The Federal Reserve's Review of Its Monetary Policy Framework: A Roadmap[1]
July 12, 2019

As part of the Federal Reserve's review of its monetary policy framework (MPF), staff from around the System are preparing a series of memos that are intended to inform the Committee's discussions. The present memo serves as an introduction to this series and lays out the work that will be presented.

One might imagine that the Federal Reserve's MPF—the strategies, tools, and communications employed by the System to achieve its congressionally-mandated goals—has remained much the same over the decades. In fact the framework has changed almost continuously since its inception.[2] Some changes in framework arose from changes in legislation; some were adopted proactively based on improved understanding of monetary economics; and some were born out of necessity when significant flaws in the existing framework were exposed by economic events. No matter the source, change has been the constant, from the gold standard to the use of intermediate monetary targets to use of the interest rate as the primary instrument, to the explicit numerical inflation objective adopted in 2012. The post-crisis era saw an even more rapid evolution of the framework, including the use of forward guidance (FG), the adoption of balance sheet policy (BSP), and the introduction of the Summary of Economic Projections and regular press conferences.

Despite the many changes in the framework over the years, the Fed has not adopted a regular, systematic process for reviewing its MPF. That is not to say that the Fed has not evaluated its framework—countless internal memos and internal and external research papers have been written, and numerous conferences organized to study the performance of the Fed's MPF. But a systematic and focused public evaluation has not been a part of the FOMC's procedure, until this year.[3]

Importantly, virtually none of the System's informal efforts to evaluate its framework have sought to include input from a broad array of constituents. Traditionally, the Fed has regular and ongoing contacts with financial market participants and academic experts, who offer their advice on how the FOMC's policies might be improved. But the Fed has not to date systematically solicited input about MPF performance from other sectors—such as institutions that represent low-income and minority residents, labor, the retired, or small businesses. As part of this first framework review, all of the Reserve Banks and the Board have been involved in organizing events to bring together representatives from all of these communities, along with the usual suspects from finance and academia.

[1] David Altig, Jeff Fuhrer, Marc Giannoni and Thomas Laubach.
[2] See Meltzer (2003, 2010), Friedman and Schwartz (1972), Fuhrer *et al* (2018) for documentation of such changes.
[3] The discussion around the annual renewal of the "Framework document"—formally, the "Statement on Longer-Run Goals and Monetary Policy Strategy"—is the closest the FOMC comes to such an evaluation.

To begin, it may be useful to define what we will mean by the "current framework" during this review. To be sure, the Statement on Longer-Run Goals and Monetary Policy Strategy that the Committee reviews at its January meetings outlines key aspects of our MPF. (Please note that a copy of the current Statement is included in your packet as an appendix.) First, that document elaborates on the elements of the dual mandate: It clarifies that inflation over the longer run is largely the Committee's choice, whereas the maximum level of employment is primarily determined by nonmonetary factors. It specifies an explicit numerical inflation objective, and defines symmetry around this objective in terms of intent by stating that persistent deviations of inflation from 2 percent in either direction would be of concern to the Committee. Providing a corresponding numerical estimate for the employment leg of the mandate is considerably more challenging because assessments of the maximum level of employment "are necessarily uncertain and subject to revision." Moreover, maximum employment is a multi-faceted object, and the Statement's solution to providing a numerical value for that side of the mandate is to point to the median estimate of the longer-run normal rate of unemployment in the SEP. Having specified the objectives, the Statement describes the balanced approach the Committee applies in addressing deviations of employment and inflation from their goals when those deviations imply conflicting policy actions, using language somewhat reminiscent of a symmetric loss function. Finally, the Statement acknowledges that the Committee's policy decisions reflect not only its longer-run goals and medium-term outlook, but also "its assessment of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals."

The full set of elements that are now part of the "current framework" have evolved since the GFC and the Great Recession. In particular, the use of forward guidance (FG) and balance sheet policy (BSP) evolved in the wake of the dual crises, as the first staff memo will emphasize. The Committee confronted significant uncertainty about the efficacy and costs associated with these alternative tools as it used them for the first time during this period. In the decade since, the Committee has resolved some of the uncertainty about both efficacy and costs, although of course substantial uncertainty about both remains.

For the purposes of this MPF review, we will use as a working definition of the current framework (i) the principles contained in the Statement on Longer-Run Goals and Monetary Policy Strategy; (ii) tools that include those the Committee has already deployed in pursuit of its goals, i.e. (non-negative) interest rate policies, FG, and BSP; and (iii) a "bygones-be-bygones" approach that does not contemplate deliberate overshooting or undershooting in response to deviations from the 2% inflation objective. The alternative strategies that ensuing memos will discuss do envision such intentional deviations from the 2 percent goal.[4]

[4] Such intentional departures from the inflation goal lie at the heart of "make-up" policies that promise overshooting (and possibly also undershooting) of the inflation goal, including average inflation targeting, price-level targeting, and variants of these strategies.

Good institutional practice suggests that routine self-evaluation is healthy for any organization. But such a review is particularly important today because changes in the economic environment raise the question of whether the current MPF (as defined above) will serve the Committee well in addressing future downturns, especially downturns that might entail prolonged stays at the ELB.

The particular structural features that will be discussed in more detail in ensuing memos are:

- The neutral real rate of interest (r*) has fallen, and there is uncertainty about where it will go in coming years. Together with a 2 percent inflation target, a persistent reduction in r* implies less "policy cushion"—less leeway to lower the federal funds rate in the event of a downturn—and thus a greater likelihood of hitting the ELB. As a consequence, another goal of this MPF review is to attain greater confidence that the Committee has the tools to stabilize the economy and to attain its goals when the frequency of ELB episodes is likely elevated.
- Inflation has persistently fallen short of the Committee's 2 percent inflation goal. Though measures of inflation expectations are imprecise and sometimes contradictory, the persistent shortfall of both headline and core inflation relative to target has arguably led to some slippage of long-term expectations below the Committee's target. Low long-run inflation expectations may in turn slow the progress of actual inflation toward our target. For this reason, the Committee may wish to explore tools that are likely to more quickly return inflation to target (or above) after a downturn, reducing the likelihood of an erosion in long-run expectations.
- Apart from expectations, the process governing inflation appears to have changed in recent years. Estimates of the natural rate of unemployment, which are always highly uncertain, have declined significantly in the post-crisis period—perhaps by as much as a percentage point. The relatively rapid change in estimates, coupled with uncertainty around the current estimates, make the use of the estimated natural rate as a guide to policy even more fraught than it has been historically. Over roughly the same period, it has become clear that inflation is considerably less responsive to activity gaps (a "flatter Phillips curve"). Many models interpret the reduced sensitivity as, at least in part, a structural feature of the economy—that is, the true coefficient linking inflation and activity gaps in structural models of the economy. However, it is possible that rather than representing such a deep structural feature of the economy, this is instead a reduced-form implication of the success of the Fed in reducing inflation and anchoring expectations at (or near) its explicit inflation objective.[5] These changes make the future trajectory of inflation at any point more uncertain, in part because inflation's response to monetary policy actions is less certain. Importantly, a flatter PC may make it more

[5] Here again humility is in order, in part because the apparently shallow Phillips curve makes inference about shifts in the natural rate more difficult, because it is difficult over this limited time period to know if inflation has (say) risen less than expected because the natural rate is falling, or because the slope of the Phillips curve is flatter, or both.

difficult to move inflation towards its target, from above or below. This structural feature and the uncertainty around it may complicate the return to target inflation in the wake of a recession. A flat PC also hinders the ability to "overshoot" or undershoot the inflation target in some of the "make-up" policies that subsequent memos will discuss.

Altogether, these recent changes in key structural features of the economy—which are assumed to be fairly persistent—provide ample motivation for a MPF evaluation at this time.

It may be important to distinguish between two types of alterations to policy that could come from this MPF review, and these will be explored in detail in memos that staff is preparing for the FOMC. The first is that our tools—interest rate policy, FG and BSP—might be implemented somewhat differently, perhaps including the use of yield curve control or negative interest rate policy, while remaining within the guardrails of the current framework (that is, without attempting to move inflation away from its target). The motivation for such changes might come from the lessons learned about the efficacy of these tools, as well as the costs associated with their use, during the period since the GFC. As Chair Bernanke emphasized, the post-crisis period was a time of learning by doing regarding use of FG and BSP, during which the Committee continually advanced its understanding of BSP and FG based on its experience with these tools.

The second set of alterations are those that would entail a change in framework. In this review, this will largely entail consideration of strategies that take the 2% inflation goal as given, but allow for policies that in some circumstances intentionally move inflation away from the 2% inflation goal. Examples of such policies are discussed briefly below, and in more detail in subsequent memos.

The sequence of memos planned over the balance of this year is intended to provide the Committee a foundation for (a) assessing the prospective performance of the current framework; (b) exploring the need for and desirability of modifying the framework; and (c) examining issues bearing on robustness of conclusions to alternative assumptions, and complications with implementation, that we believe the Committee will need to tackle as you deliberate. Throughout, the material provided to the Committee will draw on historical experience in the U.S., the experience of other central banks, and model-based analysis.

The first two memos, which will be presented at this meeting, are designed to assist the Committee in assessing what lessons to draw from the post-Great Recession period about the use of its tools and any possible limitations of its current framework. It is important to recognize that the set of tools that we now consider part of our toolkit were "under construction" during the recovery—new and untested and clouded in uncertainty. But when we look back over the course of the recovery with the benefit of hindsight, these memos will ask if there are ways in which those tools could have been used even more effectively within the framework as currently defined? And were there instances when the framework constrained the Committee from achieving its price stability and employment goals?

It is critical in examining the post-Great Recession history that we recognize the evolutionary understanding of the structural changes discussed above, and understand how those changes and our evolving recognition of them complicated monetary policy decisions over that period. The second memo to be presented at the July meeting, in particular, focuses on the policy challenges and trade-offs posed by the structural changes noted above. A key goal of this memo is to frame a discussion of how well the current framework has allowed the Committee to manage the risks arising from uncertainty and learning around u^* and r^*, the flattening of the PC, and the potential interactions among them.

The second set of memos, to be presented in September, will introduce two fundamental questions that will, we hope, inform subsequent discussions. First, *looking forward*, in light of the challenging structural changes already noted, is the current framework likely to be effective in confronting the challenges of making sustained progress toward the 2 percent inflation goal and responding to potential ELB episodes? Second, how do some widely-discussed alternatives to the current framework work, and how might they help overcome these structural and environmental challenges in pursuit of the Committee's goals?

The September memos will also focus on strategies that are variants of so-called make-up strategies, so called because they at times require the Committee to deliberately target rates of inflation that deviate from 2 percent on one side so as to make up for times that inflation deviated from 2% on the other side. Price-level targeting (PLT) is a useful benchmark among make-up policies, but also represents a more significant and perhaps undesirable departure from the current framework compared to other alternatives. One of these memos will focus primarily on "nearer neighbors" to the current framework that are more flexible variants of PLT. These include temporary PLT—that is, use of PLT only around ELB episodes to offset persistently low inflation;[6] and average inflation targeting (AIT), including one-sided AIT which only restores inflation to a 2 percent average when it has been below 2 percent, and AIT that limits the degree of reversal for over- and undershooting the inflation target[7].

Both PLT and AIT strategies imply promises of above- or below-target inflation in the future, possibly under quite different economic conditions, and likely with a different set of committee members. As a consequence, under these strategies, credibility, commitment, and issues related to time consistency take center stage. As emphasized in the first memo for the July meeting, although the committee used FG during the recovery, it never committed to deliver inflation that departed from the committee's target. In sum, time consistency considerations will generally be a prominent consideration if make-up strategies become a key feature of a new policy framework.

[6] See, for example, Bernanke (2017).
[7] See, for example, Nessén and Vestin (2005).

Because such commitments generally impose restrictions on future committees, whether or not the required commitments are institutionally feasible is a first-order question in considering make-up strategy alternatives.

Throughout the memos, robustness is a major theme, and one of the memos for the September meeting will focus exclusively on robustness issues. The focus of the memos crafted subsequent to the September meeting will, of course, be informed by the Committee's deliberations over the preceding meetings. Depending on the direction that the Committee determines the conversation should go, future memos may discuss a number of topics. At present, staff plan to present an analysis of the distributional consequences of monetary policy, a consideration that is often left out of policy framework analyses, but one that has emerged as a focal point in the Fed Listens efforts. Following the discussion of strategies, staff will also prepare memos for a Committee discussion of possible ways to evolve the use of its tools in a future downturn, such as the choice between date-based and state-based FG, as well as alternative approaches to BSP, especially quantity-target versus rate-target BSP.

The essential point with respect to the sequencing of memos after the September meeting is that it is the intention of the steering group to confer with the Committee throughout the process to ensure that the material put before you is on point with respect to the questions and issues that you deem most relevant.

References

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Statement on Longer-Run Goals and Monetary Policy Strategy

Adopted effective January 24, 2012; as amended effective January 29, 2019

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. The Committee would be concerned if inflation were running persistently above or below this objective. Communicating this symmetric 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. The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, the median of FOMC participants' estimates of the longer-run normal rate of unemployment was 4.4 percent.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.