Taming Inflation Scares*

Athanasios Orphanides and John C. Williams

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Abstract

A monetary policy strategy that keeps inflation expectations solidly anchored in line with a clearly communicated definition of price stability supports the achievement of both price stability and economic activity goals. Providing an enduring nominal anchor succeeds in taming inflation scares and allows the Fed to respond more effectively to economic downturns. This was a key policy message in Marvin Goodfriend's 1993 article "Interest Rate Policy and the Inflation Scare Problem: 1979-1992". This essay connects Goodfriend's important and timely paper to the academic and policy debates of the period and traces its influence on subsequent monetary policy research and the evolution of the Federal Reserve's monetary policy strategy and communication.

Keywords: Inflation scares, inflation expectations, Federal Reserve, monetary policy.

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Orphanides: MIT Sloan School of Management, E62-481, 100 Main Street, Cambridge, MA 02142. Tel.: +1-617-324-4051. E-mail: athanasios.orphanides@mit.edu. Williams: Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. E-mail: john.c.williams@ny.frb.org

The beginning of the 1990s marked a singular moment when academic researchers and policymakers critically examined the most basic questions of monetary policy for the post-Bretton Woods world. Researchers analyzed and debated the choices of policy instrument and goals, central bank independence and transparency, and the relative merits of rules vs. discretion. John Taylor's seminal 1993 paper "Discretion versus Policy Rules in Practice" exemplified this era.

At the Federal Reserve, Chair Greenspan acknowledged the unfinished work of anchoring sustained low inflation, saying "It is an open question whether we have learned enough to skirt the dangers of budgetary and monetary excess that have triggered past episodes of debilitating inflation."[1] Likewise, central banks around the world were redesigning institutional frameworks with the aim of reestablishing a nominal anchor. These included the European Monetary System, which was under severe stress at the time, and the adoption of inflation targeting, starting with the Reserve Bank of New Zealand.

It was in this context that Marvin Goodfriend's essay "Interest Rate Policy and the Inflation Scare Problem: 1979--1992" entered the discussion, synthesizing strands of theory and practice with the goal "to distill observations to guide future analysis of monetary policy with the ultimate objective of improving macroeconomic performance."[2] This essay connects Goodfriend's important and timely paper to the academic and policy debates of the period. It then traces its influence on subsequent monetary policy research and the evolution of the Federal Reserve's monetary policy strategy and communication.

Goodfriend focused on the interplay of interest rate policy and "inflation scares," which he defined to be adverse movements in long-term inflation expectations inconsistent

[1] Greenspan (1993), p. 5.
[2] Goodfriend (1993), p. 2.

with the Federal Reserve's inflation goal. He highlighted a critical dilemma that arises when the public and, in particular, financial markets doubt the central bank's commitment to achieve price stability. He argued that resisting inflation scares is costly because it requires a tightening of monetary policy that would not otherwise be warranted by economic fundamentals. On the other hand, failing to effectively address an inflation scare engendered the risk of persistent, undesirably high inflation. He illustrated this dilemma with specific examples from the US disinflationary period of 1979-1992.

Goodfriend drew a number of profound conceptual and policy implications from his analysis of inflation scares. At the time, these were novel and not entirely uncontroversial. But they have stood the test of time, becoming part of the canon of central banks' approaches to monetary policy. First and foremost, he stressed the importance of formulating a strategy that clearly communicates the commitment to price stability and anchors inflation expectations at the desired level.[3] He argued that such a strategy affords the central bank greater flexibility to respond forcefully to recessionary shocks, thereby improving economic stability, without risking an adverse shift in longer-term inflation expectations. Second, he identified the central role inflation expectations play in the conduct of monetary policy and highlighted, by example, the value of measuring, monitoring, and analyzing inflation expectations. Third, building on his earlier work in Goodfriend (1991), he emphasized the primacy of the short-term interest rate as the instrument of monetary policy, at a time when many economic models assumed a measure of money supply was the policy instrument. Finally, he used the example of inflation scares to illustrate the need to recognize the role of imperfections in information and credibility for the formulation of a successful

[3] These themes were developed further by Goodfriend in collaboration with Robert King (Goodfriend and King 1997), and in his work advocating for central bank transparency regarding its inflation goal and strategy (Goodfriend 2004).

monetary policy strategy. His arguments highlighted that establishing and maintaining an enduring nominal anchor is at the heart of such an effort.

The policy context

Monetary policy strategy in the United States has undergone a sea change over the past four decades.[4] By the late 1970s, Federal Reserve policy had inadvertently contributed to macroeconomic instability and the central bank's credibility was in question. Starting with Fed Chairman Paul Volcker's monetary reform in 1979, the subsequent long journey was marked by a series of dramatic changes and subtle refinements. The immediate challenge that Volcker faced was to reestablish the Federal Reserve's credibility and restore low and stable inflation. By the mid-1980s, with the credibility of Federal Reserve's commitment to price stability improved, the policy debate could once again return to the overarching monetary policy challenge: What institutional framework and monetary policy strategy can best enhance economic stability and promote high growth and employment and deliver a stable nominal anchor and price stability?

A related question was whether a clearer formal mandate for price stability would be necessary to assure improvement and defend against the risk of policy backsliding to the unfortunate experience of the 1970s. By the end of the 1980s, the evidence and practical experience worldwide supported the benefits of an independent central bank with a clear mandate to preserve price stability. However, there was then no clear consensus on the relative merits and costs of changing central bank mandates in that direction, or of the necessity of such changes in legislation for improving policy practice.

[4] Meltzer (2009), Williams (2015), and Orphanides (2020).

In the United States, the zero-inflation resolution, proposed in 1989, represented one specific legislative effort toward that end. Although Chair Greenspan supported the legislation, it was not enacted.[5] Opponents of the legislation argued that greater emphasis on price stability would come at the cost of employment and growth. By contrast, Goodfriend argued that a more explicit mandate for price stability would *enhance* economic stability:

> "The preceding observation suggests an attractive argument in favor of a congressional mandate for price stability. By reducing the risk of inflation scares, such a mandate would free the funds rate to react more aggressively to unemployment in the short run. Thus, a mandate for price stability would not only help eliminate inefficiencies associated with long-run inflation, it would add flexibility to the funds rate that might improve countercyclical stabilization policy as well."[6]

At the center of the policy debate was an increasing appreciation of the key role of the interplay between monetary policy and inflation expectations in shaping the effectiveness of monetary policy to counteract economic shocks and secure desirable economic outcomes.

While the zero-inflation legislative initiative failed in the United States, legislation stipulating monetary policy mandates was enacted in other countries that had experienced high inflation in the 1970s and 1980s and where disinflation efforts were less successful than in the United States. The most prominent example proved to be the case of New Zealand, which originated the inflation targeting framework. The Reserve Bank of New Zealand Act 1989, which became law in 1990, instructed the central bank

[5] In his testimony, Chairman Greenspan (1989) welcomed the clarity of the legislation in supporting the Federal Reserve's disinflation effort and noted that the mere adoption of the legislation would be helpful in reducing inflation expectations and achieving price stability, but he also cautioned that eliminating inflation too quickly would entail a cost in the form of suppressed growth.
[6] Goodfriend (1993), p. 17.

to focus on a single objective, an inflation goal, and enhanced the central bank's operational independence to achieve this goal.

The adoption and clear communication of an explicit numerical inflation target, the distinguishing characteristics of the inflation targeting approach, were subsequently widely adopted, including by the Federal Reserve. At the time Goodfriend wrote the inflation scares article, however, the inflation targeting framework was in still in its infancy. [7] Opacity in goals and, in the case of the Federal Reserve, even in policy instruments was common.[8] Inflation targeting gradually came to be seen as the preferred way to communicate the quantitative definition of price stability that Goodfriend's analysis called for.

Over time, the Federal Reserve came to recognize that a policy strategy that anchored inflation expectations in line with a clearly communicated definition of price stability enhanced the overall effectiveness of monetary policy, and furthermore, that this could be achieved with appropriate interpretation of the Federal Reserve's mandate within the existing institutional framework.

On January 25, 2012, the Federal Open Market Committee (FOMC) formally adopted a 2 percent inflation goal as its definition of price stability:

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[7] The article was published in early 1993, first in the *Annual Report* of the Federal Reserve Bank of Richmond for 1992 and then in the Bank's *Economic Quarterly*. Goodfriend had completed a draft by the summer of 1992. In between, he had the opportunity to present the work at the Bank of England and the Riksbank, two central banks that adopted inflation targeting in response to the ERM crisis that erupted in the fall of 1992. Goodfriend's arguments in support of a "mandate for price stability" and of the short-term interest rate as the instrument of monetary policy were pertinent to the inflation targeting debate.

[8] In his influential article on "Monetary Mystique," Goodfriend (1987) argued that the Fed's preference for secrecy, as practiced in the mid-1980s, was difficult to justify. The Fed subsequently became more transparent, but this was a gradual process. While the Federal Reserve calibrated policy with a target federal funds rate, the timing of policy changes was not immediately disclosed until February 1994, and the actual setting of the policy instrument — the target federal funds rate — was only communicated starting in July 1995. Lindsey (2003) presents a history of the evolution of FOMC communication that spans this period.

"Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances." [9]

In 2020, the FOMC stated, "The Committee judges that longer-term inflation expectations that are well anchored at 2 percent foster price stability and moderate long-term interest rates and enhance the Committee's ability to promote maximum employment in the face of significant economic disturbances" (Federal Reserve 2020). The language in these statements echoes the arguments of Goodfriend's article.

Advances in models for monetary policy analysis

Today, the merits of a monetary policy strategy based on the communication of a clear goal for inflation as the central bank's definition of price stability and aiming to solidly anchor inflation expectations in line with this goal are uncontroversial.[10] At the time of the writing of Goodfriend's article, however, economic theory had not yet provided clear support for moving policy in this direction. During the 1980s, the field of macroeconomics was disjointed regarding monetary policy. On the one hand, it was recognized that available models employed for policy analysis by central banks did not adequately capture the endogeneity of inflation expectations to monetary policy strategy and its communication. On the other hand, while the rational expectations revolution had highlighted the critical importance of policy regimes for shaping expectations, the prevalent assumption of full information and perfect knowledge made

[9] Federal Reserve (2012).

[10] With the recent adoption of a 2 percent goal by the European Central Bank, all major advanced economy central banks now share this element in their policy strategy. In its policy strategy statement, the ECB highlighted the role of a clear goal for anchoring inflation expectations: "The two per cent inflation target provides a clear anchor for inflation expectations, which is essential for maintaining price stability" (ECB 2021).

available models too simplistic to overcome reasonable policymaker doubts about the resulting policy advice.

Assuming rational expectations with full information and perfect knowledge, as was common in monetary policy models at the time of Goodfriend's article, created an apparent disconnect between theory and practice. Such models typically assumed that inflation expectations were well-anchored, effectively ruling out the inflation scares documented by Goodfriend. On the other hand, policy practitioners learned to pay close attention to private inflation expectations, as these could be inferred, albeit imperfectly, from surveys and financial market data. Indeed, the increasing appreciation of the central role of credibility for the effectiveness of monetary policy in recent decades has resulted in more resources allocated by central banks to improving the measurement of inflation expectations[11] as well as support for the development of related financial markets.[12] It also prompted the development of models that would close the apparent gap between theory and practice.

One strand of this literature introduced imperfect credibility by positing that the central bank's implicit inflation goal shifted over time and tracing the evolution of beliefs about this goal. Along these lines, Kozicki and Tinsley (2001) demonstrated that "shifting endpoints" modeled in this fashion improved our understanding of expectations embedded in the term structure of interest rates. Explicit introduction of learning about policy and other aspects of the economy improved the ability of canonical models to explain inflation persistence and business cycle dynamics.[13] Another strand focused on

[11] Such efforts include the development of new surveys as well as models that combine information from surveys and financial markets, such as indexed debt, to arrive at estimates of inflation expectations. (See, e.g. Armantier et al 2017, D'Amico, Kim and Wei 2018, and Ahn and Fulton 2020.)
[12] The Federal Reserve supported the Treasury's development of "inflation-indexed" debt in the mid-1990s. In his article, Goodfriend cited a proposal by Hetzel (1992) about how the improved measures of long-term inflation expectations that could be derived once indexed debt became available would assist the Fed in setting monetary policy.
[13] Erceg and Levin (2003), Milani (2007), Orphanides and Wei (2012), and Slobodyan and Wouters (2012).

the policy implications of departures from rational expectations with the introduction of a process of perpetual learning by private agents as a mechanism governing the formation of expectations.[14] These models show that modest deviations from the assumption of rational expectations with perfect knowledge introduce a layer of complexity in inflation dynamics that can give rise to the type of inflation scares envisaged by Goodfriend.[15] As a result, policies that would appear to be efficient under rational expectations can instead yield poor results when knowledge is imperfect. In these models, consistent with Goodfriend's policy recommendations, better outcomes can be achieved with policies that reflect a greater commitment to price stability.

The continuing importance of taming inflation scares

We conclude with one key message from Goodfriend's analysis of inflation scares relevant for monetary policy strategy: systematic anchoring of inflation expectations can improve the achievement of both price stability and economic activity goals. In contrast, the Fed's imperfect credibility during the disinflationary period of 1979-1992 led to bouts of inflation scares that increased the economic costs of restoring price stability. Goodfriend argued that when its commitment to price stability is credible, the Fed enjoys "remarkable latitude" (p. 17) for easing monetary policy in response to a recessionary shock without triggering an inflation scare. A policy strategy that keeps inflation expectations solidly anchored in line with a clearly communicated definition of price stability supports both growth and employment. Providing an enduring nominal anchor succeeds in taming inflation scares. The Federal Reserve's monetary policy strategy and communication has evolved since Goodfriend highlighted the inflation scare problem, heeding these important lessons.

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[14] Orphanides and Williams (2004), and Gaspar, Smets, and Vestin (2010).
[15] Orphanides and Williams (2005).

Marvin Goodriend's article on inflation scares was characteristic of his approach to policy research "with the ultimate objective of improving macroeconomic performance." His eagerness to explore new ideas, debate, listen, and debate some more, and his openness to questioning central bank orthodoxy, were inspiring for younger economists like us who had the good fortune to interact with him. His passion for principled, research-based policy in the quest for improving the contribution of an independent central bank to society is part of his lasting legacy.

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