From Stagflation to the Great Moderation

BY VANESSA SUMO

How former
Federal Reserve
Chairman
Paul Volcker
tamed inflation
and changed
monetary
policymaking as
we know it

hen Paul Volcker returned early from an International Monetary Fund meeting in Belgrade on Oct. 2, 1979, everyone sensed that something was afoot. Volcker, the newly installed Chairman of the Federal Reserve Board of Governors, had called for a special meeting on Oct. 6, which was 10 days ahead of the regularly scheduled Federal Open Market Committee (FOMC) gathering. Average inflation had rocketed to 10.6 percent in the first eight months of 1979 from 7.6 percent in 1978. In September, inflation soared to a high of 11.9 percent over the previous year.

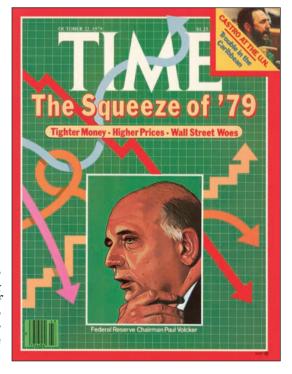
Worried about those trends, Volcker believed that the Fed had to change its policies, sharply and decisively. He opened that fateful meeting with this observation: "We wouldn't be here today if we didn't have a problem."

More than a quarter of a century ago, the Federal Reserve took a dramatic turn in monetary policy that sent interest rates soaring to their highest levels on record and triggered two recessions. But the move also finally arrested inflation's insidious rise and set the stage for a long period of prosperity in the United States.

The "Incredible Volcker Disinflation," as economists Marvin Goodfriend of Carnegie Mellon University (and former senior economist at the Richmond Fed) and Robert King of Boston University (and a visiting scholar at the Richmond Fed) hail this period, was "incredible" because the Fed was able to successfully bring down inflation from a high of 13.5 percent in 1980 to less than 4 percent in just a few years, and to keep it low for the next two and a half decades. This was a remarkable feat at a time when inflation seemed so well-entrenched in the economy and the costs of reducing it were deemed very large.

But Goodfriend and King also call this period "incredible" because the "imperfect credibility of monetary policy" complicated attempts to disinflate the economy. Stubbornness of inflationary expectations frustrated the Fed's efforts to bring down inflation permanently, even after Volcker's policy shift in October 1979. The public's deep skepticism of whether policymakers were serious about taming inflation and whether they would stay the course made it extremely difficult for the Fed to earn the credibility that was necessary to effectively rein in prices.

One of the Fed's missions is to conduct monetary policy in the pursuit of maximum sustainable growth. In many ways, The Reform of October 1979, as it has also come to be known, has led to the recognition that the Fed can best achieve this goal through its principal mission: keeping prices stable.



The Fed's decisive moves to control inflation, beginning in 1979, drew the attention of the public and media, which had grown skeptical of the central bank's resolve in pursuing price stability.

Great Expectations

Setting policy in the presence of high and volatile inflation expectations is like navigating a ship in a fog — it is difficult for a central bank to see where it is headed, whether it has been tightening or loosening too much or too little, and so runs the risk of destabilizing the economy. An environment with stable inflation expectations, on the other hand, makes it easier to bring about changes in real interest rates and thus carry out monetary policy effectively.

The Fed that Volcker inherited was utterly lacking in credibility. At the time, the notion that an expansionary monetary policy could permanently reduce unemployment was widely accepted and led many to believe that running some inflation was worthwhile. In time, the public would come to expect that the Fed would each time loosen money in order to stimulate the economy. But there was little understanding of how such expectations could feed into future wages and prices. Hence, there was little appreciation about the importance of anchoring inflation expectations.

This led to a "go-stop" fashion of monetary policy. In the "go" phase of the policy cycle, inflation would rise slowly as the Fed stimulated output and employment. By the time inflation reached worrying levels, higher inflation expectations had already seeped into the public's pricing decisions. Thus, an aggressive increase in the interest rate would have been needed to trounce inflation, but as Goodfriend points out, "There was a relatively narrow window of broad public support for the Fed to tighten monetary policy in the stop phase of the cycle."

This window opened when rising inflation started to become a concern, but closed quickly when unemployment began to rise. "The tolerance for rising inflation and the sensitivity to recession meant that go-stop cycles became more inflationary over time," explains Goodfriend. As a result, the public began to lose confidence in

the Fed. The perception that taming inflation would always take a backseat to efforts to combat a potential recession created the reputation that the Fed could not credibly commit to price stability.

The Monetary Policy Experiment Inflation began its ascent in the mid-1960s. From a low of 2.6 percent a year from 1964 to 1968, inflation rose to an average of 5 percent from 1969 to 1973, and 8 percent from 1974 to 1978. By 1979, it had reached a high of 11.3 percent.

The Fed that Volcker inherited was utterly lacking in credibility.

Even before he took over the Federal Reserve chairmanship from G. William Miller, Volcker was a well-known inflation hawk. In an April 1979 FOMC meeting as president of the Federal Reserve Bank of New York, he remarked, "[Inflation] clearly remains our problem. In any longer-range or indeed shorter-range perspective, the inflationary momentum has been increasing. In terms of economic stability in the future, that is what is likely to give us the most problems and create the biggest recession."

In part because of these credentials, President Carter appointed Volcker as Chairman, ushering out Miller after only 18 (widely perceived as ineffective) months on the job. But in August 1979 when he was finally sworn in, Volcker held back. In order to assure public support for taking a drastic measure to fight inflation, he would need to wait for a moment of crisis to arrive.

That happened sooner than expected. During the September 1979 FOMC meeting, the committee proposed a small increase in the federal funds rate (the overnight rate at which banks borrow reserves from each

other) to 11.5 percent. There were eight assents and four dissents, but three of these dissents actually came from hawks who were disappointed at the relatively small change and favored more tightening. When the Board of Governors met afterward to decide on the discount rate (the rate at which the Fed lends to financial institutions), a half percentage step up was passed with a 4-to-3 vote, this time with all three dissents on the dovish side.

But because only the vote on the discount rate was immediately made known to the public, markets interpreted the strong dovish dissents as a signal that the Fed would forestall any further increases in the interest rate. Moreover, the markets believed that Volcker's ability to fight inflation was in question since it appeared that he was facing increasing opposition within the Fed. The vote also seemed to confirm the widely held idea that the Fed would stop fighting inflation if it meant triggering a recession. Some analysts speculate that events may have unfolded differently had the markets known that three of the four dissents on the fed funds rate vote were actually by hawks who wanted more tightening instead of less.

Nevertheless, the public's belief that the Fed would take a softer stance on inflation roiled commodity markets. Daily futures prices for precious metals such as gold and silver rose sharply and turned disturbingly volatile as speculators rushed to hedge their positions against inflation. The mania spread to most other commodities as well.

After commodity futures prices spiked on Oct. 2, rumors surfaced that a support program for the flagging dollar was on its way, sending traders skidding the other way, only to learn later in the day that the rumor was unfounded. At this point, Volcker knew that the need for a dramatic monetary policy shift had arrived.

Calling for a special FOMC meeting, Volcker was determined to push

a strong program to deal with the situation. At the meeting on Oct. 6, he presented the committee with two possibilities for attacking inflation: the traditional method that would involve targeting a significant increase in the fed funds rate; or, a radical change in operating procedures.

The Fed has at its disposal two main approaches for conducting open market operations: It can target the price of balances - the federal funds rate — that banks hold at the Federal Reserve. Or it can target the quantity of those balances. The operational shift that Volcker was proposing would mean the Fed would stop directly targeting the prices of reserve balances and instead aim at a specific level of "nonborrowed reserves." Under the plan, the Fed would target a level of balances that would fall short of demand at the prevailing fed funds rate, thus causing banks to bid up the rate — accomplishing the same monetary policy goal but in a different way. However, and advantageously, this approach would mean allowing a much wider range where the fed funds rate could settle.

In speaking about these two alternatives, Volcker mentioned that changing operating procedures had occurred to him in the past: "My feeling was that by putting even more emphasis on meeting the money supply targets and changing operating techniques ... and thereby changing psychology a bit, we might actually get more bang for the buck ... I overstate it, but the traditional method of making small moves has in some sense, though not completely, run out of psychological gas." The two possibilities were put to a vote and the outcome was unanimous - switch to the new operating procedures. The Committee widened the fed funds rate band from 0.5 to 4 percentage points.

The cleverness of this simple plan, apart from the huge publicity that it created, was in taking off the Fed's hands the responsibility of where the fed funds rate may go. What tipped the decision in favor of changing operating procedures, according to economists Athanasios Orphanides of the Federal Reserve Board of Governors and David Lindsey, formerly of the Board, and Robert Rasche of the St. Louis Fed, was "the practical observation that a monetary authority deliberately setting the funds rate would be unlikely to select the level that it expected to induce that targeted money stock, because the implied volatility of the funds rate would be more than the authority could stomach." Because there was always a strong reluctance to let the funds rate rise too high, adopting the new rule would allow the Fed to fix its gaze on keeping the amount of money and credit in check while letting the fed funds rate attain the necessary level.

Rise of the Monetarists

Taming inflation expectations was a central objective in this policy experi-

ment, pushed to the foreground by Milton Friedman's monetarist ideas. Friedman pointed out that adjustments in inflationary expectations would break the perceived trade-off between inflation and unemployment if monetary policy continued to exploit this relationship. Moreover, insights from rational expectations theory taught that forward-looking agents cannot be "fooled," so their expectations and corresponding actions reflect how they perceive monetary policy is conducted. Friedman also argued that because inflation is mainly a monetary phenomenon - caused by excessive increases in the money supply - the cost of reducing inflation in terms of lost output would be much less severe than was previously thought. These ideas encouraged the Volcker Fed to proceed with its decision to drastically alter its policy.

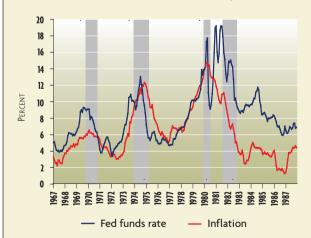
The Fed hoped that this dramatic shift would send a firm signal of its resolve to fight inflation and its intention to return the economy to more stable times. The question, however, was whether the Fed could

stick to this policy. Volcker himself had hinted that he intended to use the new operating procedure for only three or four months. But it would take much longer than that to deliver a permanent decline in inflation.

The first test of the Volcker Fed's determination to stabilize prices came on what Goodfriend identifies as the "inflation scare" of December 1979 to February 1980. During this period, the 10-year bond rate, an indicator of inflation expectations, soared from 10.5 percent to 12 percent. The inflation rate in February over the previous year was around 14.2 percent. At the same time, there were indications that the economy was weakening, which once again put the Fed in a bind. But the Fed forged ahead



The Fed aggressively raised interest rates in the early 1980s to control inflation, which had reached double digits.



NOTES: The blue line represents the monthly effective federal funds rate from January 1967 to December 1987. The red line represents the monthly year-on-year percentage change in the consumer price index. The shaded areas indicate recessions as determined by the National Bureau of Economic Research; December 1969 to November 1970, November 1973 to March 1975, January 1980 to July 1980, and July 1981 to November 1982.

 $\mbox{\it SOURCES}$: St. Louis Fed's Federal Reserve Economic Data (FRED) and the Bureau of Labor Statistics

with its tightening stance, and within two weeks of the March 1980 FOMC meeting, the fed funds rate shot up to 19 percent.

This aggressive tightening, however, would only restrain inflation temporarily, partly because the Fed felt compelled to ease the burden it had created by allowing interest rates to go so high. After credit controls (annual ceilings on both direct lending and loan guarantees in federal programs) that President Carter put in place plunged the economy into an even deeper recession, the Fed loosened policy, effectively moving the fed funds rate down to 9 percent by July 1980.

By the fall of that same year the fed funds rate and the 10-year bond rate were around 13.25 percent and 10.5 percent, respectively, roughly where they had stood the year before. This seemed to suggest that efforts to stabilize inflation in the past year had not been so successful, perhaps because the familiar pattern of gostop policy that had plagued the Fed's credibility had not yet been convincingly shaken off.

Staying the Course

The Fed tightened monetary policy again, just as the economy was recovering from the short 1980 recession and the threat of increasing energy prices due to skirmishes in the Middle East. The fed funds rate rose to a near record high of more than 20 percent in December of that same year. Though the FOMC knew it was risking another recession, Volcker reiterated the importance of staying the course in a February 1981 meeting, "We see the risks of the

alternative of a sour economy and an outright recession this year. So, maybe there's a little tendency to shrink back on what we want to do on the inflation side. I don't want to shrink back very far; that is my general bias for all the reasons we have stated in our rhetoric but don't always carry through on."

Still, nothing could stop long-term inflation expectations from climbing higher, as they did when the 10-year bond rate peaked to more than 15 percent in October 1981. Average inflation for 1981 was running high at 10.4 percent. This second inflation scare, say Goodfriend and King, was a pivotal moment in U.S. monetary history "because it convinced the Fed that the cost of a deliberate disinflation in 1981-82 was acceptable in light of the recurring recessions that would be needed to deal with inflation scares in the future."

And true enough, despite evidence that the economy was faltering and moving into another recession, the Fed was unwavering in its pursuit of stable prices. In the July 1981 FOMC meeting, Volcker once again reminded everyone of the ultimate objective. "I haven't much doubt in my mind that it's appropriate in substance to take the risk of more softness in the economy in the short run than one might ideally like in order to capitalize on the antiinflationary momentum to the extent it exists," Volcker said. "That is much more likely to give a more satisfactory economic as well as inflationary outlook."

Finally in October 1982, Volcker announced the end of the new operating procedures that were put in place

three years earlier. Inflation had begun to weaken in the spring of 1982 and by that fall, inflation had slipped to around 5 percent, the long rates dropped by 2 percentage points since that summer, and the fed funds rate fell to around 9 percent from more than 14 percent in July.

The Volcker Fed reverted to managing the fed funds rate more closely (targeting the price of balances instead of the quantity) and began taking a more accommodative stance in its treatment of the money supply. The recession ended in November 1982. Still, the Fed did not give into complacency and held the fed funds rate in the 8 percent to 9 percent range through the first half of 1983, even as inflation moved down to less than 4 percent by the end of that year, largely because long-term interest rates were still hovering over 10 percent.

The battle was not yet completely won at this point, for there were still some inflation scares that would test the Fed's mettle. Nevertheless, the hardest work had been done.

Volcker's monetary policy experiment established the credibility that the Fed sorely needed to stabilize inflationary expectations. A time of unprecedented low inflation and steady economic activity has ensued in the decades since the Volcker disinflation, a period which has sometimes been called the "Great Moderation." Most observers agree that improved monetary policy since Volcker deserves much of the credit for this era of stability. Without a doubt, Alan Greenspan and Ben Bernanke have benefited greatly from this legacy.

READINGS

Federal Open Market Committee Transcripts, 1979-1982. Washington, D.C.: Board of Governors of the Federal Reserve System.

Goodfriend, Marvin, and Robert King. "The Incredible Volcker Disinflation." National Bureau of Economic Research Working Paper no. 11562, August 2005.

Goodfriend, Marvin. "The Monetary Policy Debate Since October 1979: Lessons for Theory and Practice." Federal Reserve Bank of St. Louis *Review*, March/April, vol. 87, no. 2, part 2, pp. 243-262.

Lindsey, David, Athanasios Orphanides, and Robert Rasche. "The Reform of October 1979: How It Happened And Why." Federal Reserve Bank of St. Louis *Review*, March/April, vol. 87, no. 2, part 2, pp. 187-235.