Monetary Policy Lessons from the 1990s for Today

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The Fed under Paul Volcker put the economy through a severe recession in the early 1980s to bring inflation down. Even so, the Fed's credibility for low inflation was not yet secure in the early 1990s. Core CPI inflation rose from around 3.8 percent in 1986 to around 5.3 percent in 1990. Rising inflation expectations elevated the 30-year bond rate from 7.5 percent to 9.6 percent between March and October 1987. Markets doubted that the Fed under Volcker's successor, Alan Greenspan, would hold the line on inflation, let alone push toward price stability. Rising inflation in late 1980s reinforced that skepticism. It took five years for the bond rate to fall back to the 7.5 percent range.

Remarkably, the Greenspan Fed did deliver price stability. By the end of the 1990s the bond rate was around 6 percent and core CPI was running at 2.5 percent, even as the unemployment rate drifted down to 4 percent. In a 2003 semiannual testimony to Congress, Greenspan declared that measures of core consumer inflation had decelerated to a range that could be considered "effective price stability."

The Greenspan Fed secured credibility against inflation in 1994-95 with its successful preemptive tightening of monetary policy against the last great "inflation scare" in bond rates. For the first time, there was talk of the "death of inflation" and of inflation expectations being "well-anchored." The 1990s divides into two halves with respect to the conduct of monetary policy. Before 1995 the Fed contended with insecure credibility against inflation; after 1995 the Fed adapted monetary policy to its secured credibility.

The stabilization of inflation in the 1990s involved problems for monetary policy that are still with us. In what follows, I review monetary policy in the 1990s before and after the Fed secured credibility against inflation to provide perspective on issues confronting monetary policy today.

1) Securing Credibility Against Inflation: 1990-95

During and following the 1990-91 Gulf War recession the Greenspan Fed cut interest rates very slowly by historical standards—from 8 percent in August 1990, to 6 percent in April 1991, to 3 percent in October 1992—allowing the unemployment rate to climb to a 7.8 percent peak in June 1992, over a year after the recession ended. The costly, protracted "jobless recovery" forced the inflation rate down to 3 percent by 1992. And the Fed kept the zero real short-term interest rate in place for 18 months as the unemployment rate fell to 6.6 percent and the 30-year bond rate fell below 6 percent.

Then, from February 1994 to February 1995 the Fed lifted the federal funds rate from 3 to 6 percent in reaction to an inflation scare which took the 30-year bond rate from 5.8 percent in October 1993 to peak at 8.2 percent in early November 1994.

The 1994-95 policy tightening was controversial because it was initiated without a prior increase in actual inflation while the unemployment rate was 6.6 percent. And the policy tightening threatened to prolong the jobless recovery. Congress forced the Fed in February 1994 to begin publicizing its intended federal funds rate immediately after each FOMC meeting, further fueling the controversy. And Congress invited all twelve Reserve Bank presidents to explain their views before the House and Senate banking committees, threatening legislation to reorganize the Federal Reserve.

The highly public controversy helps explain why the 1993-94 inflation scare was so intense and why the Greenspan Fed responded to the inflation scare challenge with an aggressive tightening of monetary policy.

The 1994-95 policy tightening did preempt rising inflation, which continued to range between 2.5 and 3 percent. Real GDP grew by 4 percent in 1994, up from 2.6 percent in 1993 and the unemployment rate actually fell to 5.6 percent. Republicans gained control of the House for the first time in fifty years ending the threat to restructure the Federal Reserve. By January 1996 the bond rate was back at 6 percent. Inflation was widely thought to be "dead," and inflation expectations were "well-anchored."

2) Monetary Policy with Credibility Against Inflation: 1996-2001

The Fed confronted an entirely different set of problems in the second half of the 1990s. Core CPI inflation stayed in the 2.5 percent range, and the bond rate ranged between 5 and 6 percent during the last two years of the decade even as the unemployment rate fell to 4 percent.

Fed credibility against inflation meant that tight labor markets no longer triggered inflationary wage pressure. Workers were disinclined to demand inflationary nominal wage increases confident that firms would not push up product prices. And firms were inclined to hold the line on product price increases in the face of tight product markets

For its part, the Greenspan Fed exploited its hard-won credibility against inflation to experiment—letting the economy run above its previously presumed non-inflationary

potential. And the economy did operate above what had previously been believed to be its potential output with little or no increase in inflation.

The question was: When should the Fed raise interest rates to prevent overshooting of the sustainable non-inflationary growth path? The Fed's success in anchoring inflation and inflation expectations meant that traditional indicators of excessive monetary stimulus became less informative. Inflation was stable. The unemployment rate was less predictive of inflation. The bond market was less susceptible to inflation scares. Nominal money growth was less predictive of inflation.

Complicating matters further, apparently higher trend productivity growth at the time required higher real interest rates to make households and firms accept a steeper spending profile in line with faster productivity growth. Yet the Fed refrained from raising interest rates due to the East Asian currency crisis in 1997 and the Fed actually cut the federal funds rate by 75 basis points to 4.75 percent in the wake of the Russian default and failure of LTCM in late 1998.

Equity prices rose ever higher in the second half of the 1990s. Tech stock prices nearly tripled in 1999 and the unemployment rate fell from 4.3 to 4 percent by year's end. In June 1999 the Fed judged that the pool of available workers — unemployed plus discouraged — looked to be approaching an "irreducible minimum." In light of these developments, the Fed raised the federal funds rate gradually from 4.75 percent in June 1999 to 6.5 percent in May 2000.

Unfortunately, by then the economy had already overshot its potential. Tighter monetary policy was needed to bring aggregate demand down to the non-inflationary growth path. Pro-cyclical finance in equity and credit markets amplified the overshoot and the adjustment thereafter. Because the Fed's credibility against inflation was secure, the Fed needed only a modestly restrictive 4 percent real federal funds rate to precipitate the necessary adjustment.

Technology stock prices peaked in March 2000 and then collapsed, and financial conditions tightened more generally. Consumer spending held up reasonably well as unemployment rose slowly to only 4.6 percent by mid-2001. The contraction finally accelerated in early 2001 with the collapse of investment in structures, equipment, and software, and from the accompanying inventory liquidation.

As the contraction deepened, the Greenspan Fed cut the federal funds rate sharply from 6.5 percent in January 2001 to 1.75 percent in December, confident of its credibility against inflation. Core CPI inflation changed little. The 4.75 percent real interest rate cut cushioned the adjustment. Instead of perpetuating a jobless recovery as it had after the 1990-91 recession, Fed monetary policy mitigated job losses in 2001. The NBER officially determined that the United States endured a relatively mild recession from March 2001 until November, and might not have had a recession at all if not for the severely contractionary effects of the September 11 attack on the World Trade Center.

3) Lessons from the 1990s for Monetary Policy Today

After nearly seven years of near zero interest rate policy the Fed may finally be about to exit the zero bound. With interest rates having been exceptionally low for so long, the case for liftoff is a good one. As of August 2015 the unemployment rate has fallen to 5.1% and the economy added around three million new jobs in the past twelve months. With an extraordinary \$3 trillion of bank reserves now on bank balance sheets there is good reason for the Fed to be on guard against losing its credibility against inflation, so hard-won in the early 1990s. There is also reason to worry that delaying liftoff could fuel an excessive appreciation of equity or real estate prices and cause the economy to overshoot potential as it did in the late 1990s.

Yet there are lessons from the 1990s in conjunction with the current shortfall of inflation below target that argue for waiting before tightening monetary policy very much, if at all in the near term. The Fed's preferred inflation index, core PCE on a monthly year over year basis has run below its 2% longer-run inflation objective since 2008 (except for reaching 2% briefly in early 2012). Core PCE inflation has averaged only around 1.5% since early 2013, and the latest year over year reading is only 1.25%.

The Fed has argued that the shortfall of core PCE inflation relative to its target will be reversed over time because inflation expectations and trend inflation have been well-anchored since the mid-1990s. That presumption is questionable. The Fed's hard-won credibility in the early 1990s only anchored expectations securely against <u>inflation</u>. Credibility against inflation does not translate to credibility against <u>deflation</u> when interest rate policy is immobilized at the zero bound. In the absence of Fed credibility against deflation, persistently low inflation may well drag expected inflation and trend

inflation below 2%, just as persistently high inflation dragged trend inflation upward—when the Fed lacked credibility against inflation—during the Great Inflation.

The Fed and others have argued from the "bottom up" on a case-by-case basis that the shortfall of inflation today is also likely to be reversed because many relative prices in the index appear to be temporarily low. One should be suspicious of such "non-monetary" explanations of inflation given the evidence—like that from monetary policy in the 1990s—that inflation dynamics are heavily influenced by central bank behavior as perceived by the public.

On balance, there is good reason to be skeptical of arguments such as these that low inflation will revert to 2% of its own accord.

We are left with two opposing lessons from the 1990s for monetary policy today. One teaches that failure to raise interest rates in a timely manner risks higher inflation, an inflation scare in bond rates, excessive appreciation of asset prices, or overshooting the sustainable growth path as in the late 1990s. The other teaches that raising interest rates too far, too soon before the Fed secures its credibility against deflation, risks a "deflationary destabilization" of trend inflation and inflation expectations.

Given that the primary responsibility of a central bank is to preserve price stability and that only monetary policy can do that, the Fed should give priority to moving inflation back to the 2% target. The Fed should wait before tightening monetary policy very much, if at all in the near term until it has direct evidence that core PCE on a monthly year over year basis has consistently moved back toward 2%.