MERCATUS SPECIAL STUDY

WHAT KIND OF LANDING: SOFT OR HARD?

Robert L. Hetzel, *Mercatus Center*

MERCATUS.ORG

MERCATUS CENTER
George Mason University

Robert L. Hetzel, "What Kind of Landing: Soft or Hard?" Mercatus Special Study, Mercatus Center at George Mason University, Arlington, Virginia, January 2023.

ABSTRACT

In the past, the Federal Open Market Committee (FOMC) has been able to bring down inflation through contractionary monetary policy only at the cost of recession. Despite this history, in their comments on current policy, FOMC participants do not draw lessons from that experience. There is no evidence in their comments that the FOMC possesses a strategy, drawn from the lessons of historical experience, for lowering inflation without a serious recession. This paper summarizes the relevant issues. It also suggests a strategy for reducing inflation without high risk of recession: a "soft landing."

JEL codes: E, E4, E5, E42, E51, E52, E58

Keywords: Federal Open Market Committee, Federal Reserve System, inflation, Jerome Powell, Milton Friedman, monetarism, monetary policy, money, Phillips curve, stop-go, soft landing

In the past, the Federal Open Market Committee (FOMC) has been able to bring down inflation through contractionary monetary policy but only at the cost of recession. Despite this history, in their comments on current policy, FOMC participants do not draw lessons from that experience. There is no evidence in their comments that the FOMC possesses a strategy, drawn from the lessons of historical experience, for lowering inflation without a serious recession. This paper summarizes the relevant issues. It also suggests a strategy for a soft landing.

Section I questions whether the FOMC possesses a coherent strategy for achieving its target of 2 percent inflation—a strategy based on a conceptual framework of the transmission process of monetary policy. Section II provides such a conceptual framework. It is useful for understanding the high inflation of the 1970s and why the fine-tuning policy of that era ended up as destabilizing "go-stop." Section II also uses that framework to put the current high rate of underlying inflation into perspective. Using a graphical overview, Section III provides context for the current inflation in a way that suggests the difficulty of the task before the FOMC in restoring price stability. Section IV reviews the ends of postwar inflations in a way that highlights the importance of expectations. Section V asks what lessons the FOMC should have learned from the pandemic monetary policy of extreme stimulus and the subsequent inflation. Section VI discusses a strategy for returning to price stability. Section VII concludes with a comment on Federal Reserve independence.

I. THE NEED FOR A COHERENT STRATEGY (A RULE)

Nothing in the official statements of the FOMC suggests a coherent strategy for achieving a soft landing. The FOMC press release for the meeting ending November 2, 2022, included the language:[1]

> The Committee anticipates that ongoing increases in the target range will be appropriate in order to attain a stance of monetary

1. Board of Governors, Federal Open Market Committee Press Conference, November 1–2, 2022.

> policy that is sufficiently restrictive to return inflation to 2 percent over time. In determining the pace of future increases in the target range, the Committee will take into account the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments.

The language gives the impression that the FOMC understands whether monetary policy is contractionary or restrictive based on the level of the funds rate. Furthermore, it also understands the lags involved in the transmission of monetary policy to the behavior of the economy. Such understanding must derive from a conceptual framework explaining how monetary policy impacts the economy. However, the FOMC does not share that framework with the public. Policy remains "trust me." The FOMC missed badly the rise in underlying inflation in 2021 by attributing it to transitory factors rather than to prior expansionary monetary policy. An explicit framework would help to assure the public that the FOMC now has corrected its earlier misunderstanding.

In his final comments to the FOMC before retiring as governor, Frederic Mishkin made comments that seem pertinent to the current situation.[2]

> What is very problematic from my viewpoint are the speeches, discussions, and interviews outside, when people [FOMC participants] talk about where they think interest rates should head. . . . That's where the criticism has been coming from. I have to tell you that a lot of people whom I respect tremendously are saying to me that it's making us look like the gang that can't shoot straight. I think it's a really serious problem. . . . This kind of cacophony on this issue has the potential to damage us.

It is hard to characterize the public statements of FOMC participants as anything other than subjective opinions. They seem to consist of guesses about the extent to which the funds rate must rise to implement a sufficiently restrictive policy to bring down inflation. Like the SEP (Summary of Economic Projections) that participants submit quarterly, the statements are presented without reference to an underlying strategy (rule) that brings coherence to policy over time.

In the same statement,[3] Mishkin also warned the FOMC: "Let me talk about the issue of focusing too much on the federal funds rate as indicating the stance of monetary policy. . . . I have a chapter in my textbook that . . . talks

2. Board of Governors, Federal Open Market Committee Transcript, August 5, 2008, 125–126.
3. Board of Governors, Federal Open Market Committee Transcript.

about the very deep mistakes that have been made in monetary policy because of exactly that focus on the short-term interest rate as indicating the stance of monetary policy."[4] The FOMC needs a strategy for setting the funds rate.

An explicit strategy for returning inflation to the target of 2 percent would assure the public that the FOMC was grappling with the genuine issues raised by its policy. In particular, to prevent expected inflation from rising with actual inflation, the FOMC has used hawkish language that has committed it to raising interest rates until growth in the real economy, strength in the labor market, and underlying inflation moderate. In his prepared remarks for the press conference following the November FOMC meeting, Chair Jerome Powell said, "Incoming data between the meetings, both the strong labor market report but particularly the CPI report, suggest to me that we may move to higher levels than we thought at the time of the September meeting."[5] However, the FOMC is then basing its actions on the behavior of variables that are influenced by its past actions generally with long lags. Milton Friedman's 1960 critique of activist policy[6] argued that such behavior would create a destabilizing stop-go dynamic in policy.

Without an explicit strategy, the FOMC can provide no assurance that it will not push the funds rate to a level that will cause a severe recession. As of November 2022, incoming data are likely to push the FOMC to continue raising the funds rate. The data do indicate some moderation of economic growth. In particular, for the first three quarters of 2022, growth in real final sales to private domestic purchasers came in at 2.1 percent, 0.5 percent, and 0.1 percent, respectively. Still, the economy is not in recession. In August and September 2022, at an annualized rate, real consumer spending came in at 3.5 percent according to the preliminary third-quarter GDP report. At the same time, underlying inflation has not moderated. The Cleveland Fed annualized measure of median Consumer Price Index (CPI) inflation was 8.3 percent for September 2022, basically equal to the average for the prior three months. Its trimmed mean number was 7 percent for September 2022, again basically equal to the number for the prior three months. As reported by the Atlanta Wage Tracker, the three-month moving average of wage growth was 6.3 percent for September 2022 and 7.9 percent for job switchers, which is a leading indicator for wage growth.

4. Board of Governors, Federal Open Market Committee Transcript, 121.
5. Board of Governors, Federal Open Market Committee Meeting Press Conference, November 1–2, 2022.
6. Milton Friedman, *A Program for Monetary Stability* (New York: Fordham University Press, 1960).

II. A CONCEPTUAL FRAMEWORK FOR HOW EXPANSIONARY MONETARY POLICY IMPACTS THE ECONOMY

Not since the 1970s had the United States experienced anything close to the expansionary monetary policy initiated in March 2020 in response to the pandemic. The 1970s then is the logical template for understanding the Powell pandemic monetary policy. At the start of the 1970s, the public, economists, and policymakers blamed inflation on cost-push factors, especially the monopoly power of large corporations and labor unions. By the end of the 1970s, as evidenced by high rates of the growth of money, the consensus had changed to attributing inflation to the Fed. That change in consensus attributing underlying inflation to expansionary Fed policy laid the foundation for the sustained Volcker-Greenspan policy of restoring price stability. The following explains the similarities between the pandemic monetary policy and the 1970s monetary policy.

When the extent of the pandemic became evident in March 2020, the FOMC made a fateful decision. Despite the fact that the virus was a negative productivity shock, for example, restaurants could not deliver safe meals, the FOMC believed that it would have to counter a significant drop in aggregate demand with a highly expansionary monetary policy. Of course, as of March 2020, the FOMC had a traditional central bank responsibility to meet an increased demand for liquidity (the dash for cash). It also had to maintain aggregate demand to prevent the economy from falling into a deflationary spiral. It could have met the first responsibility of accommodating the increased demand for liquidity, however, through the purchase of short-term Treasury securities, which would run off when the increased demand for liquidity abated. It could have met the second responsibility of maintaining growth in aggregate nominal demand through the kind of policy developed in the prior recovery. That is, it could have used a combination of forward guidance and quantitative easing (QE, or the purchase of long-term Treasury securities) to ensure positive growth in nominal spending just sufficient to maintain price stability.

What the FOMC did, however, was to monetize a significant amount of the vast increase in the government deficit while promising to maintain the funds rate at the zero lower bound for a period long enough to raise inflation above 2 percent (average inflation targeting). The resulting high rate of money growth repeated the high rate of money growth in the 1970s—the primary cause of the high rate of inflation in the 1970s. It is important to understand the relationship between money creation and growth in aggregate nominal demand and inflation. With a neutral policy, the FOMC moves the funds rate in line with the natural rate of interest, which is the interest rate that maintains aggregate demand equal to potential output. Given its interest rate target, it automatically accommodates

a rate of growth of money consistent with potential output and expected inflation, ideally price stability. Money is a veil.

Such was not the case with the money creation that began in March 2020. Money creation without a monetary policy that causes the funds rate to track the natural rate of interest as the economy strengthens, which in practice requires preemptive increases in the funds rate as the labor market tightens, is helicopter money. The resulting transmission process works through a portfolio balance effect. Open market purchases replace relatively illiquid assets like long-term Treasuries and mortgage-backed securities (MBS) in the public's asset portfolio with liquid bank deposits. To reconcile the public to holding a more liquid asset portfolio, the price of illiquid assets must rise. That is, the price of equities, houses, consumer durables, commodities, and so on must rise (Tobin's Q). The rise in the price of assets relative to their service flows initially produces an increase in investment and real output. Later, inflation rises to restore the amount of real cash balances (liquidity) desired by the public.[7] This process takes time to unfold and then unwind and is affected by extraneous forces. Friedman summarized the resulting noise introduced into a policy of activist aggregate-demand management with its alternating phases of expansionary and contractionary policy using the phrase "long and variable lags."[8]

III. THE TASK BEFORE THE FOMC IN RESTORING PRICE STABILITY

By providing an intuitive way to characterize monetary policy, figures 1 through 4 place the pandemic monetary policy in perspective. In an approximate way, they divide inflation into two classes. One class, the flexible-price class, consists of products sold in auction markets. The other class, the sticky-price class, consists of products sold by firms that set prices for multiple periods. As formulated in the New Keynesian model of Aoki, central banks should concentrate on stabilizing sticky-price inflation and allow flexible-price inflation to pass through to headline inflation.[9] That concentration gives the price system free rein to determine relative prices. For example, flexible-price inflation can be affected by the world price of commodities, which can be a relative price shock. Figures 1 and 2 use the Personal Consumption Expenditures (PCE) services and goods deflators as proxies for sticky-price and flexible-price inflation, respectively. Figures 3 and

7. Milton Friedman, "The Lag in Effect of Monetary Policy" (1961) in Milton Friedman, ed., *The Optimum Quantity of Money and Other Essays* (Chicago: Aldine Publishing Company, 1969).
8. Friedman, *Monetary Stability*.
9. Kosuke Aoki, "Optimal Monetary Policy Responses to Relative-Price Changes," *Journal of Monetary Economics* 48 (2001), 55–80.

4, which are constructed by the Atlanta Fed, give context to this distinction in a purposeful way by classifying items in the CPI into sticky-price and flexible-price categories.

Stability of the series for sticky-price inflation at a level consistent with price stability indicates that the Fed is providing a stable monetary framework conducive to the operation of a market economy. With the Volcker disinflation of the early 1980s, the Fed moved in this direction. In 1994, Greenspan finally vanquished the bond market vigilantes and restored the nominal expectational stability lost in the earlier era of Keynesian aggregate-demand management.[10]

The relationship between the two series also bears on the stance of monetary policy. A difference in technological progress determines the long-run relationship between the two series. A secular decline in the prices of goods relative to the prices of services causes the goods inflation (flexible-price) series ordinarily to lie below the services inflation (sticky-price) series. An "inflation shock" appears as a rise in the goods (flexible-price) line above the services (sticky-price) line. As shown in figures 1 and 2, goods price inflation is directly affected by the portfolio balance effect in that expansionary monetary policy affects goods prices more promptly and strongly than services prices and similarly for the flexible-price inflation shown in figures 3 and 4. Expansionary monetary policy pushes the goods (flexible) price line above the services (sticky) price line.

Figures 2 and 3 show the dramatic difference in policy in the recovery from the Great Recession and in the recovery from the pandemic recession. As shown by the moderate reduction in the services (sticky-price) inflation line, the Great Recession reinforced the nominal expectational stability restored in the Greenspan era.[11] The expectation of price stability proved consistent with measured inflation of around 1.5 percent with the latter not accounting for quality improvement in goods and services. In the recovery from the Great Recession, monetary policy was initially mildly contractionary due to a sharply rising

10. Relevant historical narrative may be found in three of my other books: *The Monetary Policy of the Federal Reserve: A History* and *The Great Recession: Market Failure or Policy Failure?* (Cambridge: Cambridge University Press, 2008 and 2012, respectively) and *The Federal Reserve: A New History* (Chicago: University of Chicago Press, 2022).

11. A policy of price stability implies that real variables like unemployment move independently of the price level. As an empirical matter, an estimated Phillips curve will be flat. That fact, however, in no way implies that monetary policy can exploit such an empirical relationship; see Milton Friedman, "The Role of Monetary Policy" (1968) in Friedman, ed., *Optimum Quantity of Money*, 95–110. Similarly, a policy of price stability will cause a lack of persistence in fluctuations in inflation. The appearance of persistence with an inflationary monetary policy is not evidence of an exogenous change in the nature of the Phillips curve but rather evidence of the Lucas critique of monetary policy affecting a reduced-from relationship in Robert E. Lucas Jr., "Econometric Policy Evaluation: A Critique (1976)," in Robert E. Lucas Jr., *Studies in Business-Cycle Theory* (Cambridge, MA: The MIT Press, 1981).

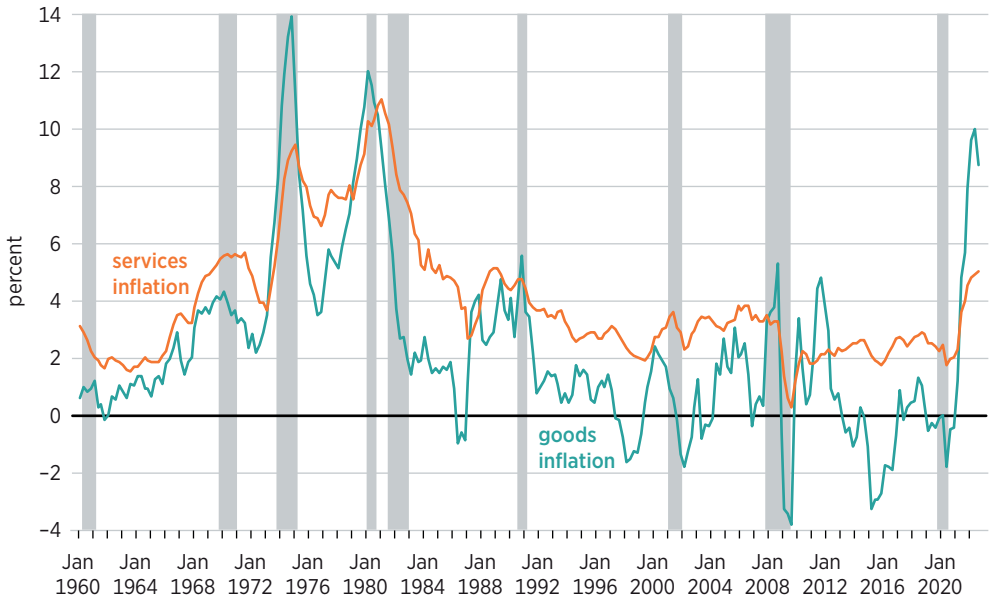
slope of the yield curve. The rising slope came from the market's expectation that strong recoveries always followed sharp recession.

A strong recovery did not occur given the initially negative value of the natural rate of interest and the FOMC's unwillingness to implement a negative funds rate. In time, QE raised the natural rate of interest through the portfolio balance effect of stimulative monetary policy. Belatedly, the FOMC also moved to forward guidance in August 2011. As the recovery progressed and with continued QE, the natural rate of interest rose and became positive. Starting in December 2015 with an initial increase and then a series of increases beginning in December 2016, the Yellen FOMC followed that rise with a series of funds rate increases. That is, it continued the policy of preemptive increases to prevent the emergence of inflation as implemented in the Volcker-Greenspan era. Given the unsettled world situation at the time with events like Brexit and the threatened breakup of the eurozone, the persistence of the recovery illustrates the power of QE and a monetary policy of allowing the price system to work. As shown in figures 2 and 4, the stability of the two core measures of inflation shows the desirability of a monetary policy that serves as a stable framework facilitating the operation of a market economy.

In contrast, the pandemic monetary policy featured expansionary monetary policy. Significant QE effected through monetization of government debt and MBS in the hands of the public raised the natural rate of interest. Expansionary monetary policy arose from the FOMC's commitment to forward guidance of "lower for longer" for the funds rate. In a repudiation of the policy of preemptive increases in the funds rate implemented in the Volcker-Greenspan era, flexible average inflation target (FAIT) promised markets that the funds rate would remain at the zero lower bound even as inflation rose above 2 percent. (The term "flexible" meant that the FOMC would offset undershoots of its inflation target from 2 percent but not overshoots.) As in the 1970s, by keeping the real funds rate below the natural rate of interest until inflation rose, monetary policy was expansionary.

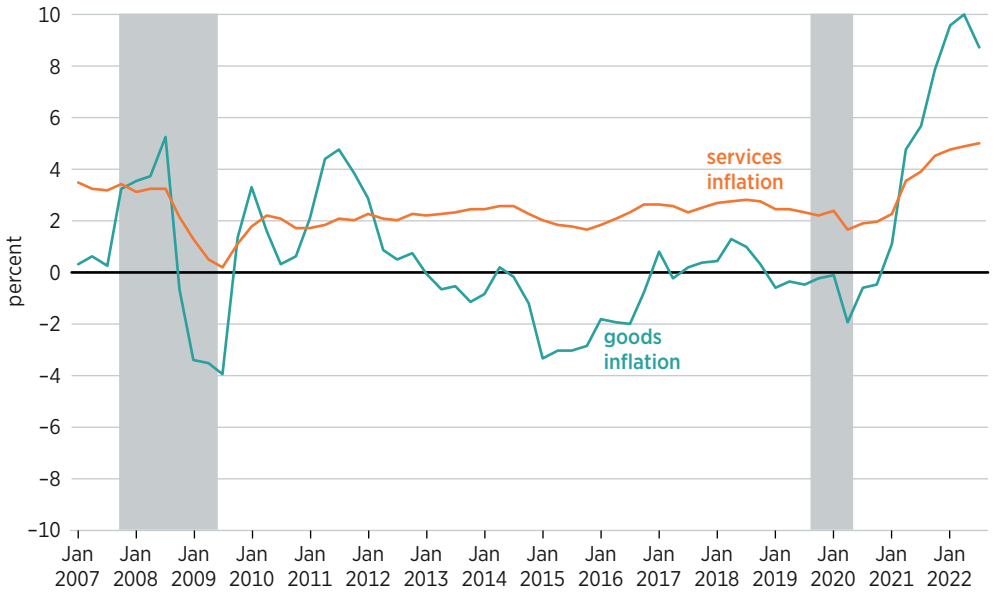
Figures 2 and 4 reveal the stark differences in the results of the divergent monetary policies in the two recoveries with the latter policy producing a rise in underlying inflation. As of late 2022, the challenge for the FOMC is to unwind the monetary overhang of real money balances created by the expansionary pandemic monetary policy without doing so through additional inflation. (See appendix A, "Unwinding the Excesses Created by Expansionary Monetary Policy.") The funds rate must rise in excess of the natural rate of interest. Unfortunately, the long-and-variable-lags phenomenon that bedevils expansionary monetary policy transmitted through a positive portfolio balance effect also exists with the contractionary counterpart.

FIGURE 1. PCE GOODS AND SERVICES INFLATION: 1960 TO 2022



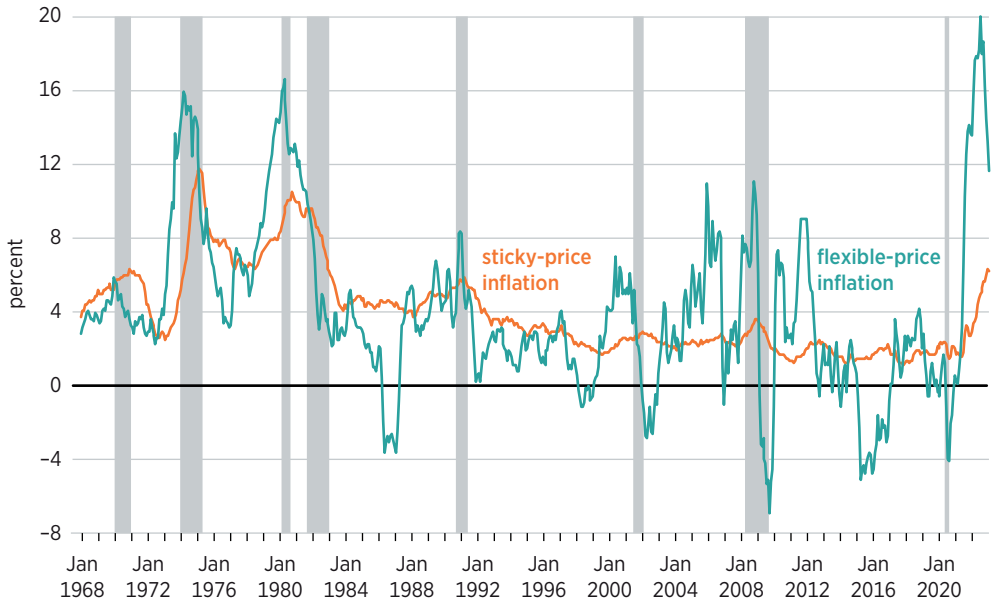
Note: Quarterly observations of four-quarter percentage changes in the goods and services personal consumption expenditures (PCE) implicit price deflator. Shaded areas indicate recessions as defined by the National Bureau of Economic Research (NBER). Source: Haver Analytics.

FIGURE 2. PCE GOODS AND SERVICES INFLATION: 2007 TO 2022



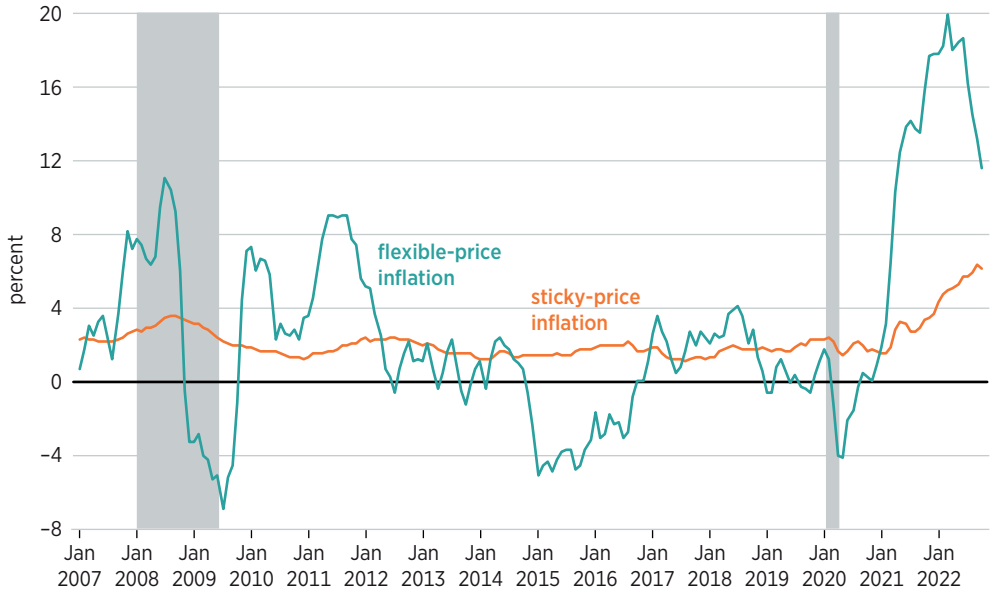
Note: Quarterly observations of four-quarter percentage changes in the goods and services personal consumption expenditures (PCE) implicit price deflator. Shaded areas indicate NBER recessions. Source: Federal Reserve Bank of St. Louis; retrieved from FRED (database).

FIGURE 3. STICKY-PRICE AND FLEXIBLE-PRICE CONSUMER PRICE INDEX INFLATION: 1968 TO 2022



Note: Observations are 12-month percentage changes in sticky-price and flexible-price inflation. For construction of the series, see Michael F. Bryan and Brent Meyer, "Are Some Prices in the CPI More Forward Looking Than Others? We Think So," Federal Reserve Bank of Cleveland, *Economic Commentary* 2010–2 (May 19, 2010). Source: Federal Reserve Bank of Atlanta.

FIGURE 4. STICKY-PRICE AND FLEXIBLE-PRICE CONSUMER PRICE INDEX INFLATION: 2007 TO 2022



Note: Observations are 12-month percentage changes in sticky-price and flexible-price inflation. For construction of the series, see Bryan and Meyer (2010). Source: Federal Reserve Bank of Atlanta.

IV. POSTWAR INFLATIONS AND THEIR ENDS: THE IMPORTANCE OF EXPECTATIONS

Expectations are central to understanding how inflations end.[12] Given that importance, it is central how the public understands the monetary standard and whether monetary policy follows a rule or is discretionary (in that monetary policy behaves in a way that raises issues of time consistency as exposited by Kydland and Prescott[13]). The 1946/47 inflation was an inflation shock caused by the removal of price controls. The winter 1950/51 inflation was an inflation shock caused by the Chinese crossing the Yalu River in the Korean War and the expectation of World War III producing a rise in commodity prices and the return of price controls. In both cases, expectations were those of the gold standard. The public assumed stationarity for the price level. In the expression of the time, "What goes up must come down." If prices rose, they would fall. The expectation of deflation following inflation made real rates rise with little change in nominal interest rates.

The expectation that prices would decline combined with an increase in the real rate of interest produced soft landings. By the time of the 1965/66 rise in inflation, inflation, not the price level, was assumed stationary. The price level did not fall after WWII as it did after WWI but the inflation that had arisen in 1956/57 had been brought down by the Fed with two recessions. As a result of the belief that inflation was stationary (not persistent), the Fed could lower the 1965/66 inflation with only a growth recession.

However, in return for the promise by the Johnson administration of sending a proposal for a tax increase to Congress, the William McChesney Martin FOMC backed off its policy of preemptive increases in the funds rate in economic recoveries. With the resulting high money growth, inflation surged. As measured by series like the Livingston survey of expected inflation and the behavior of bond rates, expected inflation lagged the rise in actual inflation. Still, as inflation rose, expected inflation rose and in spring 1979, expected inflation became unmoored (nonstationary) in that increases in expected inflation followed increases in actual inflation.

In the 1970s, in the stop phase of go-stop monetary policy, the Fed raised the funds rate until the economy weakened. Concerned about inflation, it then kept the funds rate unchanged to avoid sending a signal to markets that it would

12. See Hetzel, *Monetary Policy of the Federal Reserve*, *The Great Recession*, and *Federal Reserve: A New History*.

13. Finn E. Kydland and Edward C. Prescott, "Rules Rather Than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy* 85 (June 1977), 473–491.

accept a higher inflation rate as the norm. Recession ensued. The essence of the 1970s activist policy of aggregate-demand management was the existence of two independent targets—low inflation and low unemployment—with discretionary tradeoffs between the two. However, in the stop phases of monetary policy, discretion meant that the FOMC had to endure a recession to prove to markets its adherence to the goal of low inflation. In the current situation, if the Fed follows this same pattern, there is reason to expect a significant recession.

With the pandemic monetary policy adopted in March 2020, the FOMC revived the activist policy of the 1970s. It had observed that the pre-pandemic low in the unemployment rate of 3.5 percent had coexisted with inflation of near 1.5 percent. With an unemployment rate of 14.7 percent in April 2020 and given the Keynesian tenor of the FOMC, the significant degree of slack in the economy seemed to ensure that an expansionary monetary policy would lower unemployment without raising inflation. (The FOMC believed that the Phillips curve was flat and exploitable.)

That is, the FOMC believed that it could restore full employment much more quickly than the years-long process that had occurred after the March 1991 and June 2009 cycle troughs. The desire of the FOMC to lower unemployment to a level that ensured full employment in minority communities provided an extra incentive. The issue as of late 2022 is whether the FOMC in an ongoing way will revive the go-stop-go monetary policy of the 1970s or return permanently to the Volcker-Greenspan policy concentrated on price stability. The next section provides a brief history of the FOMC's movement away from the activist policy of aggregate-demand management to the Volcker-Greenspan policy of a concentration on price stability with the goal of maximum employment as a byproduct of a healthy economy.

V. LEARNING THE LESSONS OF FINE-TUNING AND MOVING ON

The term "soft landing" arose in 1969 in reference to the landing in 1968 of a manned capsule on the moon. As designed by Paul McCracken, President Nixon's head of the Council of Economic Advisers, the Fed would keep the unemployment rate moderately above its assumed full-employment value of 4 percent and over time inflation would decline without a recession. Instead, in 1970, both inflation and unemployment rose to near 6 percent. That failure initiated the resort to wage and price controls. Just as important, in response to the apparent combination of a negative output gap and inflation, it created a policy-making environment in which the FOMC attributed underlying inflation to exogenous

cost-push forces such as labor union militancy. The Fed then bought into a policy of Keynesian aggregate-demand management in which in an ongoing discretionary way it had to trade off between lowering an inflation driven by cost-push pressures and raising the unemployment rate. The result was go-stop monetary policy.[14]

Like former FOMC chair Arthur Burns, FOMC chair Powell rejects the idea that monetary policy is responsible for underlying inflation. For example, LHM Monetary Policy Analytics summarized comments by Chair Powell in his Q&A in the press conference following the September 20–21, 2022, FOMC meeting: "Powell also pushed back against the charge that excessive Fed asset purchases led to inflation. He stressed that monetary policy did not raise the overall amount of government debt, only the 'mix' of how it's paid for, with bank reserves if the Fed intervenes. This setup points the finger at fiscal expansion as the more proximate cause. During COVID, informal assurances were given by Powell to Congress that the Fed would stand behind [fiscal policy] action."[15]

In fall 1978 in response to the depreciation of the dollar, the FOMC pursued a contractionary monetary policy. In reaction to the inflation shock caused by the Russian invasion of Afghanistan in December 1978, however, FOMC chair G. William Miller retreated from raising interest rates and lost control of inflationary expectations. In August 1979, Paul Volcker came in determined to quell inflation but lost a year with Fed support of the disastrous Carter credit controls imposed in March 1980. Still, the FOMC abandoned the former policy of fine-tuning (Keynesian activist aggregate-demand management), which had created the destabilizing go-stop policy of the 1970s. It adopted a (Wicksellian) monetarist rule of providing a stable nominal anchor in the form of the expectation of price stability supported by procedures that caused the real funds rate to track the natural rate of interest, thereby turning over to the unfettered operation of the price system the determination of real variables (output and employment).

---

14. The change to an activist monetary policy also reflected a change in the political consensus. Sustained high growth and low unemployment became a political imperative for two reasons. First, society fractured over the Vietnam War and a militant civil rights movement. To the dismay of the World War II generation, the baby boomer generation burned the American flag in demonstrations. With the assassination of Martin Luther King Jr., inner cities burned in riots. Low unemployment appeared to be necessary for social cohesion. Second, earlier, Lyndon Johnson was unwilling to abandon his Great Society programs to pay for the war. Guns and butter required an economy that grew rapidly. The Keynesian consensus, which focused policy on a structural Phillips curve, promised to deliver both rapid growth and low unemployment at a cost of only moderate inflation.
15. LHM Monetary Policy Analytics, "Fed Balance Sheet: Paint Drying Fast and Slow," September 14, 2022.

The point of this all-too-brief history lesson is that current policy needs to be guided by a vision of where future policy is headed. That vision needs to articulate not only a determination to restore price stability but also a conception of the policy that will maintain it. The difficult part is to admit to the error of reviving the activist policy of fine-tuning adopted with the March 2020 monetary policy.[16] The equally difficult next part is to articulate and commit to the underlying rule that restored price stability in the Volcker-Greenspan era.

VI. A PROPOSAL FOR A SOFT LANDING

One way to reverse the inflation created by the FOMC's revival of the fine-tuning policy of the 1970s would be to repeat the Volcker disinflation with its increase in unemployment to 10.8 percent reached in December 1982. What could the FOMC try as an alternative to such a hard landing? An encouraging fact is the steadiness of long-term inflationary expectations at the relatively low levels created by the Volcker-Greenspan–era commitment to price stability and reinforced by the recent Great Recession. (As of November 11, 2022, the five-year, five-year forward expected CPI inflation rate was 2.3, consistent with a 2 percent target for PCE inflation.)

The following suggested monetary policy draws on the hard recession landings in the 1970s and the Greenspan policy to work inflation down over time. Based on experience in the 1970s, the Fed will cause a recession if it raises the funds rate until the economy weakens and then maintains it at that level despite the weakening so as not to signal markets that it is backing off from lowering inflation. The problem for the FOMC is that underlying inflation will persist long after the economy weakens (stagflation). The need to lower the funds rate when the economy weakens in a sustained way while preserving moderate inflation expectations makes commitment to a rule essential.

The proposal here is that the Fed raise the funds rate moderately at each FOMC meeting (0.25 basis points) until it becomes clear that the economy is weakening in a sustained way. It would then begin to work the funds rate down moderately.[17] The issue is what would happen to expected inflation. Perhaps, the

16. Tellingly, FOMC participants talk of "learning the lessons of the 1970s" rather than learning from the mistakes the FOMC made in the 1970s. The former usually attributes the 1970s inflation to a wage-price spiral with untethered inflationary expectations. The Fed is portrayed as an "inflation fighter" rather than an "inflation creator."

17. The FOMC will need to confirm that it is reducing the monetary overhang created by the prior expansionary monetary policy as well as the excess increase in the price of illiquid assets. See appendix A, "Unwinding the Excesses Created by Expansionary Monetary Policy."

FOMC can draw on the capital built up in the Volcker-Greenspan era in the form of the expectation of price stability, reinforced by the Great Recession. When the economy weakens, it will be able to lower the funds rate while inflation and inflation expectations fall. If not, it will cause a serious recession.

The proposal here is that the Fed lower the funds rate when the economy weakens but reinforce its credibility to restore 2 percent inflation by specifying a benchmark path for growth in nominal output (final sales to private domestic purchasers) whose upward slope decreases over time. (Given the uncertainty over productivity growth, the FOMC would adjust the path based on estimates of productivity growth.) The FOMC would thus take explicit responsibility for the growth of aggregate nominal demand. It would be dramatic for the Fed to accept responsibility for that growth. The idea would be to mimic what Volcker did in October 1979 in announcing procedures to target money. Like Volcker and Greenspan, FOMC chair Powell would have to give up the unemployment rate as an independent target in addition to price stability.

The benchmark path would not be an intermediate target such that deviations would automatically trigger changes in the funds rate. The path would instead serve as a background discipline that would influence FOMC actions over time to produce a gradual reduction in inflation without the need for a sharp recession. To reinforce the discipline imposed by the path, the FOMC would publish forecasts of the evolution of nominal output relative to the path.

The template would be the way in which Greenspan always kept in the back of his mind a nominal variable whose behavior was consistent with a return to price stability. From the start of his FOMC chairmanship until the early 1990s, Greenspan watched the behavior of M2.[18] When M2 demand became unstable in the early 1990s, Greenspan watched the behavior of nominal GDP. Like Volcker, Greenspan paid attention to the bond market vigilantes who had been burned by inflation.[19] He especially watched the behavior of long-term bond rates in the recovery from the 1990/91 recession and in 1994 with its dramatic increase in the funds rate.[20]

---

18. For background, see appendixes B and C, "The Historical Relevance of M2" and "Why the Monetary Aggregates Lost Their Predictive Value." The point of the latter appendix is that despite the absence of predictive value of the measured monetary aggregates (M1 and M2) for the near-term behavior of the economy, to control inflation, monetary policy procedures still need to provide for monetary control.

19. Marvin S. Goodfriend, "Interest Rate Policy and the Inflation Scare Problem," Federal Reserve Bank of Richmond, *Economic Quarterly* 79 (Winter 1993), 1–24.

20. Hetzel, *Monetary Policy of the Federal Reserve*, ch. 15, "Greenspan's Move to Price Stability."

The benchmark path for nominal output would serve as a guardrail to ensure that nominal GDP did not rise strongly to revive inflation and did not fall strongly to create a severe recession.[21] However, the path does not in itself provide a rule for monetary policy. Given the practice of using an interest rate as the policy variable, a central concern is that the FOMC does not know the value of the natural rate of interest. In 2021 and 2022, the emergence of inflation indicated that the funds rate had to rise. Over a longer run, however, the natural rate of interest could again decline significantly. For example, significant geopolitical instability could produce a desire for the preservation of wealth rather than innovation that would lead to safe, but low-yielding, investments.

The implication is that the FOMC needs a rule that allows market forces to cause the real interest rate to track the natural rate of interest.[22] The lean-against-the-wind (LAW) procedures pioneered by former chair Martin furnish such a rule. With LAW, the FOMC moves the funds rate in a persistent way to counter unsustainable strength or weakness in the economy. The FOMC does not know the level of potential output, but it observes sustained increases and decreases in the economy's rate of resource utilization. Sustained increases in the economy's rate of resource utilization (declines in the unemployment rate) lead to output in excess of potential and a need for the funds rate to rise. When the economy's rate of resource utilization stabilizes, the real rate of interest has risen to the natural rate of interest, which keeps output growing at potential. The converse follows for sustained weakness in growth.

Such movements in the funds rate act to discover the natural rate of interest, which keeps output growing at potential. With LAW, the FOMC does not judge the stance of monetary policy by the level of the funds rate. The forecast of sustained changes in the economy's rate of resource utilization is the criterion of whether the funds rate is "high" or "low."

The discipline imposed on LAW is the credible commitment to maintain long-term price stability. With that commitment, incoming news on the economy indicating unanticipated strength causes the yield curve to rise with all the rise being in real forward rates of interest with none in inflation premia. Policy in the Volcker-Greenspan era restored this version of LAW as a consequence of a concentration on price stability to the exclusion of a fine-tuning policy of trading off between the competing goals of low unemployment and low inflation

21. Scott Sumner, "Monetary Policy Rules in Light of the Great Recession," *Journal of Macroeconomics* 54 (2017), 90–99.

22. Although the FOMC has an inflation target, the long-and-variable-lags phenomenon Friedman describes in *A Program for Monetary Stability* implies that a feedback rule running from the inflation target to the funds rate would be destabilizing rather than track the natural rate of interest.

with its implied movement between expansionary and contractionary monetary policy. The goal of low unemployment is then achieved as the byproduct of a healthy economy.

VII. CONCLUDING COMMENT

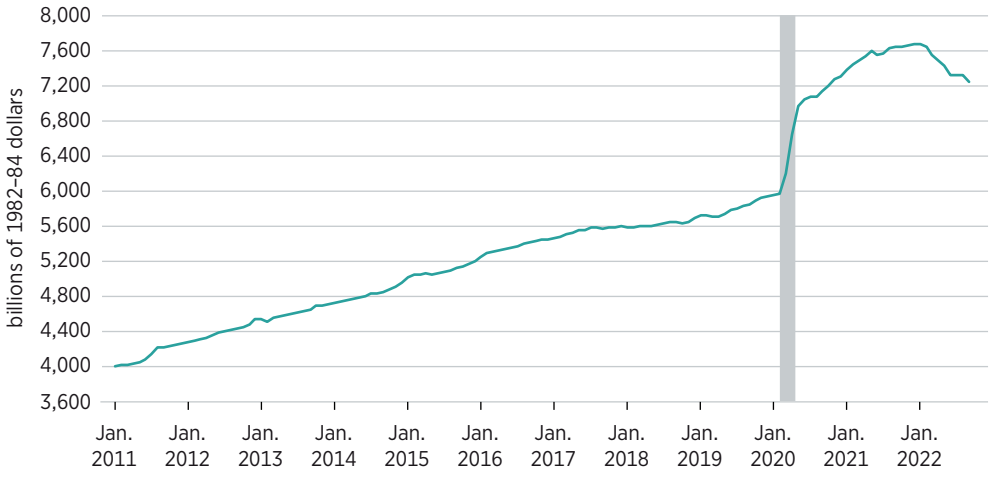
Fed independence is not ensured. The failure to foresee that the rise in underlying inflation in 2021 was persistent not transitory hurt its credibility. If monetary policy pushes the economy into a sharp recession, especially if reinforced by a sharp recession in the world economy produced by the contractionary monetary policies of all the world's important central banks, then populist critics in Congress will push for reform. The usual candidate is to eliminate the regional bank presidents as voting members in the FOMC to increase the importance of the Board of Governors. The presumption is the latter can be more easily controlled through the appointments process.[23] The proposal advanced here may not only prevent a sharp recession but would also show that the Fed can reform itself and become more accountable.

23. For more commentary, see appendix D, "Defending Fed Independence."

APPENDIX A: UNWINDING THE EXCESSES CREATED BY EXPANSIONARY MONETARY POLICY

One measure of the monetary overhang that needs to be worked off is the above trend increase in real M2 that began in March 2020. The St. Louis Federal Reserve FRED database has a series for real M2 (M2 deflated by the CPI). The issue with respect to the extent of a monetary overhang is how far the series is above its trend. Figure A.1 shows real M2 from 2010 onward. Note that the series is flat starting in spring 2017. In December 2016 with an initial increase in the midpoint of the funds rate from 0.375 to 0.625, the Janet L. Yellen FOMC began to raise the funds rate steadily. Given that banks are slow to raise the rates paid on their deposits, when the FOMC raises the funds rate and correspondingly money market rates rise, disintermediation causes funds to flow out of bank deposits into money market instruments. When the Powell FOMC began to lower the funds rate in summer 2019, the upward trend in real M2 resumed. Given the sharp rise in the funds rate starting in March 2022, disintermediation again began taking place. It follows that the slope of the appropriate trend for evaluating a monetary overhang rises with the onset of the recession in early 2020 as the yield curve moved down and then became flatter. With the onset of funds rate increases in March 2022, the slope of the appropriate trend declined. A cursory eyeball examination leads to the conclusion that a significant amount

FIGURE A.1 REAL M2 MONEY STOCK, 2012–2022



Source: Federal Reserve Bank of St. Louis; retrieved from FRED (database).

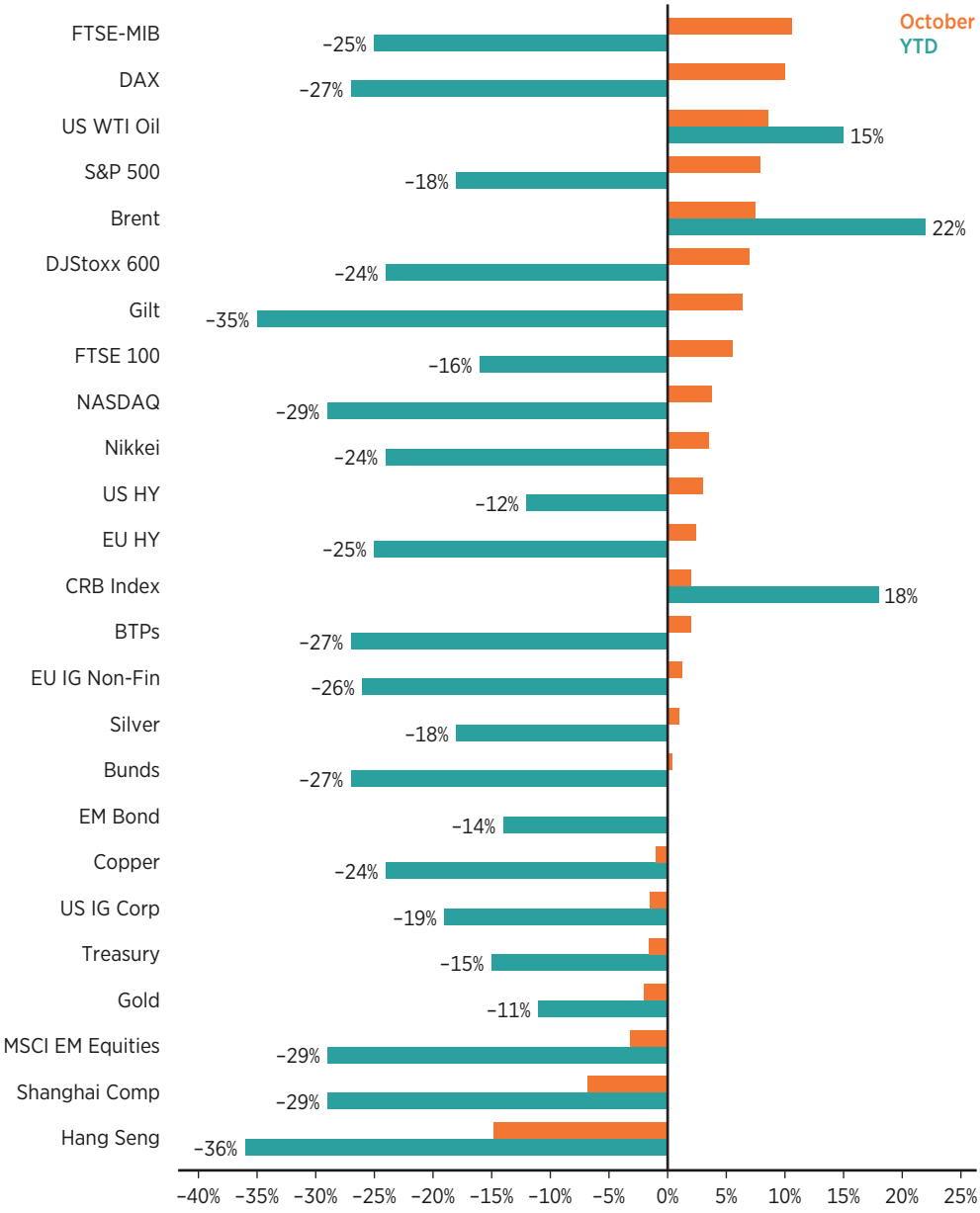
of the monetary overhang has been eliminated but that about one-third still remains to be worked off.

Of course, the measure of overhang needs to be debated. Stephen Stanley, chief economist at Amherst Pierpont, calculates a much higher value. Using the Flow of Funds data from the Board of Governors (Z.1), Table B.101 Household Balance Sheet and summing lines 11, 12, and 13 (currency, bank deposits including institutional deposits, and money fund shares), Stanley argues that "households were still sitting on over $4 trillion in extra liquid assets as of June 30 [2022]. Thus, at the current pace of runoff, it would take consumers several years to burn through their pandemic windfall."[24] Stanley adds: "In the years prior to COVID, the savings rate averaged around 7%. It is currently at 3.1%. Given the level of disposable income, this four percentage point gap amounts to about $750 billion per year. This calculation offers a reasonable proxy for how fast consumers in the aggregate are running down their excess liquidity."

The FOMC also needs to monitor whether the prior excess rise in the price of illiquid assets is being run off. A research paper by Jim Reid for Deutsche Bank contained a useful graph (see figure A.2) of the decline in the value of a variety of illiquid assets.[25]

24. Stephen Stanley, "September Income, Spending, and PCE Deflator," Amherst Pierpont, October 28, 2022.
25. Jim Reid, "DB CoTD: October Has Slightly Helped 2022," Deutsche Bank, November 1, 2022.

FIGURE A.2 TOTAL RETURN PERFORMANCE OF MAJOR GLOBAL FINANCIAL ASSETS IN OCTOBER AND YEAR TO DATE (IN US DOLLARS)



Source: Deutsche Bank, Bloomberg Finance LLP.

APPENDIX B: THE HISTORICAL RELEVANCE OF MEASURED M2

In 2003, David Lindsey of the Board of Governors wrote of M2:

> Some of the properties of M2 demand over most of the post-war period strongly recommend it as a policy indicator. The velocity of M2 has tended to revert over time to its historical average value (of 1.6454 to be precise). This characteristic underlies the celebrated work of Federal Reserve Board staffers Messrs. Hallman, Porter, and Small on P-star. Their study demonstrates that, once accelerationist dynamics are accounted for, the statistical connection between M2 and the average price level has been remarkably close in the United States. This model's forecast of inflation to date [the beginning of the 1990s] has been quite accurate, though in recent quarters a tendency to underpredict inflation is surfacing, perhaps as a result of a possible uptrend in long-run equilibrium velocity. . . . Causality tests extended through the 1980s suggest that M2 retained—though perhaps to a more attenuated degree—its leading indicator properties in predicting future nominal spending and real output. Through the 1980s as well, a satisfactory M2 demand function could be identified that contained only a few variables—as Milton Friedman long ago had contended in his restatement of the quantity theory of money. Moreover, its interest elasticity appeared neither too large nor too small to be useful for policy purposes.[26]

APPENDIX C: WHY THE MONETARY AGGREGATES LOST THEIR PREDICTIVE VALUE

It is important to exposit monetarism in a way that demonstrates its continued relevance. With a policy of price stability, money does not predict inflation. Moreover, the Fed possesses no money targets and does not consider money in its deliberations. The monetary control characterization of a policy of price stability remains invisible. The public sees only the positive correlation between

26. David E. Lindsey, "A Modern History of FOMC Communication: 1975–2002," Board of Governors of the Federal Reserve System, June 24, 2003, 132–133.

Appendix C is from an unpublished manuscript by the author titled, *Milton Friedman: Markets, Monetariam, and Wicksellian Monetarism.*

real growth and the interest rate instrument. Interpreted in the absence of a model that can explain the control of inflation in terms of monetary control, that correlation suggests that the central bank controls real growth. The impression that the central bank is controlling the price system to control real growth creates populist pressures to manage the economy as occurred with the pandemic monetary policy, which reverted to the 1970s policy of activist aggregate-demand management.

It is also important to understand that the pre-1981 period in which Friedman formulated his monetarist hypotheses remains an extraordinary laboratory for testing the validity of alternative principles around which to organize an understanding of monetary policy. The reason is that the empirical measures of money constructed to capture the liquidity of the public's asset portfolio, M1 and M2, worked well in this period. That is, these empirical measures of "moneyness" exhibited significant stability in their real demand function while exhibiting relatively little interest sensitivity. For that reason, the behavior of the monetary aggregates offered a fairly accurate measure of the stance of monetary policy—expansionary, contractionary, or neutral. For example, in the 1970s Burns-Miller era, monetary decelerations and accelerations captured the stop-go character of the FOMC's activist policy. They also captured the long lags in the impact of this policy.

In short, before 1981, the existing empirical definitions of money (M1 and M2) captured reasonably well the liquidity of the public's asset portfolio. Friedman could then use instability in measured money as a red flag for destabilizing behavior on the part of the FOMC. With the technological innovation introduced by computers in the early 1980s, funds placed in money market instruments flowed readily into and out of M1 and M2 when market interest rates changed relative to the more sluggishly changed rates banks offered on their deposits. Even though the public retained a well-defined demand function for money (liquidity), with the resulting change in the composition of bank deposits between relatively liquid and illiquid assets, M1 and M2 no longer adequately measure this liquidity.

Equivalently, the demand for real M1 and real M2 became interest sensitive. As a result, the aggregates no longer measured the influence of monetary policy on nominal expenditure. In particular, weakness in the economy and declining money market interest rates led to an increase in M1 growth through reintermediation of funds out of the money market into the deposits of banks. Because of the inertia that banks impart to the interest rates on their deposits, measured money demand has become countercyclical (increasing when the

economy weakens, and money market interest rates decline and conversely), and thus the monetary aggregates offer a misleading guide to the conduct of policy.

APPENDIX D: DEFENDING FED INDEPENDENCE

In the past, FOMC chairs have defended Fed independence by arguing that the country needs a central bank that is independent of politics. Especially, given the pressure for deficit spending in Congress, the country needs an independent Fed to ensure price stability. Because the Fed has become so enmeshed in Washington politics, such a defense is no longer possible. Consider the following examples of Fed involvement in politics. First, the Fed broke with precedent and became involved in fiscal policy when in March 2020 Powell encouraged House Speaker Nancy Pelosi to "think big."[27] That is, the FOMC would keep the funds rate at the zero lower bound for a long time so that Congress would have no problem in financing a large deficit. Second, the Fed has reinvented itself as an agent of social change. It has done so by making "maximum employment" an independent objective rather than as in the Volcker-Greenspan era a byproduct of a healthy economy anchored by price stability. The motivation is to create an unemployment rate low enough to provide full employment in minority communities. Rep. Maxine Waters has introduced legislation to formalize this social responsibility.

Third, the Fed has become heavily involved in the allocation of credit. It began in September 2008 when the Bernanke Board of Governors created numerous programs to undo the flight of the cash investors from financial institutions with portfolios of long-term dodgy mortgages. It continued later in the year with QE aimed at allocating credit to the housing market. As of fall 2022, the Fed had $2.7 trillion in mortgages on its books. Building on Bernanke's reinvention of the Fed as a housing government-sponsored enterprise in March 2020, the Powell Board greatly expanded the scope of credit interventions by taking on tail risk for all kinds of lending, for example, corporate securities. No wonder that progressive Democrats want to use the Fed's supervisory powers to allocate credit away from the fossil fuel industry and toward green energy. Finally, some regional Fed banks have invested large amounts of resources in research

27. In a press release dated March 17, 2020, Pelosi said, "Today I spoke with Federal Reserve Chairman Powell, where I raised the importance of continued engagement by the Fed and urged the Chairman to explore ways to use the Fed's authority to assist state and local governments. I was encouraged by the Chairman's perspective that with interest rates at nearly zero, Congress is enabled to think big fiscally as we craft a response."

on income inequality. The president of the Minneapolis Fed in particular is campaigning to make equal education part of the state constitution.

One problem with becoming involved in political issues is that politicians see the Fed as making value judgments. There is then pressure in the political appointments process to base appointments on criteria irrelevant to an understanding of how the economy works. Larry Summers made the point: "Questions of macroeconomic policy are not about values but judgments about the ultimate effects of various actions."[28] For example, basing appointments on criteria other than scholarly credentials in the study of monetary economics and history suggests that somehow one's values should determine optimal monetary policy.

28. Lawrence Summers, "Curbing Inflation Comes First, But We Can't Stop There," *The Washington Post*, October 31, 2022.

ABOUT THE AUTHOR

Robert Hetzel is a retired economist from the Federal Reserve Bank of Richmond. He received AB and PhD degrees from the University of Chicago. While at Chicago, he participated in the university's Money and Banking workshop and did his thesis work under the founder of the workshop, Milton Friedman. His two recent books, both published by Cambridge University Press, are *The Monetary Policy of the Federal Reserve: A History* (2008) and *The Great Recession: Market Failure or Policy Failure?* (2012). He currently has another Fed history in production at the University of Chicago Press: *The Federal Reserve—A New History* (forthcoming).

ABOUT THE MERCATUS CENTER AT GEORGE MASON UNIVERSITY

The Mercatus Center at George Mason University is the world's premier university source for market-oriented ideas—bridging the gap between academic ideas and real-world problems.

A university-based research center, Mercatus advances knowledge about how markets work to improve people's lives by training graduate students, conducting research, and applying economics to offer solutions to society's most pressing problems.

Our mission is to generate knowledge and understanding of the institutions that affect the freedom to prosper and to find sustainable solutions that overcome the barriers preventing individuals from living free, prosperous, and peaceful lives.

Founded in 1980, the Mercatus Center is located on George Mason University's Arlington and Fairfax campuses.