### Milton Friedman and the Second Wave of the Great Inflation, 1976–1980

Edward Nelson Federal Reserve Board April 22, 2024<sup>1</sup>

#### 1. Introduction

This talk draws on the author's book (a complete draft of which is available online), *Milton Friedman and Economic Debate in the United States*, 1973–2006.<sup>2</sup> The book (consisting of two volumes) is a continuation of my previous two-volume study, *Milton Friedman and Economic Debate in the United States*, 1932–1972 (University of Chicago Press, 2020: see Figure 1).

From the onset of this project, the inclusion of the word "economic" or "economics" in the book titles struck me as mandatory. It reflects the fact that their focus is on Milton Friedman's economic framework and how he applied it in his contributions to debates in research and public-policy forums, as well as the fact that the account is written from the perspective of someone in Friedman's own research field of monetary analysis and macroeconomics.

The 2020 volumes consider the pre-monetarist years of Friedman's activity in economics, the changes in his thinking (and the impetus for those changes) that turned him into a monetarist, the details of his economic framework, and his engagement in research and policy debates during the first 22 years of his years (1951 onward) as a monetarist. The book ends on the eve of the severe inflation breakout of early 1973. The continuation volume covers the period from 1973 to 2006.

The coverage of both the 1932–1972 and 1973–2006 studies spans Friedman's research contributions and his interventions in the public square (for example, his *Newsweek* columns and other op-eds, his many appearances on television and in other media, and his books coauthored with Rose Friedman). In the 1973-to-2006 study, this public-policy activity absorbs an increased proportion of the coverage. This tilt in the coverage reflects Friedman's concentration in this period on public policy rather than research. In addition, in light of Friedman's move to California at the turn of 1976/1977, the continuation volumes predominantly concern Friedman's years at the Hoover Institution, rather than at the University of Chicago.

<sup>&</sup>lt;sup>1</sup> Prepared for the Hoover Monetary Policy Conference, Hoover Institution, Stanford University, May 2–3, 2024. The views expressed here are those of the authors and should not be interpreted as official positions of the Federal Reserve System or the Board of Governors.

<sup>&</sup>lt;sup>2</sup> Downloadable at <a href="https://sites.google.com/site/edwardnelsonresearch">https://sites.google.com/site/edwardnelsonresearch</a>. Sources for the quotations and data used below are documented in that manuscript.

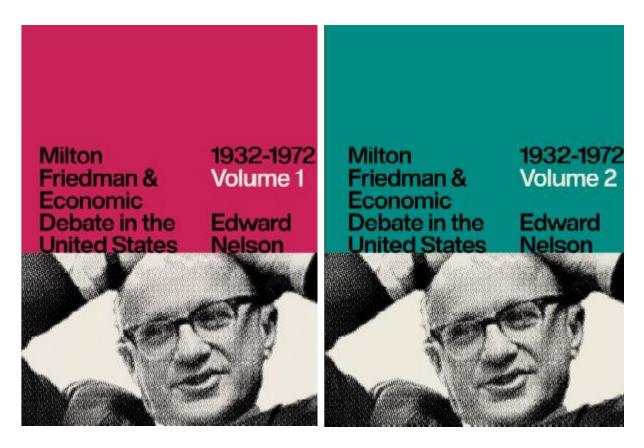


Figure 1. *Milton Friedman and Economic Debate in the United States*, 1932–1972 (University of Chicago Press, 2020).

In what follows, I will focus on a single item in Friedman's public-policy activity: his prediction and analysis of the second wave of the United States' Great Inflation, which I define as the rise in the inflation rate from its 4.8 percent (December 1976) trough—a rise that culminated in double-digit inflation rates in 1979, 1980, and 1981. This aspect of Friedman's public-policy activity spanned the period surrounding his move to California and the Hoover Institution.

The discussion will not primarily involve considering his research publications. The relevant Friedman statements on inflation appeared in non-research outlets. But they are revealing about the monetary framework *underlying* his research—including the body of work produced with Anna Schwartz. A look at this episode will also shed light on how his viewpoint contrasted with—but helped reshape—thinking in policy circles and the economics profession during the late 1970s, in the leadup to the Volcker disinflation.

#### 2. The second wave of the Great Inflation

The United States had so-called twin peaks of inflation during the Great Inflation—with double-digit rates recorded in the mid-1970s and in the period of 1979 and the early 1980s. It is the second wave of the Great Inflation, which featured the second of the twin peaks, that will be the concern here.

Over the years, some skepticism has been expressed about the genuineness of the second peak. In particular, the fact that the CPI rate was pushed up by the second oil shock and by the statistical treatment at the time of mortgage costs has been used as a basis for doubting whether this second period had double-digit inflation that could be attributed to the creation of excess demand. But, although the peak of CPI inflation in 1980 was undoubtedly boosted by special factors, the PCE inflation rate also shows a double-digit rate. The GDP deflator inflation rate also reached double digits in the early 1980s (Figure 2). Furthermore, the notion that the second wave of the Great Inflation was at least as serious as the first wave is reinforced by considering the four-year average of a series considerably focused on at the time—the GNP deflator inflation rate (Figure 3). This average shows a higher peak in the early 1980s than that in the mid-1970s.<sup>3</sup> So the case for viewing the second wave as having a severity comparable with the first, and as reflecting sustained forces put in place by aggregate demand policy, seems quite sound.

As background for the discussion of this second wave, Table 1 gives the names and positions of several key personnel in U.S. economic policymaking over this period.

### 3. The second wave of the Great Inflation—expected or not?

In the mid-1970s, U.S. Treasury bond pricing suggested that the mid-1970s inflation would not be repeated and that a further decline in inflation to lower rates was likely. A *Business Week* article noted in March 1975, "it is highly unlikely that double-digit inflation will recur in this decade." And testifying in 1981 about U.S. budget forecasts submitted at the end of 1977, a government official stated: "Nobody predicted the double-digit inflation that actually occurred in the 1979–80 timeframe. Those were not predicted to occur." This characterization neglected Milton Friedman's public interventions. A friend of his pointed this out to the *Wall Street Journal* at the end of the 1970s: "In your ongoing 'debate' about econometric models, it was particularly disturbing to read Michael Evans' comment... that no one correctly forecast inflation for 1978 and 1979. He's wrong, because Milton Friedman did."

<sup>&</sup>lt;sup>3</sup> This figure featured in mid-1980s vintages of the Dornbusch-Fischer macroeconomics textbook.

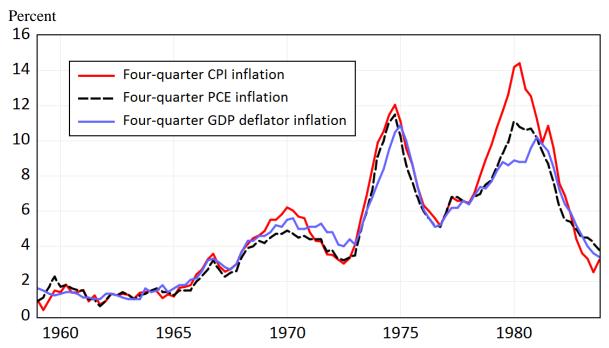


Figure 2. U.S. inflation rates, 1960:Q1-1983:Q4.

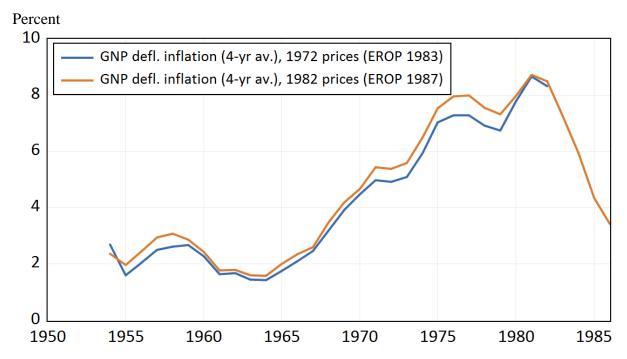


Figure 3. Four-year averages of GNP deflator inflation rates.

Table 1. Selected key figures in U.S. government, 1976–1980	
Gerald R. Ford	U.S. president, 1974–1977
Jimmy Carter	U.S. president, 1977–1981
Michael Blumenthal	U.S. Treasury Secretary, 1977–1979
Charles Schultze	CEA chair, 1977–1981
Bert Lance	OMB director, 1977
Alice M. Rivlin	CBO director, 1975–1983
Arthur F. Burns	Federal Reserve chair, 1970–1978
G. William Miller	Federal Reserve chair, 1978–1979;
	U.S. Treasury Secretary, 1979–1981
Paul A. Volcker	FOMC vice chair, 1975–1979; Federal Reserve chair,
	1979–1987

Friedman made a sequence of predictions from 1976 to 1978, initially forecasting the turnaround in inflation, then indicating inflation would reach double digits, and then suggesting a peak in the 10 to 13 percent range. In the first half of December 1976, he stated that inflation would trough around February 1977. In the 12-month CPI inflation rate, the actual trough was 4.8 percent in December 1976, as already indicated. Also in his December 1976 commentary, he predicted a 7 to 9 percent average inflation rate over the February 1977 to mid-1979 period. On television in April 1977, Friedman said: "I expect it's going to step up in the next year or two to 7 percent or 8 percent." Then in the fall of 1977, in the wake of double-digit M2 growth during 1976 having continued in 1977, he predicted in his *Newsweek* column and in public talks that there would be a return of double-digit inflation in 1979 or 1980. A *Chicago Tribune* report on one of these sets of remarks was titled "10% Inflation in 1980?" With regard to 1978 specifically, Friedman in a briefing to a financial firm in October 1977 stated that he saw 1978 inflation as being 7 to 10 percent (this was when U.S. economists' consensus forecast was 6 percent).

In his *Newsweek* column of April 24, 1978, Friedman indicated that he saw February 1977 to October 1979 average inflation as being 7 to 10 percent. He went on to remark during a mid-1978 briefing: "it would be a miracle if inflation peaked below 10 percent, and 10 to 12 percent or 10 to 13 percent would be more likely." He assessed that peak as likely to occur in 1979:Q4. Like his other inflation predictions in the 1976 to 1978 period, this closely anticipated the actual outcomes, as the peak occurred in 1980:Q1.

# 4. The contrast with the professional consensus on inflation and stabilization policy

In making these predictions, Friedman was again marking himself out from mainstream macroeconomic views. In fact, in the second half of the 1970s, Friedman's views on inflation—not just in their focus on monetary growth, but also more generally in their tracing the decade's inflation to aggregate demand developments—were still encountering strong resistance, notwithstanding his recent Nobel Prize in economics (in October 1976) and occasional generous remarks made about his influence, such as the statement by the Federal Reserve Bank of San Francisco president John Balles in January 1977, "Milton Friedman has altered the course of economic thinking."

In fact, resistance (in practical, policy-oriented discussions) to Friedman's views on inflation in fact went *up* over the years 1977 and 1978. During these years, he was greatly out of step with policymakers and many economists in the perspective that he took on the analysis and control of inflation.

The contrast between Friedman's views and the mainstream was brought out in discussions of stabilization policy during 1977. Across government agencies, there was a consensus that very considerable resource slack existed. The director of the CBO, Alice Rivlin, suggested in January 1977: "With excess capacity and high unemployment continuing, demand pressures do not seem likely to lead to an acceleration of inflation... [Aggregate demand] stimulus to get the rate of [real GNP] growth up to 5 or 6 percent would probably not add greatly to the problem of inflation." Similarly in the new Carter Administration, economic officials Bert Lance and Charles Schultze wrote in a joint statement in January 1977, "the overwhelming majority of 'serious macroeconomists' have called for expansionary economic policies," while Schultze remarked the following September: "Ample resources are available to permit further expansion..." Among Federal Reserve governors, Chair Arthur Burns remarked in February and March 1977 that "there is now considerable slack in the economy" and "[s]ubstantial amounts of idle capacity and manpower," while Board member Charles Partee stated in October, "sizable unused resources exist."

As of the first quarter of 1977, the reported U.S. output gap estimate stood at about minus 9 percent. This severely overestimated slack, as Athanasios Orphanides' research, including that in 2003, would document. Also, slack was rapidly diminishing in 1977. Friedman did not present his own estimates of output gaps, but he emphasized the fragility of outstanding estimates

(notably that of the full-employment, or natural, rate of unemployment) and eschewed the usage of them in his own analysis of ongoing U.S. economic developments.

In 1977, James Tobin criticized Friedman's October 3, 1977 *Newsweek* column (on monetary policy being too loose)—Tobin suggesting that it implied an extreme view that there was now zero slack. Whether Friedman had that view or not, it ultimately became mainstream. The CBO now sees U.S. output as crossing U.S. potential GDP around 1977:Q3.

Though his prescriptions were consistent with an augmented Phillips-curve framework, Friedman relied principally in his quantitative analysis on reduced-form linkages between nominal series (notably, monetary growth, nominal income growth, and inflation). This approach led him to believe in late 1976 that there was already considerable stimulus in the pipeline and that monetary policy settings should become less, not more, expansionary. In his December 6, 1976 *Newsweek* column, he offered the policy prescription: "take it easy. Hold down government spending. Hold down the rate of monetary growth. Let the recovery proceed as it then would, at a moderate pace. As the recovery proceeds, reduce the rate of monetary growth still further, so that we can force down the rate of inflation gradually over a few years."

This was not a widely shared prescription. In part, this reflected the fact that many other economists did not see the first-half 1970s experience as an instance of monetary policy generating high inflation—or even of expectational Phillips-curve dynamics in action. Although it partially underlay his 1976 Nobel award, in many circles in the late 1970s the Friedman-Phelps story was seen as mainly useful in understanding *the decade of the 1960s*. The 1970s inflation was seen as different—as being overwhelmingly cost-push. Despite often being portrayed as a nuanced and modern way of looking at inflation, the cost-push perspective on inflation is, as Friedman often stressed, nothing new. It is also very mechanical: an approach in which the behavior of the aggregate inflation rate is traced, as though adding up items in a spreadsheet, to the behavior of particular cost and price categories—with these items in turn seen as having a life of their own, rather than as depending on the aggregate-demand/aggregate-supply balance.

According to this mindset, the rise in inflation through 1976 was attributable mainly to autonomous forces, and the mid-decade rise in the unemployment rate (Figure 4) had little to do with the 1975 and 1976 disinflation. Alice Rivlin, for example, remarked in January 1977: "If we get double-digit inflation in the next year or so, it is much more likely to be from extraneous causes that have nothing to do with excess demand. We are not in an excess demand situation now. We have a great deal of unused capacity." She added: "The output gap and its attendant

higher levels of unemployment and excess capacity explain relatively little of this reduction in inflation. The principal factors... have been the ending of the effects of the one-time shocks which hit the economy in 1972–74." Likewise, in the Carter Administration, Treasury Secretary Blumenthal observed in January 1977: "much of the acceleration of inflation during the first half of this decade was due to such outside shocks as the higher energy price imposed by the OPEC countries and severe weather..." Arthur Burns, during his tenure through 1978, and his successor as Federal Reserve Chair, G. William Miller, made many statements along the same lines.

## 5. Who was most responsible for the second wave?

As already indicated, ahead of the second wave of the Great Inflation, inflation troughed in the last full month of the Ford Administration (December 1976). Furthermore, after its rise during 1977, inflation's further major surge in 1978 and 1979 largely occurred under Federal Reserve Chair G. William Miller, who had been nominated by President Carter. But, in contrast to accounts that associated the rise in inflation with the change in administration or in the Federal Reserve leadership, Friedman attributed the second wave of the Great Inflation overwhelmingly to actions taken by the Burns Federal Reserve—which had presided over the 1970s' second monetary explosion (in 1976 and 1977)—that is, renewed double-digit growth rates of M2. This rapid monetary growth had taken place in the context of real federal funds rates that, although less negative than had been the case in 1975, had been allowed to remain negative (and by a widening amount in 1977). See Figures 5 to 7.4

But although he viewed high inflation in 1978 and 1979 as having been locked in by the policies of the later Burns years, Friedman became critical of the Miller Federal Reserve. Like others, he criticized its tightening of monetary policy (which certainly did occur) as being mostly too leisurely. Furthermore, as already suggested, Miller also had a cost-push outlook on inflation. For example, in August 1978, Miller remarked, "The Federal Reserve is limited to what it can do about inflation," and in January 1979, he wrote: "In sum, our arsenal of weapons against inflation is somewhat restricted…"

<sup>&</sup>lt;sup>4</sup> In Figure 7, the real federal funds rate is defined as the nominal funds rate minus 12-month CPI inflation.



Figure 4. The aggregate unemployment rate, January 1970 to December 1979.

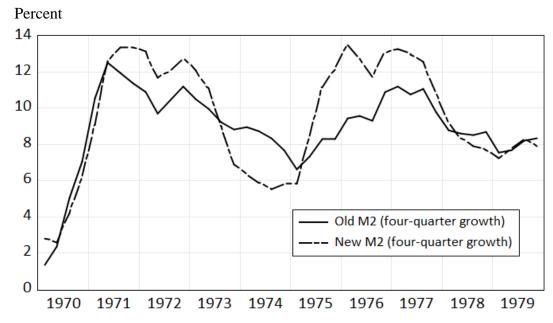


Figure 5. M2 growth, 1970:Q1-1979:Q4.

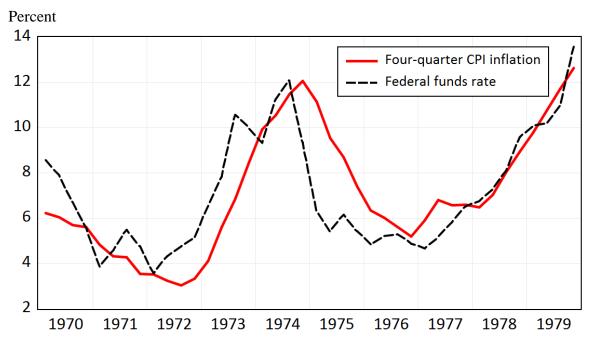


Figure 6. The federal funds rate and CPI inflation, 1970:Q1–1979:Q4.

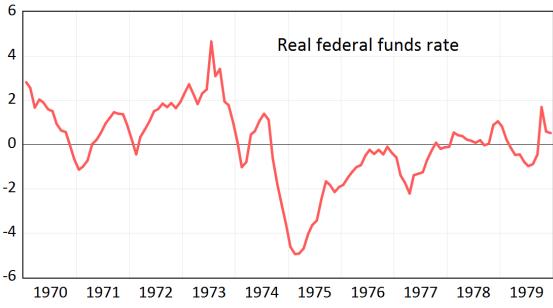


Figure 7. The real federal funds rate, January 1970 to December 1979.

This outlook put Miller at odds with Friedman. The difference between them was not on the need to disinflate, but on the degree to which monetary policy tightening could deliver disinflation. Reflecting this difference, Miller in May 1978 reacted to a Friedman *Newsweek* commentary by observing: "In the last section of his article, Dr. Friedman asserts that 'We need a long-term program dedicated to eliminating inflation.' I agree wholeheartedly." The divergence with Friedman was brought out by Miller's next observation: "Monetary policy has a critical role to play, but it cannot alone bear the whole burden of combating inflation."

Friedman believed that it was the Federal Reserve, rather than the executive branch, that made the decisions that most mattered for the course of inflation. But Friedman was critical of the Carter Administration on inflation, in good part because it articulated a nonmonetary, cost-push perspective. In doing this, he believed that the administration hindered public appreciation of the demand-restriction steps that would be needed to produce disinflation.

Like Miller, the administration was explicit in viewing price stability as a desirable goal. This was reflected in Treasury Secretary Blumenthal's remark early in his tenure: "Reduction in the rate of inflation is one of the goals of this administration." When, over the subsequent years, the administration propounded a cost-push view of inflation, Friedman at times expressed incredulity, such as in April 1978 when he remarked: "Secretary Blumenthal knows as well as you and I do that inflation does not come from trade unions." On numerous occasions, however, the administration made clear that it indeed *did* view inflation in these and similar terms. For example, CEA chair Schultze observed in March 1978: "We can't wring this inflation out of the economy through measures which promote unemployment and economic slack. Such policies have only a limited impact on the kind of inflation from which we now suffer..."

Especially before 1979, the Carter Administration diagnosed inflation in terms of special factors. These included rises in specific prices: those associated with U.S. exchange-rate depreciation (especially in 1978), weather (notably in 1977), rising world food prices (in 1978), and then food plus oil (in 1979). And, throughout these years, it put much emphasis on wage-push: pressures on prices associated with pay demands of U.S. labor unions. The administration's nonmonetary outlook was reflected in its series of anti-inflation measures. These included: a call in January 1977 by President Carter for prenotification of private-sector price increases; an April 1977 Carter announcement of a set of specific measures designed to bring inflation to 4 percent by mid-1979; his attempt in February and April 1978 to revive the wage-price guidelines of the 1960s; and the modification of this idea in October 1978 in the form of voluntary wage guidelines, voluntary price guidelines, and proposed real wage insurance via a tax-based incomes

policy (tax-based rewards for wage and price restraint). The president conveyed his outlook in April 1978 when he remarked: "Reducing the inflation rate will not be easy... We will not solve inflation by increasing unemployment. We will not impose wage and price controls. We will work with measures that avoid both extremes."

And in the face of such endurance of cost-push views, Friedman reiterated his criticisms of them. He was a longstanding critic of wage-push ideas. He would sum up his position in April 1981: "To say that wages are a cause of inflation is somewhat like saying that wet streets are a cause of rain. Wage rises are a manifestation of inflation." Or even more bluntly, in June 1976 he remarked: "Wage settlements have nothing to do with inflation."

In April 1978, Friedman observed: "President Carter's [anti-]inflationary package is like Hamlet without the Prince of Denmark... Inflation is not caused by trade unions, business interests, consumers, or oil... [It] has been around 1000 years and, in all that period, only one medicine to cure inflation has been found: to hold down the rate of monetary growth and hold down governmental spending."

In a November 1978 television appearance, Friedman added: "The great confusion in this area is to confuse particular prices with prices in general. Why is that people point to food prices as a cause of inflation, but I have seen nobody point to the sharp decline in the cost of computers, or hand-held computers, or computing services? Has somebody been pointing to that as a cause of deflation?"

By this point, President Carter made Alfred Kahn, known for his deregulation initiatives, the administration's "anti-inflation czar." Carter indicated that Kahn would be "my new partner in controlling inflation in this country." Friedman reacted by observing that Kahn had done a "remarkable job" on deregulation but that it was "sheer delusion" to see deregulation as key to disinflation. He feared that this was the direction in which the administration was going with the Kahn appointment. That fear was partially borne out by the president's remark in mid-1979: "The best anti-inflation medicine, in my opinion, is real competition under the American free-enterprise system."

Friedman was also concerned that, in propounding the administration's incomes policy, Kahn in his new job would move to stifling market forces. This concern was consistent with an early news report on Kahn's views, which stated that if he was forced to choose, Kahn favored mandatory wage and price controls over a recession.

### 6. The tidal year of 1979

In 1979, in drafting the book version of *Free To Choose*, Milton and Rose Friedman titled their final chapter "The Tide Is Turning." This referred principally to public opinion on the role of government. But 1979 proved to be a tidal year also regarding views in policy circles in 1979 on the causes and control of inflation—with this change in views rapidly reflected in policy stance.

1987's *Economic Report of the President*, largely drafted by Richard Clarida and Michael Mussa, noted that the 1975–1979 expansion "ended in a double crescendo of rising inflation and interest rates and falling economic activity." As this process unfolded, Friedman wrote in August 1979: "The problem is not, as President Carter asserts, a lack of confidence. The problem is rather that the public is very confident that the government will produce inflation and will mismanage the economy. We do not need more confidence in bad policies. We need better policies."

By the time Friedman was writing these words, major changes were afoot in policymaker and in general thinking about inflation in the economics profession. Far-reaching revisions in official estimates of the output gap at the start of the year, together with increasing recognition of a rising natural rate of unemployment, helped reconcile the decade's Great Inflation—including the ongoing second wave—with an excess-demand account. By 1982, Ben Bernanke, then at Stanford University, could refer to the "excess-supply bias of earlier estimates" and a "growing consensus that aggregate demand was overstimulated in the late 1970s." In policymaking, Paul Volcker became Federal Reserve chair in July 1979 and viewed inflation as monetary in nature.

There were many divergences between Friedman's prescriptions and the monetary policy of the Volcker Federal Reserve. But a lasting break in officialdom occurred in 1979, reflected in Volcker's perspective and consistent with Friedman's position: monetary policy now had special responsibility for controlling inflation. This change would be clear in Volcker's observation in August 1983: "We have to be particularly sensitive to inflation: that is a monetary phenomenon; that's more directly in our bailiwick." And with regard to the second wave of the Great Inflation, Volcker—who had been vice chair of the FOMC in the second half of the 1970s—articulated a retrospective judgment that lined up with Friedman's. In an appearance in 1982 alongside Anna Schwartz at an event in New York City, Volcker gave a negative verdict on monetary policy in 1976 and 1977. He observed that in the United States, noninflationary economic expansion "went on in the early '60s: and [then] the Vietnam War came along and all the rest, but we did have a five-year period where that happened. It began to happen [again], in my judgment, in '75 and '76, coming out of the recession. And then, for a variety of reasons, we blew it."