Inflation and Recession, 1979-82: Supply Shocks and Economic Policy

By Glenn H. Miller, Jr.

The economy has seen two episodes of supply shock inflation and three recessions since the early 1970s. The early part of this period included the supply shocks of 1972-73 and the recession of 1974-75. These earlier years have been examined extensively in the economic literature, along with the performance of macroeconomic policy during that period.[1] This article presents a similar examination of the period from early 1975 through 1982. Special emphasis is placed on the years since 1978, a time of supply shock inflation and virtual stagnation in economic activity that included two recessions.

The first section summarizes economic performance and economic policy in the early 1970s and presents an overview of the period since 1975. The next two sections examine in detail the anatomy of the inflation and the behavior of the real economy in the 1975-82 period. The discussion stresses the effects of supply shocks and the role of macroeconomic policy. The article concludes by indicating that inflation in the later period was due largely to supply shock factors, and that inflation was followed by slow growth and recession at least partly related to the effects of demand management policies.

OVERVIEW OF SUPPLY SHOCKS IN THE 1970S AND EARLY 1980S

The phrase "supply shock" has been widely used to describe an unexpected disturbance, usually a contraction, in the supply of some commodity that generates large, rapid increases in the price of the commodity. In addition to pushing up the commodity's own price, a supply shock leads to relative price changes. Although these relative price changes could occur in the context of a stable general price level, they are generally associated with a rise in the general price level and with a slowing or decline in the growth of real output.

Early 1970s

There is general agreement on the sources of supply shock considered responsible for the

---

[1] Alan S. Blinder, *Economic Policy and the Great Stagflation,* New York: Academic Press, 1979; Otto Eckstein, *The Great Recession,* Amsterdam: North-Holland, 1978; Robert J. Gordon, *Macroeconomics* (2nd ed.), Boston: Little, Brown and Co., 1981; Robert M. Solow, "What To Do (Macroeconomically) When OPEC Comes," in Stanley Fischer, ed., *Rational Expectations and Economic Policy,* Chicago: University of Chicago Press, 1980.

Glenn H. Miller, Jr., is a Vice President and Economic Adviser in the Economic Research Department at the Federal Reserve Bank of Kansas City. Dale Allman, an assistant economist at the Bank, provided research assistance.

Chart 1
CONSUMER PRICE INDEX, FOOD COMPONENT
Percent Change Over Four-Quarter Spans

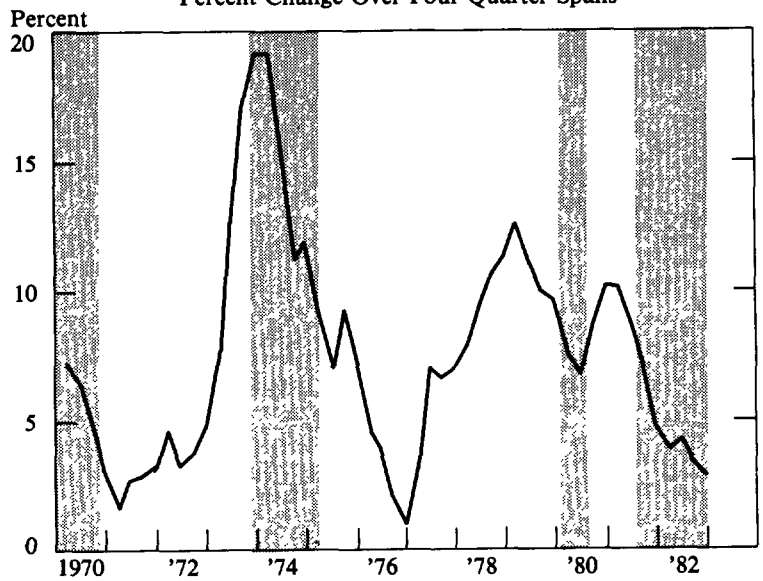


Chart 2
CONSUMER PRICE INDEX, ENERGY COMPONENT
Percent Change Over Four-Quarter Spans

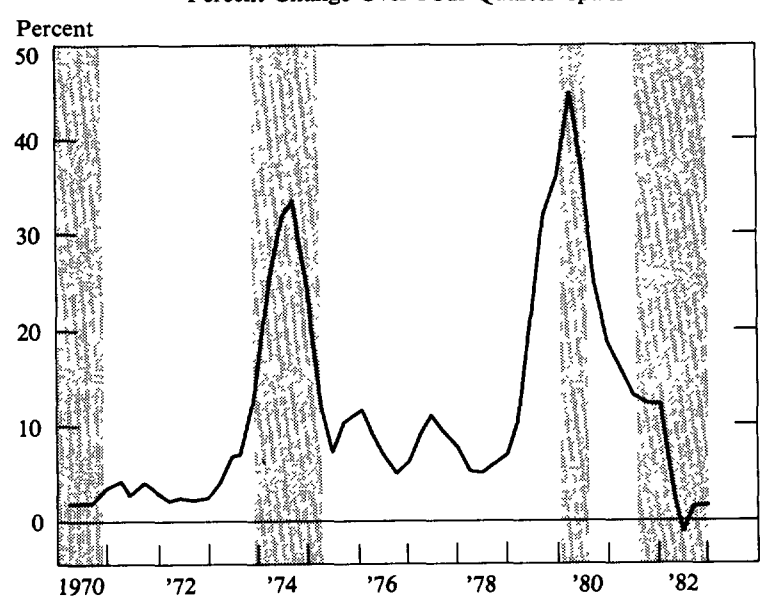


Chart 3
CONSUMER PRICE INDEX, ALL ITEMS
Percent Change Over Four-Quarter Spans

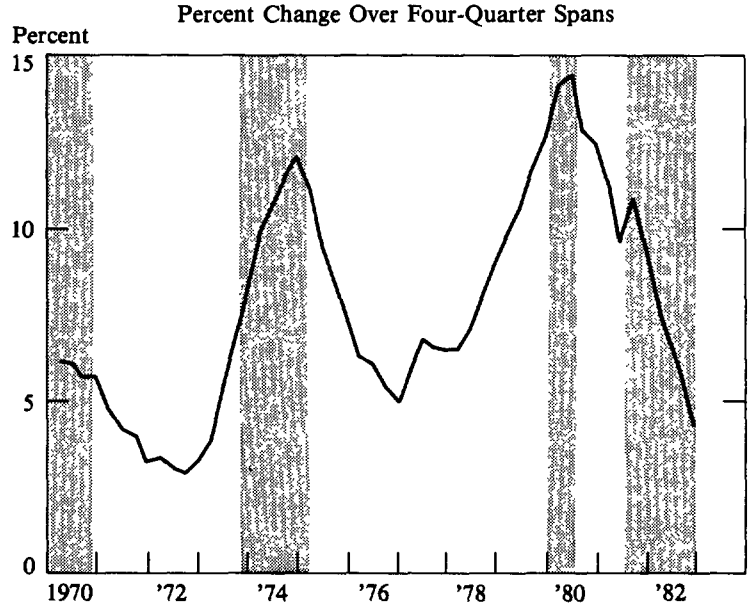


Chart 4
CONSUMER PRICE INDEX, ALL ITEMS LESS FOOD AND ENERGY
Percent Change Over Four-Quarter Spans

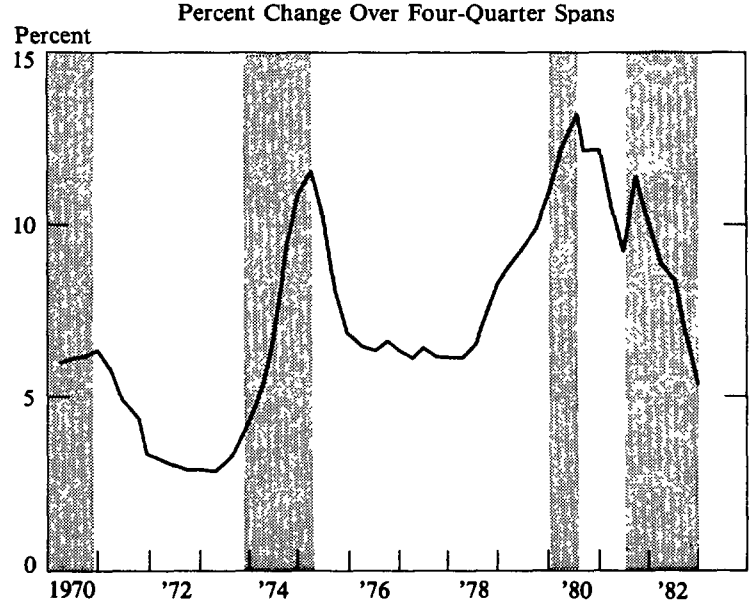
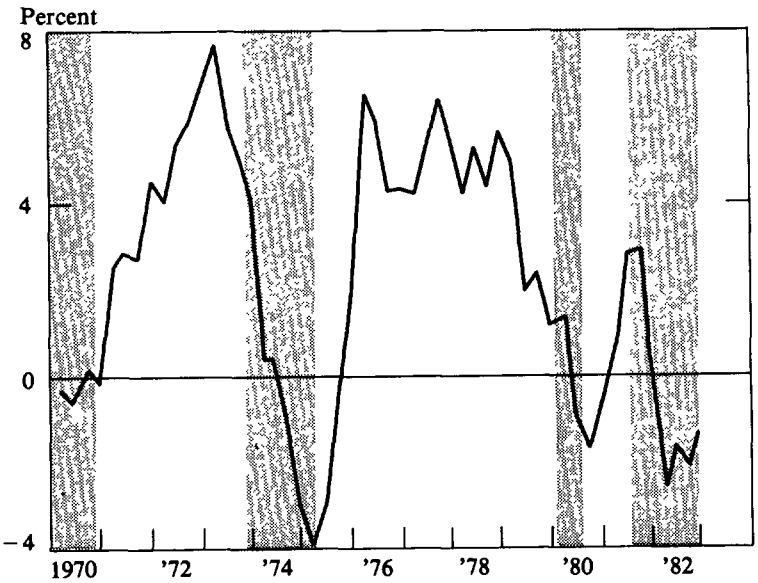


Chart 5
REAL GROSS NATIONAL PRODUCT
Percent Change Over Four-Quarter Spans



surge of inflation and the ensuing recession in the early to mid-1970s. First food prices and then energy prices accounted for most of the increase in inflation between 1972 and 1974 (Charts 1 and 2). The runup in food prices traces primarily to crop failures around the world at a time when carryover stocks of grain were very low. The very sharp rise in energy prices originated primarily in actions of OPEC, first through its embargo on oil supplies in 1973 and then by the quadrupling of imported oil prices in 1973-74. Inflation as measured by the Consumer Price Index for All Urban Consumers (CPI) reflected these shocks. Increases in the CPI rose from an annual rate of around 4 percent in 1971-73 to about 10 percent in 1973-74 (Chart 3).

While the increases in food and energy prices slowed sharply after reaching the peak of their acceleration in 1973-74, the CPI rose about 11 percent from early 1974 to early 1975. Non-food-nonenergy prices rose faster in the latter period, averaging 11.6 percent (Chart 4). This increase, and its effect on inflation overall, has been attributed to the removal of wage-price controls in the spring of 1974.

There is also widespread agreement that food and oil supply shocks were largely responsible for the recession of 1974-75. Growth in real Gross National Product (GNP) after having been fairly strong from early 1971 to early 1973, slowed to less than 1 percent from early 1973 to early 1974 (Chart 5). Real output then fell 4 percent from early 1974 to early 1975.

Three demand management responses to the inflation and recession caused by supply shocks have been characterized by economists.[2] One, which seeks to eliminate the inflation induced

[2] Edward M. Gramlich, "Macro Policy Responses to Price Shocks," *Brookings Papers on Economic Activity*, 1979:1, p. 126; Gordon, *Macroeconomics*, p. 253.

by supply shocks by restricting aggregate demand at the expense of lower (even negative) real output growth has been called an extinguishing policy. Another, which seeks to maintain real growth in output by expanding aggregate demand and accepting whatever inflation results, has been called an accommodative policy. Still another, aimed at achieving some positive growth in aggregate demand, even though somewhat more inflation and somewhat less real growth are implied, has been called a neutral policy. Demand management policies can be more appropriately viewed as a continuum with the accommodative and extinguishing cases at each end and the neutral case somewhere between.

Some economists have suggested that the policy response to the supply shock-induced inflation of 1973-75 settled too far toward the extinguishing end of the continuum and should have been closer to the accommodative end. These analysts believe that policy did not properly enhance aggregate demand in a situation of supply shock-induced recession, making the 1973-75 episode less satisfactory than it needed to be.[3] The following summary quotations catch some of the flavor of their conclusions:

> The depth of the recession of 1973-75 can be explained by three supply shocks (the termination of price controls and increases in the relative price of food and energy), together with an extinguishing policy that slowed aggregate demand growth in response to the supply shocks.[4]

> . . . a monetary policy of supply-shock accommodation was both necessary and sufficient to forestall or foreshorten the post-1974 slump in aggregate employment. From that perspective it is striking and disturbing to observe that there was no effort at accommodation though the 1974-75 downturn was the deepest one since the Great Depression.[5]

> The U.S. economy was buffeted by some severe and unavoidable supply shocks in 1973 and 1974. The authorities did little or nothing to cushion these blows, and even compounded the problems through ill-timed and ill-conceived policy actions.[6]

This is, of course, not the only view of the period. The "credibility thesis" provides a potentially important objection to adoption of an accommodating policy. This thesis notes that firms and workers are sensitive to perceptions of future government policy. Because a policy of accommodating supply shock inflation might be seen as a weakening in the commitment to stand firm against inflationary pressures, it might have the adverse effect of strengthening inflationary expectations and thereby hindering efforts to stimulate economic growth.[7]

---

[3] The preceding summary is based on the analyses of Blinder, *Economic Policy and the Great Stagflation,* and Gordon, *Macroeconomics.* See also analyses by Eckstein, *The Great Recession,* and Solow, "What To Do (Macroeconomically) . . . ."

[4] Gordon, *Macroeconomics,* p. 287.

[5] Edmund S. Phelps, "Commodity-Supply Shock and Full Employment Monetary Policy," *Journal of Money, Credit, and Banking,* Vol. X, No. 2, May 1978, p. 215.

[6] Blinder, *Economic Policy and the Great Stagflation,* p. 203.

[7] William Fellner, "The Credibility Effect and Rational Expectations," *Brookings Papers on Economic Activity,* 1979:1, pp. 167-78. William Poole also has criticized what he calls the "activist" policy position with regard to supply shocks. See "Macroeconomic Policy, 1971-75: An Ap-

Late 1970s and early 1980s

Supply shocks led to an increase in inflation and a slowing in economic activity again in the late 1970s and early 1980s. The special factors were again food and energy prices. Overall inflation as measured by the CPI reached a higher point in this episode than in the earlier one. Where consumer prices increased from 6 to 6.5 percent a year between early 1975 and early 1978, they increased about 10 percent from the first quarter of 1978 to the first quarter of 1979 and over 14 percent in the next four quarters (Chart 3). Food prices, though not the factor they had been in the early 1970s, rose sharply in the early stages of this second runup in inflation. From the first quarter of 1977 to the first quarter of 1978, food prices rose 8 percent. Over the next four quarters, they rose 13 percent (Chart 1). Energy prices rose even more sharply in the second oil shock of the 1970s than in the first. After three years of increasing an average of about 8 percent a year, energy prices rose about 11 percent from the first quarter of 1978 to the first quarter of 1979. They then increased 45 percent from early 1979 to early 1980, before dropping back to a 16 percent increase in the following four-quarter period (Chart 2). Increases in both food and energy prices were significantly slower from early 1981 through 1982.

The rise in food prices can be traced to higher prices for meat. After several unprofitable years in the livestock industry, meat supplies had been reduced. The rise in energy prices can be attributed primarily to rising crude oil prices as Iranian production dropped, as OPEC increased prices, tightened credit terms, and shifted more production to the spot market, and as domestic production shifted to higher priced supplies. The influence of nonfood-nonenergy prices on the overall inflation rate was felt again in the late 1970s-early 1980s episode as sharply rising costs of homeownership contributed significantly to the rapid increase in the CPI during part of the period (Chart 4).

Just as in the early 1970s, supply shock inflation was followed by a slowing in economic activity and a decline in real output. Growth in real GNP, which had averaged 4 to 5 percent a year from early 1976 to early 1979, slowed to around 1 percent from early 1979 to early 1981 (Chart 5). Real output over the four quarters from early 1981 to early 1982 declined about 2.5 percent followed by virtually no change for the rest of 1982.

ECONOMIC ACTIVITY AND POLICY: 1975-79

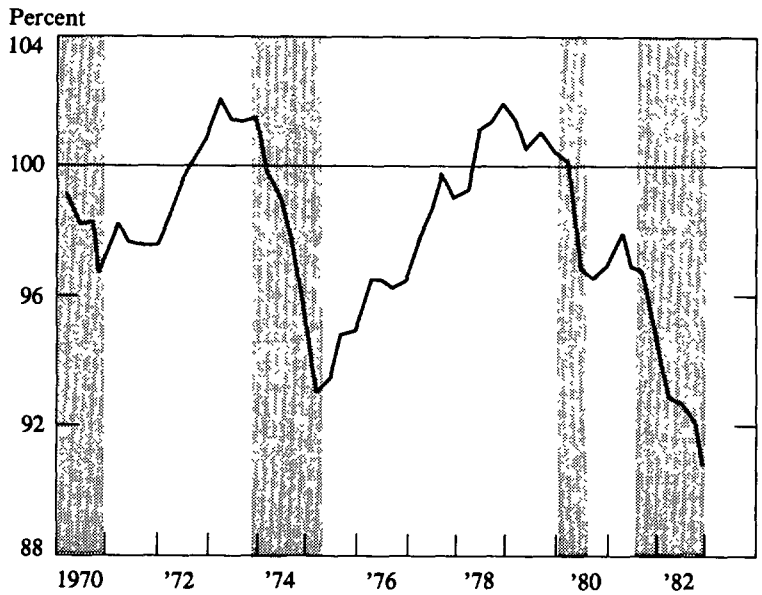
To better examine economic activity, the anatomy of the inflation, and the performance of macroeconomic policy, the period from early 1975 through 1982 is broken at early 1979. Division at that time is warranted by the timing of the energy supply shock and of the distinct change in the growth rate of output.

The subperiod from early 1975 through early 1979 opened with a year of typically rapid recovery from recession, included two succeeding years of normal expansion, and closed with a year of rapid growth in aggregate demand that began to put pressure on the economy's resource base. The first three years of this subperiod also saw inflation maintained at its basic, or underlying, rate. In the fourth year, inflation began to pick up under the pressures of both developing excess demand and the initial impact of supply shocks.

In the subperiod from early 1979 through

praisal," in Fischer, ed., *Rational Expectations and Economic Policy,* pp. 269-79. Other economists have questioned the existence of an exploitable tradeoff between inflation and unemployment and, therefore, oppose monetary policy accommodation of supply shocks. See, for example, Robert G. Barro, "Rational Expectations and the Role of Monetary Policy," *Journal of Monetary Economics,* January 1976, pp. 1-32.

Chart 6
RATIO OF REAL GROSS NATIONAL PRODUCT TO ESTIMATED TREND LEVEL



1982, supply shock-induced inflation spurted to a peak, then steadily receded. Growth in real output all but ceased during the period, which included the business cycle contractions of 1980 and 1981-82.

Economic activity

Real GNP grew 6.7 percent in the first four quarters of recovery from the severe recession that reached its trough in the first quarter of 1975. For the next two years, real output grew at an annual rate of about 4.5 percent, which was about 1.5 percentage points faster than the estimated trend rate of real GNP growth. By mid-1977, the gap between actual real GNP and the estimated trend level of real GNP had closed, suggesting that after three years of expansion the nation's industrial and human resources were essentially fully employed (Chart 6). All in all, the three years from early 1975 to early 1978 made up a fairly tranquil time of typical cyclical expansion, with output increasing at a reasonably normal recovery rate.

In the fourth year of expansion, the pace quickened. From the first quarter of 1978 to the first quarter of 1979, real GNP grew at an annual rate of 5.2 percent and reached a level even farther above its estimated trend level.

The increase in the CPI averaged slightly more than 6 percent a year in the three years from the the first quarter of 1975 to the first quarter of 1978 (Table 1). This was widely regarded as about the basic, or underlying, inflation rate for the economy at the time. Food and energy prices exerted little special influence and tended to offset each other. As a result, the CPI for all items less food and energy increased about 6 percent a year. The underlying rate of inflation remained high partly because productivity increased slowly and workers sought to keep wage increases high enough to stay

ahead of inflation. From the first quarter of 1978 through the first quarter of 1979, however, the increase in the CPI accelerated to 9.8 percent. Two-thirds of the increase was due to the rising costs of food, energy, and homeownership.

In the four quarters from early 1978 to early 1979, therefore, both economic activity and inflation increased. Inflation picked up as the costs of food, energy, and homeownership rose more rapidly. At the same time, economic activity also increased and the resulting demand pressure on the economy's resource base led to further upward pressure on prices.[8]

Economic policy

Fiscal policy. Change in the high-employment budget position is a commonly used summary measure of the effects of federal taxing and spending policies on aggregate demand. Estimates of the high-employment budget provide the levels of outlays and revenues—and hence surpluses or deficits—that would result if economic activity remained at a high level. Because it abstracts from the effects of the economy on the budget, the high-employment budget position is a better indicator of discretionary fiscal policy than the actual surplus or deficit position, which reflects the automatic response of revenues and outlays to business fluctuations.[9]

Changes in the high-employment surplus or deficit are thus taken to represent changes in discretionary fiscal policy. Movement of the high-employment budget in the direction of surplus indicates that discretionary fiscal policy is becoming more restrictive, and movement in the direction of deficit indicates a more stimulative fiscal policy. Movements in the high-employment budget position are used in this article to assess the part fiscal policy played in an environment of supply shock-induced inflation and recession in the late 1970s and early 1980s.

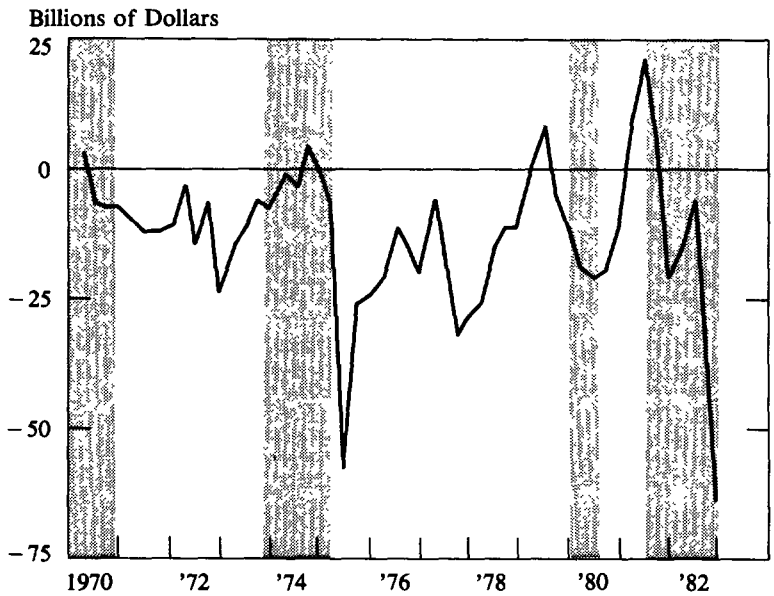
The high-employment budget plunged deep into deficit in the second quarter of 1975, which was the first quarter of recovery after the 1974-75 recession. The plunge came as a result of a large tax cut that added significant stimulus at the beginning of the expansion (Chart 7). After rebounding sharply in the next quarter, the high-employment deficit moved moderately but steadily toward restraint until the first quarter of 1977. There was then a relatively sharp move toward fiscal stimulus lasting until the end of 1977. Fiscal policy then became more restrictive throughout 1978 and on into early 1979 (Chart 7). The shift toward restraint marked an appropriate policy change in the light of strong growth in aggregate demand and the increase in inflation associated with it.

---

8 In the preceding discussion and in Table 1, the CPI less food and energy is offered as an indicator of the basic, or underlying, inflation rate. Several other indicators are also possible. For example, the all-items CPI can be stripped of homeownership costs as well as of its food and energy components, leaving as the indicator of basic inflation the CPI Less Food, Energy, and Homeownership. From early 1978 to early 1979, that indicator accelerated significantly, presumably in response to relatively strong growth in aggregate demand. Thus, that indicator of basic inflation supports the notion that in the 1978-79 period, in addition to being affected by the beginning of the influence of inflationary supply shocks, the overall inflation rate was being pulled up by demand factors. The weighted average exchange value of the dollar fell substantially during 1978 and remained relatively low throughout most of 1980 before beginning to rise again. This depreciation and continuing weakness of the dollar also added to inflationary pressures in the United States.

9 Estimates of the high-employment surplus or deficit used in this article are from the *Survey of Current Business*, April 1982, pp. 21-33. These estimates are based on revenues and outlays associated with the real output that would be produced if the economy operated at a rate of resource utilization represented by a 5.1 percent overall unemployment rate.

Chart 7
HIGH EMPLOYMENT BUDGET SURPLUS OR DEFICIT



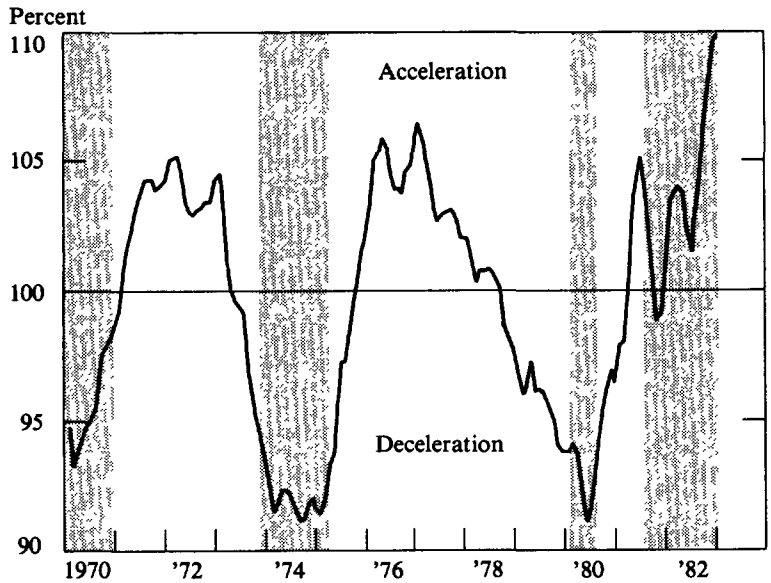
Monetary policy. Over the past decade, monetary policy has put increased emphasis on the rate of monetary growth and its relationship to the real economy. The emphasis rests on historical relationships between monetary deceleration and economic slowdown and between monetary acceleration and rapid growth and inflation.

One method used for defining monetary acceleration and deceleration is based on "comparison of the actual level of the money supply to the level that would have resulted if monetary growth had continued at an established trend rate."[10] The comparison is made by computing the ratio of the actual level of the money supply, A, to the level estimated from the trend growth rate, E. The A/E ratio measures the degree that money growth over a period exceeded or fell short of the trend rate of money growth.

Deceleration of money growth yields an A/E ratio less than one. Acceleration yields a ratio greater than one. In addition, the degree of monetary acceleration or deceleration can be ranked by the numerical value of the corresponding A/E ratios. The higher the A/E ratios above one, the stronger is the monetary acceleration. The lower the ratios below one, the more pronounced is the monetary deceleration. Thus, degrees of monetary deceleration or acceleration in various periods can be ranked ac-

[10] Bryon Higgins, "The Relationship Between Monetary Decelerations and Recessions," *Economic Review*, Federal Reserve Bank of Kansas City, April 1979, p. 16. ". . . the trend rate is defined as the annualized growth rate over the two-year period ending one year before the date in question. This trend growth rate is then extrapolated 12 months ahead to determine the hypothetical level of the money supply that would have resulted from continuation of the two-year trend growth rate for an additional year."

Chart 8
RATIO OF REAL M1 TO ESTIMATED TREND LEVEL



cording to the A/E ratios for those periods.

In a study of the relationship of monetary deceleration and recession, Higgins identified three characterizations of money deceleration: mild deceleration, appreciable deceleration, and severe deceleration. He concluded that historical evidence indicates "that the likelihood of recession increases with the degree of monetary deceleration."[11]

There was monetary deceleration throughout the recession of 1974-75, and as shown by the A/E ratios for real M1 (Chart 8), deceleration continued several months into the cyclical recovery. Monetary acceleration began in October 1975 and continued until September 1978. During most of this time, monetary acceleration coincided with a typical cyclical expansion and stable inflation at the economy's basic rate.[12]

Two years of monetary acceleration preceded the 1978-79 period of strengthening aggregate demand and accelerating inflation. Monetary deceleration then began in 1978 and, in conjunction with increasing fiscal restraint, remained appreciable into early 1979. Although previous fiscal stimulus and monetary ease undoubtedly contributed to the strong growth in demand and the increase in inflation, both aspects of economic policy were moving toward restraint before the end of 1978. Economic

11 See Higgins, "The Relationship Between . . . ," pp. 19-20.

12 Another indicator of money growth is the percentage change in real M1 measured over 12-month spans to smooth out short-run volatility. This indicator also shows growth in the real money supply ceased in September 1978. However, percentage growth in real M1 over 12-month spans did not become positive until October 1976, a full year after the A/E ratio shows a beginning of monetary acceleration. Similar results are found when real M2 is used as the measure of money.

policy was thus set on a restrictive course in response to excess demand pressures just before the economy lapsed into the stagflation associated with the oil price shock of 1979-80.

ECONOMIC ACTIVITY AND POLICY: 1979-82

The period from the first quarter of 1979 through the end of 1982 opened with the dramatic shock in oil prices that sent inflation rocketing to an inordinately high rate. A deceleration in inflation followed, as supply shocks faded and economic activity languished. The most noteworthy feature of this period was the sustained fundamental weakness of the economy, pointed up by the level of real GNP at the end of 1982 being virtually unchanged from the beginning of 1979.

Economic activity

The period from the first quarter of 1979 to the first quarter of 1980 was a time of stagflation—inflation rose while the rate of real output growth fell. Growth in real GNP dropped sharply to 1.5 percent from 5.2 percent in the preceding four-quarter period. Output growth slowed further from the first quarter of 1980 to the end of 1982, an interval that included the short, sharp business cycle contraction of 1980 and the recession of 1981-82.

The recession of 1980 consisted essentially of a 10 percent drop in the annual growth rate of real output in the second quarter of 1980. That sharp decline reopened a sizable gap between actual GNP and the estimated trend level of real GNP. The gap was not closed by the ensuing brief business expansion. Real GNP increased only about 1 percent from the first quarter of 1980 through the first quarter of 1981 (Chart 6).

Real GNP fell a substantial 2.4 percent from early 1981 to early 1982, the largest decline for any four-quarter period since the recession of 1974-75. New post-World War II records in the underutilization of human and industrial resources were also set in 1982. By December, the overall unemployment rate had risen to 10.8 percent and the rate of capacity use in manufacturing had fallen to 67 percent. At the end of 1982, real GNP was about 1 percent less than in the fourth quarter of 1981.

Not only did the 1980s open with two business cycle contractions, but the four years after 1978 were a time of overall stagnation that substantially increased the underutilization of recources. With the trend rate of growth in real output estimated at about 3 percent a year, the sustained weakness of the economy greatly widened the gap between actual real GNP and its estimated trend level (Chart 6). Strong growth in real GNP after the 1974-75 recession had brought the level of real output in the fourth quarter of 1978 to about 102 percent of its estimated trend level. Four years of stagnation, however, brought real GNP in the fourth quarter of 1982 to a level that was only 91 percent of the estimated trend level—the lowest quarterly ratio of actual-to-trend level GNP in the 34 years since the beginning of 1949.

Along with the fundamental weakness in economic activity just described, the 1979-82 period included a sharp swing in the inflation rate. Following the initial effects of shocks in food and energy prices that contributed to 9.8 percent inflation from early 1978 to early 1979, overall CPI inflation increased to 14.2 percent for the period from early 1979 to early 1980 (Table 1).

Energy prices rose 45 percent from the first quarter of 1979 to the first quarter of 1980, enough to account for more than three-fourths of the total increase in inflation. While food prices did not contribute to the overall acceleration in inflation from early 1979 to early 1980, nonfood-nonenergy prices did make a significant contribution, with homeownership costs

Table 1
PERCENTAGE CHANGE IN CPI AND COMPONENTS, 1975-82
(First Quarter to First Quarter)

Category	1975-1976	1976-1977	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982*
CPI: All Items	6.3	5.9	6.5	9.8	14.2	11.2	7.6	4.9
Food	4.7	3.8	8.2	12.7	7.8	10.0	4.3	2.8
Energy	9.6	9.2	5.8	10.7	45.1	16.0	3.6	3.5
Homeownership	6.6	5.0	9.3	13.2	21.1	13.2	9.3	4.6
All Items Less Food and Energy	6.6	6.2	6.3	9.0	12.2	10.7	9.1	5.7

*Annual rate, first quarter to fourth quarter.

playing a major role.[13]

Although inflation slowed after the four quarters of primary energy price shock, it remained at a high 11.2 percent from early 1980 to early 1981. The dramatic deceleration in energy inflation, from 45 percent in 1979-80 to 16 percent from early 1980 to early 1981, was enough in itself to provide the full three-point deceleration in the CPI (Table 1).[14]

Further substantial slowing in inflation made the CPI increase from early 1981 to early 1982 the lowest since the 1975-78 period of nonaccelerating inflation, and the 1982 increase was the smallest for any four-quarter period since the era of price controls in the early 1970s. The special factors of food and energy—along with homeownership costs—contributed heavily to the disinflation of 1981-82.

The anatomy of inflation following the supply shocks of 1979-80 can be summarized as follows. From the first quarter of 1975 to the first quarter of 1978 was a period of pre-supply shock, with overall inflation fairly stable near the economy's basic or underlying inflation rate. The rate of increase in the CPI then picked up as special-factor costs for food and energy increased more rapidly and excess demand pressures built. Continued increases to the 1979-80 peak inflation rate can be traced largely to the sharp rise in energy prices. The overall rate of price rise remained high from early 1980 to early 1981, even with substantial slowing in energy price inflation. With a further slowing in energy price rises—and a substantial slowing in food price increases—increases in the CPI slowed from the first quarter of 1981 to the end of 1982.[15]

[13] Stripping homeownership costs as well as food and energy prices from the overall inflation rate, however, leaves only a modest rise in the underlying inflation rate.

[14] The rate of increase in food prices picked up, but the rise in the cost of homeownership slowed in this period. When the effects of energy, homeownership, and food are stripped from the total CPI, the rest of the index grew considerably faster in 1980-81 than in 1979-80.

[15] The inflation rate for all items less food, energy, and homeownership followed a pattern similar to that of the

The inflationary bulge of the late 1970s and early 1980s was thus due largely to special factors, especially energy prices, and to some extent food prices. Energy prices were especially important in the runup to an inflationary peak in 1979-80 and in the deceleration that followed. During periods of both accelerating and decelerating inflation, homeownership costs were a major factor in moving the level of nonfood-nonenergy prices. Other consumer prices contributed only slightly to the increase and decrease in inflation from early 1978 through 1982.[16]

Fiscal policy. The restrictive thrust of fiscal policy that began in late 1977 continued through the second quarter of 1979. Then, as weakness in real economic activity became apparent in the first half of 1979, fiscal policy turned toward stimulus and remained stimulative through the short recession of 1980 (Chart 7). This moderately stimulative fiscal policy coincided with the energy shock inflation of 1979-80 and tended toward accommodation of it.

After mid-1980, however, fiscal policy turned again toward restraint, as the direct influence of special-factor inflation waned and the weakening economy started sliding toward the recession of 1981-82. Shortly after the recession began in mid-1981, fiscal policy again turned stimulative and remained so through 1982, helping prepare the way for economic recovery.

Monetary policy. After about a year of appreciable monetary deceleration beginning in late 1978, the slowdown in money growth became severe in late 1979 and remained either severe or appreciable until monetary acceleration resumed in March 1981 (Chart 8). Thus, the movement to monetary deceleration slightly preceded and then coincided with the 1979-80 period of stagflation, when the energy shock pushed inflation to a peak rate and output growth fell below its long-run trend rate. Monetary deceleration, lessening from severe to appreciable, then continued until early 1981. The monetary stringency of this period coincided both with a slowing in energy-price inflation in overall inflation and with a significant further slowing in the growth of real GNP (Chart 5).

Two and a half years of monetary stringency beginning in the fourth quarter of 1978 thus preceded the recession that began in July 1981, as did a year or so of fiscal restraint that began about mid-1980. Real GNP declined about 2.5 percent from the first quarter of 1981 to the first quarter of 1982 and showed virtually no growth through 1982. Inflation also declined from the first quarter of 1981 to the end of 1982, due not only to very small increases in costs of food, energy, and homeownership but also to the large amount of slack in the economy as a result of slow growth and recession.

In a situation of supply shock-induced inflation and recession from 1979-82, macroeconomic policy operated in a somewhat mixed pattern. Fiscal policy was moderately stimulative as the energy shock developed and through the short recession of 1980, but became significantly restrictive during the abnormally short recovery that preceded the recession of 1981-82. Monetary policy varied less than fiscal policy. Relative to its trend rate, growth in real M1 began slowing just before energy inflation

---

overall CPI during the early years of the period. As overall inflation rose to a supply shock-induced peak, however, the rate of increase in the index less food, energy, and homeownership lagged in its acceleration. That indicator of basic inflation continued to accelerate after the overall index had begun to decelerate, probably reflecting indirect influences of the supply shocks working through the system.

16 This conclusion is similar to that of Blinder for the 1973-74 period, ". . . if we are to understand the anatomy of the Great Inflation it is essential to deal separately with energy prices, food prices, and other prices." Blinder, *Economic Policy and . . . , p. 78.*

started to pick up. Monetary stringency then increased during the 1979 explosion in energy prices and became more severe during the ensuing period that included both another sharp runup in energy prices and the recession of 1980.

The lingering effects of two and a half years of monetary stringency, along with the movement toward greater fiscal restraint (albeit interrupted by a brief move to stimulus in 1979-80), were associated with some four years of economic stagnation. At the same time, that period of stagnation itself combined with a dramatic turnaround in special-factor inflation to bring both overall inflation and underlying inflation down to rates not seen since before the mid-1970s.

In having held back the growth in demand and output, therefore, macroeconomic policy in this period might be characterized as less than accommodative. At the same time, macroeconomy policy must also be credited with having brought under control the serious inflation that had been sapping the economy's strength for many years.

Monetary acceleration resumed in March 1981, though in a variable pattern. Along with stimulus from fiscal policy, that acceleration helped set the stage for the economic recovery that appears to have begun in early 1983.

CONCLUSIONS

Following a strong recovery from the supply shock-induced recession of 1974-75, food and especially energy prices were again affected by supply shocks in the late 1970s. Just as in the early 1970s, inflation increased sharply and a slowing in economic activity was followed by declines in real output. Overly strong growth in aggregate demand probably contributed briefly to the increase in inflation in the late 1970s. But most of the increase in inflation, as well as its rapid decline, was due to energy prices and homeownership costs, and somewhat less to food prices. This period also included two business-cycle contractions and four years of sustained fundamental weakness in the economy characterized by severe underutilization of resources.

It appears that, as in the early 1970s, macroeconomic policies in the late 1970s and early 1980s did not enhance aggregate demand in a situation of inflationary supply shocks and sustained economic weakness and recession. Although fiscal policy was generally restrictive from about mid-1975 until mid-1982, a temporary move toward stimulus coincided with the energy shock inflation of 1979-80 and tended toward some accommodation of it. Monetary deceleration, on the other hand, both preceded and accompanied the 1979-80 period of stagflation and was not accommodative of the supply shock. Fiscal and monetary policy were both restrictive during the brief expansion of 1980-81, thus sharing some responsibility for the recession of 1981-82. The four-year period of economic slack and underutilization of resources—along with a reversal of the inflationary influence from supply shocks—brought a significant slowing in inflation. The resulting disinflation, together with a return to fiscal stimulus and monetary acceleration, helped set the stage for a return to growth in economic activity.