

## **The Fed Replays History**

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Inflation is at a 40-year high and gaining momentum, and the Federal Reserve is now faced with the difficult challenge of tightening monetary policy enough to reduce inflation back to target, but not too much to generate recession. With so much experience, how did the Fed get itself into such a situation? Unfortunately, delayed exits from periods of countercyclical monetary easing have been a reoccurring theme in modern U.S. history.

Since the Fed assumed a more active role in managing aggregate demand following World War II, it has downgraded its price stability objective and tilted toward prioritizing employment and favoring higher inflation. The Fed's discretionary approach has involved constantly changing its interpretations of its objectives and expanding the monetary tools to achieve them. This has involved excessively fine-tuning economic outcomes without adequate regard to the lags between monetary policy, the economy and inflation, and occasional slippages in its effort to make monetary policy data-dependent. Ironically, history suggests that the Fed has been guilty of the all-too-human trait of "fighting the last battle", basing policies on most recent cyclical policy response and outcome. These factors have led the Fed to frequently misinterpret the most appropriate lessons of history.

We review historic episodes of the Fed's exits following periods of monetary ease that resulted in undesired inflation and subsequent tightening phases. This includes the post-World War II period, the 1960s and 1970s, the early 1990s, the 2002-2005 period, the period following the 2008-2009 financial crisis and the current pandemic period. While every inflation episode unfolded under different circumstances, we find that they were all initiated by some combination of monetary and fiscal stimulus that generated excess demand. In each episode, the Fed proved too slow to remove its monetary stimulus, fueling inflation. The subsequent Fed tightening typically generated recession.

Our findings contrast with the assessment of the Biden Administration's Council of Economic Advisors, which attributes these bouts of inflation to supply shocks and a variety of other factors but not to the stimulative impacts of monetary and fiscal policies (Rouse, et al 2021). Similarly, as inflation rose in 2021, the Fed asserted that inflation was due to supply shocks while significantly understating the role of monetary or fiscal policy stimulus on aggregate demand (Powell 2021). The Fed belatedly pivoted in December 2021 toward acknowledging the persistence of inflation and the need for the Fed to raise rates to slow demand (Federal Reserve 2021).

The cyclical experiences since the 1920s were carefully documented by Michael Bordo and John Landon-Lane (Bordo and Landon Lane 2013). Their narratives and empirical evidence found that up until the 1950s, the Fed began to raise rates after the general price level turned up and the policy tightening, led to recession. Since the 1960s, the Fed began to tighten after inflation began rising and its belated exits to remove the inflation led to recession.

Unless the Fed corrects its unevenly balanced approach to achieving its employment and inflation mandates and acknowledges the lags between monetary policy, the real economy and inflation, it will be prone to future policy mistakes. This requires removing the asymmetries and imbalances introduced in its new strategic framework and replacing it with a rule-based approach for achieving maximum employment that provides sufficient flexibility to the Fed during emergencies.

### **Inflation episodes in modern US history**

**Post-World War II.** The high inflation that followed World War II has important analogies to the current situation. Before the Treasury-Fed Accord of 1951, the Fed supported the Treasury's financing of World War II with artificially low rates and rapid money growth. As the war ended and on the heels of the Great Depression, it was widely agreed that managing aggregate demand was the proper role of the government. The biggest concern was that aggregate demand would collapse and recession and deflation would follow, like in the post-WWI period.

Instead, pent-up demand surged, fueled by sustained low interest rates and monetary ease, as the Fed was constrained from rising interest rates (Bordo-Levy 2020). Consumption and housing boomed. The excess demand for goods strained the transition from wartime to civilian production and drove up production costs. Businesses benefited from strong demand and raised product prices after the wartime wage-price controls were lifted. The inflation was temporary but intense, with three consecutive years of inflation exceeding 10% following the removal of wartime price controls.

The Fed belatedly tightened monetary policy through higher bank capital requirements while the government's defense spending fell faster than anticipated and fiscal policy turned restrictive. This generated a mild recession in 1949 that quickly subdued inflation. This episode highlighted the common theme that monetary policy plays a key role in generating aggregate demand, and once inflation rises significantly, it is difficult to reduce it without harming economic expansion.

**The late 1960s.** After a decade of subdued inflation leading up to 1965, inflation accelerated significantly in the second half of the decade, from 1.6% in 1965 to 5.9% in 1970. Excessive fiscal stimulus--President Johnson's Great Society Programs and Vietnam War spending--accommodated by easy monetary policy, generated excess demand and higher inflation (Levin and Taylor 2013). By the 1960s, activist Keynesian policy prescriptions had become mainstream. Lowering unemployment took precedence and the belief that moderate inflation was good for economic performance dominated policy makers' mindset.

Although the ramping up of government spending stimulated demand, to the dismay of fiscally conservative Fed Chair William McChesney Martin, the Fed caved into LBJ's wishes not to raise interest rates in late 1965. The Fed attempted to dampen aggregate demand in Summer 1966 through higher bank capital requirements and not lifting Regulation Q on interest rates. This resulted in a "Credit Crunch" that temporarily stalled economic activity, forcing the Fed to step back. Accelerating Vietnam War spending and renewed monetary accommodation spurred aggregate demand and rising inflation. The Martin-led Fed began raising rates aggressively only after LBJ announced he would not seek re-election. Coupled with the extension of the Vietnam War surtax, the economy tilted into mild recession in 1970.

**The 1970s.** Following the recession of 1970, inflation receded to only 3.5%, more than double its 1965 average, and inflationary expectations remained elevated. New Fed Chairman Arthur Burns' placed more concern on the high unemployment rate, which rose from 4.2% when he became chair in February 1970 to 6.1 in December. Reflecting his eclectic views and skepticism of monetary policy, Burns attributed inflation to an array of non-monetary sources, including labor unions and greedy businesses, rather than Fed policy. This led to his disastrous advocacy of President Nixon's wage and price controls and abandoning the gold standard (Stein 1984).

Among the many lessons from the misguided policies and high inflation of the 1970s, the wage and price controls were destructive in many ways, attempting to address the symptoms of inflation rather than its causes, understating the role of inflationary monetary policy, and creating massive confusion. The abandoning of the gold standard in August 1971 unanchored inflationary expectations. The Fed's accommodative monetary policy during President Nixon's re-election bid fueled inflation pressures that were constrained by wage and price controls. The mounting costs of high inflationary expectations became a reality, as they became embedded in wage and price setting behavior, pushed up interest rates and damaged financial markets.

The oil price shocks in November 1973 and 1979 contributed to the inflation and poor economic performance, but in the absence of accommodative monetary policy, these negative supply shocks would not have generated sustained excess demand and inflation (Cagan 1974). After a temporary spike in nominal spending, aggregate demand and inflation would have fallen. Instead, nominal GDP growth exceeded 10% in the consecutive years 1978-1981, creating the excess demand that fueled the wage-price spiral.

The decade-long policy tilt toward prioritizing lower unemployment while using failed administrative means to keep a lid on inflation without any viable strategy for lowering inflation lost the confidence of the public and financial markets and culminated in the US dollar crisis in 1978. The appropriate and necessary disinflationary policies of the Volcker-led Fed broke inflation and inflationary expectations resulted in damaging recessions during 1980-1982 but ushered in a sustained period of moderate inflation and healthy economic performance.

**The 1990s.** Fed policy during the 1990s was highlighted by one of the Fed's greatest successes—a mid-cycle monetary tightening in 1994 that resulted in an economic soft-landing and reduced inflationary expectations that established the basis for strong economic performance in the second half of the decade. The Fed had sustained monetary accommodation during the so-called “jobless recovery” that followed the shallow recession of 1990. In delayed response to the economic overheating that began in 1993, the Fed raised rates sharply, from 3% in February 1994 to 6% a year later.

This dampened inflationary expectations and successfully orchestrated an economic soft-landing, but the sharp rate increases were not costless. Domestically, spikes in Treasury and mortgage yields resulted in bankruptcies of several US public sector money managers. More importantly, the Fed rate hikes contributed to the Mexican debt and peso devaluation crisis (the “Tequila Crisis”) that rippled through Latin America (Bordo, Humpage and Schwartz 2015).

**The 2000s.** The negative implications of rate hikes in 1994 heavily influenced the Greenspan-led Fed in the early 2000s. In 1999, the Fed maintained monetary accommodation despite an overheating economy and the dot.com stock market bubble because it mistakenly insisted on maintaining excess

liquidity going into Y2K. In 2000, it tightened monetary policy too much. The stock market bubble burst, and recession unfolded in 2001, culminating with the shock of 9/11. Following 9/11, a new worry surfaced at the Fed: inflation fell to 1% and the Fed feared that the U.S. would follow Japan's 1990s path of deflation, which would lead into a downward spiral of weak aggregate demand whose escape would be difficult. Fed Chairman Greenspan characterized deflation as a low probability but high cost outcome, and tilted monetary policy decidedly in the other direction (Greenspan 2003) while Fed Governor Bernanke described how Fed asset purchases could combat deflation if the Fed faced the zero lower bound (Bernanke 2002).

Even as inflation rose to 2%, the Fed kept rates at 1%, and when it belatedly began raising rates, in deference to the jarring impacts of the rapid rate increases of the mid-1990s, the Fed pre-announced very gradual increases with a clear objective of minimizing any disturbance to financial markets. For a sustained period, rates were well below what a Taylor-type monetary policy rule would have prescribed and real estate activity and values and mortgage debt soared (Taylor 2007).

While the Fed's policies did not cause the debt-financed housing bubble, which was characterized by a proliferation of excessively complex mortgage-based debt instruments, the Fed's lower for longer monetary policy clearly facilitated the debt-financed housing boom. Subsequent rate increases in 2005-2006 shifted expectations about housing unraveled the mortgage debt markets that led to the financial crisis. This was another instance in which the Fed's delayed exit from monetary ease proved costly.

**Post Great Financial Crisis (GFC).** The Fed's sustained aggressive monetary ease was striking in character and impact, with considerable longer-run ramifications. The Fed followed its QEI crisis response in November 2008 with QEII, operation twist (selling short-dated securities and buying long-dated securities) and open-ended QEIII. Fed Chair Bernanke stated that the primary purpose of QEIII was to lower the unemployment rate (Bernanke 2012). The Fed subsequently maintained zero interest rates until December 2015, well after the economy had recovered on a self-sustaining basis. While the economy grew slowly and labor markets improved gradually following the GFC, inflation remained subdued and remained below the Fed's 2% longer-run target. This experience heavily influenced the Fed's policymaking a decade later in response to the 2020 pandemic.

The Fed learned the wrong lessons from the post-GFC. Inflation stayed low because the Fed's unprecedented monetary ease beginning in 2009 did not stimulate an acceleration in aggregate demand, with nominal GDP never accelerating above 4%, providing little support for higher prices or wages (Levy 2017). The economic and financial environment was negative, with a crippled banking system and housing sector, and fragile household finances took years to repair. The American Recovery and Investment Act of 2009 provided only limited stimulus, and tax increases in January 2013 imposed fiscal restrictiveness.

In this environment, the Fed's QEs increased bank reserves and the monetary base, but remained as excess reserves, and did not translate into increased money supply or credit expansion that generated economic activity. This may be attributable to the Fed paying interest on excess reserves beginning in October 2008, raising capital and liquidity requirements, and imposing tighter controls and bank supervision as part of the Fed's stress tests of the large banks. The Fed's strategic review in 2018-2019, which focused on the low inflation and worries about the effective zero lower bound, did not thoroughly analyze why monetary policy failed to achieve the Fed's 2% inflation target.

**The 2020 pandemic and current situation.** In response to the unfolding severe economic contraction and dysfunction in the US Treasury market, the Fed reduced rates to zero and engaged in massive asset purchases, including MBS. The Fed's actions were matched by the largest fiscal support package in US history. Financial markets quickly stabilized and in May there were signs that the economy was beginning to recover. The government followed with more and more stimulus, which totaled over \$5 trillion in deficit spending, over 25% of GDP. For nearly two years, the Fed has maintained its zero rates and its asset purchases have more than doubled its balance sheet to \$8.6 trillion.

The Fed made clear that a critical lesson it had learned from the GFC was that its monetary response had been too timid, and it presumed that the subdued inflation that followed the GFC would be repeated. This presumption emboldened the Fed to aggressively pursue its maximum employment mandate (Ireland and Levy 2021). The Fed's new strategic framework that Chair Powell introduced in August 2020 institutionalized the Fed's unbalanced approach to monetary policy, prioritizing maximum employment and explicitly favoring higher inflation (Powell 2020). The Fed interpreted its assessment that the Phillips Curve was flat as eliminating the need to pre-emptively tighten monetary policy in response to conditions of maximum employment (Clarida 2020).

The Fed's presumptions and forecasts proved wrong. The economy and labor markets recoveries far exceeded Fed expectations and inflation rose far above its December 2020 forecast of 1.8% inflation in 2021. Even as the recovery accelerated, the Fed emphasized the downside economic risks and asserted that the high inflation was transitory. It incorrectly attributed the inflation to supply shortages, while largely ignoring robust aggregate demand and understating the impact of its aggressive monetary stimulus. The Fed subsequently backed off this assertion.

CPI inflation rose to 6.9% and PCE inflation to 5.7% before the Fed signaled in December 2021 that it would need to raise rates in 2022. By then, the Fed's delayed exit put monetary policy way behind the curve. Certainly, the pandemic has posed unique risks for the Fed. But its current situation is nothing new, rather an unfortunate repeat of history of delayed exits from extended monetary ease.

## References

Ben Bernanke (2002) "Deflation: Making Sure 'It' Doesn't Happen Here", National Economists Club, Washington DC, November 21.

Ben Bernanke (2012) "Monetary Policy Since the Onset of the Crisis", Federal Reserve Bank of Kansas City Jackson Hole Economic Symposium, August 31.

Michael D. Bordo, Owen Humpage and Anna J. Schwartz (2015) *Strained Relations: U.S. Foreign Exchange Operations and Monetary Policy in the Twentieth Century*. Chicago: University of Chicago Press.

Michael Bordo and John Landon-Lane (2013) "Exits From U.S. Recessions: The U.S. Experience, 1920-2007" in Vincent R. Reinhart, No Way Out: Persistent Government Interventions in the Great Contraction, American Enterprise Institute Press, February.

Michael D. Bordo and Mickey D. Levy (2020) "Do Enlarged Deficits Cause Inflation: The Historical Record, NBER Working Paper 28195, December.

Michael Bordo and Athanasios Orphanides (2013) The Great Inflation: The Rebirth of Modern Central Banking, University of Chicago Press.

Phillip Cagan (1974) The Hydra-Headed Monster: The Problem of Inflation in the United States, American Enterprise Institute, October.

Richard Clarida (2020) “Fed Vice Chair Richard H. Clarida on U.S. Monetary Policy”, The Peterson Institute for International Economics, August 31.

Federal Reserve (2021 and 2022) “Federal Reserve Press Release”, December 15, and “Minutes of the Federal Open Market Committee December 14-15, 2021, released January 5, 2022.

Alan Greenspan (2003) “The Economic Outlook”, Testimony before the Joint Economic Committee of the U.S. Congress, May 22.

Peter Ireland and Mickey D. Levy (2021) “‘Substantial Progress’, Transitory vs Persistent and the Appropriate Calibration of Monetary Policy”, Shadow Open Market Committee, Oct 1.

Andrew Levin and John B. Taylor (2013) “Falling Behind the Curve: A Positive Analysis of Stop-Start Monetary Policies and the Great Inflation” in Michael Bordo and Athanasios Orphanides, The Great Inflation: The Rebirth of Central Banking, University of Chicago Press.

Mickey D. Levy (2017) “Why Have the Fed’s Policies Failed to Stimulate the Economy”, Cato Journal, 37 (1), 39-45.

Mickey D. Levy and Charles Plosser (2020) “The Murky Future of Monetary Policy”, Hoover Institution Working Paper 20119, October 1.

Jerome Powell (2020) “New Economic Challenges and the Fed’s Monetary Policy Review”, Federal Reserve Bank of Kansas City Jackson Hole Economic Symposium, August 27.

Jerome Powell (2021) Semiannual Monetary Policy Report to the Congress, House Financial Services Committee, U.S. House of Representatives, July 14.

Cecilia Rouse, Jeffrey Zheng and Ernie Tadeschi (2021) “Historical Parallels to Today’s Inflationary Episode”, The White House Council of Economic Advisors, July 6.

Herbert Stein (1984) Presidential Economics: The Making of Economic Policy from Roosevelt to Reagan and Beyond, New York, Simon and Schuster.

John Taylor (2007) “Housing and Monetary Policy”, Federal Reserve Bank of Kansas City Jackson Hole Economic Symposium, August.