

For release on delivery
Noon EST
February 22, 2019

The Federal Reserve's Review of Its Monetary Policy Strategy, Tools, and
Communication Practices

Remarks by

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at the

2019 U.S. Monetary Policy Forum, sponsored by
the Initiative on Global Markets at the University of Chicago Booth School of Business

New York, New York

February 22, 2019

I am pleased to participate in this year's U.S. Monetary Policy Forum, which, since its inception, has brought together policymakers, academics, and market participants to share ideas and perspectives on U.S. monetary policy. Today I would like to discuss the broad review of the Federal Reserve's monetary policy framework that we are undertaking this year. We will examine the policy strategy, tools, and communication practices that we use to pursue our dual-mandate goals of maximum employment and price stability. In my remarks, I will describe the motivation for and scope of this review and will preview some of the events we are planning as part of it.¹ The U.S. Monetary Policy Forum is an excellent venue for this presentation. For more than a decade, it has focused attention and timely analysis on critical issues confronting the Federal Open Market Committee (FOMC). Its programs have drawn on the latest economic research and considered a range of views. Similarly, the Federal Reserve's review of its monetary policy framework will be transparent, will be open minded, and will seek perspectives from a broad range of interested individuals and groups, including academics, other specialists, and the public at large.

Motivation for the Review

The fact that the System is conducting this review does not suggest that we are dissatisfied with the existing policy framework. Indeed, we believe our existing framework has served us well, helping us effectively achieve our statutorily assigned dual-mandate goals of maximum employment and price stability. Nonetheless, in light of the unprecedented events of the past decade, we believe it is a good time to step back and assess whether, and in what possible ways, we can refine our strategy, tools, and

¹ I would like to thank Etienne Gagnon for his assistance in preparing these remarks.

communication practices to achieve and maintain these goals as consistently and robustly as possible. I note that central banks in other countries have conducted periodic reviews of their monetary policy frameworks, and their experience has informed the approach we are pursuing.

As Chairman Powell has indicated, with the U.S. economy operating at or close to our maximum-employment and price-stability goals, now is an especially opportune time to conduct this review. The unemployment rate is near a multidecade low, and inflation is running close to our 2 percent objective. By conducting this review, we want to ensure that we are well positioned to continue to meet our statutory goals in coming years. In addition, the Federal Reserve used new policy tools and enhanced its communication practices in response to the Global Financial Crisis and the Great Recession, and the review will evaluate these changes. Furthermore, U.S. and foreign economies have significantly evolved since the pre-crisis experience that informed much of the research that provided the foundation for our current approach.

Perhaps most significantly, neutral interest rates appear to have fallen in the United States and abroad.² Moreover, this global decline in r^* is widely expected to persist for years. The decline in neutral policy rates likely reflects several factors, including aging populations, changes in risk-taking behavior, and a slowdown in technology growth. These factors' contributions are highly uncertain, but irrespective of their precise role, the policy implications of the decline in neutral rates are important. All else being equal, a fall in neutral rates increases the likelihood that a central bank's policy

² For evidence of a fall in neutral rates of interest in the United States and abroad, see, among several contributions, King and Low (2014); Holston, Laubach, and Williams (2017); Rachel and Smith (2017); and Brand, Bielecki, and Penalver (2018).

rate will reach its effective lower bound (ELB) in future economic downturns. That development, in turn, could make it more difficult during downturns for monetary policy to support spending and employment, and keep inflation from falling too low.³

Another key development in recent decades is that inflation appears less responsive to resource slack. That is, the short-run Phillips curve appears to have flattened, implying a change in the dynamic relationship between inflation and employment.⁴ A flatter Phillips curve is, in a sense, a proverbial double-edged sword. It permits the Federal Reserve to support employment more aggressively during downturns--as was the case during and after the Great Recession--because a sustained inflation breakout is less likely when the Phillips curve is flatter.⁵ However, a flatter Phillips curve also increases the cost, in terms of economic output, of reversing unwelcome increases in longer-run inflation expectations. Thus, a flatter Phillips curve makes it all the more important that longer-run inflation expectations remain anchored at levels consistent with our 2 percent inflation objective.⁶

³ For assessments of the risks that U.S. monetary policy will be constrained by the ELB and its implications for economic activity and inflation, see Kiley and Roberts (2017), Erceg and others (2018), Swanson (2018), and Chung and others (2019).

⁴ For evidence of a flattening of the slope of the Phillips curve in the United States and abroad, see, among others, Simon, Matheson, and Sandri (2013); Blanchard, Cerutti, and Summers (2015); and Bank for International Settlements (2017).

⁵ One potential contributor to the flattening of the Phillips curve is a change in the conduct of monetary policy since the 1980s toward greater stabilization of inflation and economic activity; for evidence of such a change, see Clarida, Galí, and Gertler (2000); Boivin and Giannoni (2006); and Boivin, Kiley, and Mishkin (2010). As discussed in Roberts (2006) and Bullard (2018), greater stabilization on the part of a central bank can lead to the estimation of flatter Phillips curves in reduced-form regressions. Similarly, the adoption of an explicit inflation objective, along with greater certainty regarding the conduct of monetary policy, can help anchor longer-term inflation expectations and stabilize actual inflation in response to shocks.

⁶ See Yellen (2015) for a discussion of inflation dynamics and monetary policy; see Erceg and others (2018) for a quantitative exploration of the monetary policy implications of a flat Phillips curve in an uncertain economic environment. Since the mid-1980s, movements in both realized inflation and measures of longer-term inflation expectations have been somewhat muted, complicating the task of extracting the precise role of inflation expectations as a determinant of realized inflation. Faust and Wright (2013) review the literature on inflation forecasting and present evidence in support of the conclusion that measures of inflation expectations help predict the trend in inflation. In a paper discussed at this forum two years ago,

Scope of the Review

In the Federal Reserve Act, the Congress assigned the Federal Reserve the responsibility to conduct monetary policy “so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.”⁷ Our review this year will take this statutory mandate as given and will also take as given that inflation at a rate of 2 percent is most consistent over the longer run with the congressional mandate.

Our existing monetary policy strategy is laid out in the Committee’s Statement on Longer-Run Goals and Monetary Policy Strategy.⁸ First adopted in January 2012, the statement has been reaffirmed at the start of each subsequent year, including at the FOMC’s meeting last month with unanimous support from all 17 FOMC participants. The statement indicates that the Committee seeks to mitigate deviations of inflation from 2 percent and deviations of employment from assessments of its maximum level. In doing so, the FOMC recognizes that these assessments of maximum employment are necessarily uncertain and subject to revision. According to the Federal Reserve Act, the employment objective is on an equal footing with the inflation objective.

Cecchetti and others (2017) showed that while the level of realized inflation and four-quarter-ahead inflation expectations are positively correlated, changes in these variables have been largely uncorrelated since the mid-1980s. These authors suggest that, in a low and stable inflation environment, policymakers should pay attention to a wide array of other indicators in determining the implications of movements in realized inflation and measures of inflation expectations.

⁷ Even though the act lists three distinct goals, the Federal Reserve’s mandate for monetary policy is commonly known as the “dual mandate.” The reason is that an economy in which people who want to work either have a job or are likely to find one fairly quickly and in which the price level (meaning a broad measure of the price of goods and services purchased by consumers) is stable creates the conditions needed for interest rates to settle at moderate levels. For a discussion, see Mishkin (2007).

⁸ The statement is available on the Board’s website at https://www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals.pdf.

As a practical matter, our current strategy shares many elements with the policy framework known in the research literature as “flexible inflation targeting.”⁹ However, the Fed’s mandate is much more explicit about the role of employment than that of most flexible inflation-targeting central banks, and our statement reflects this by stating that when the two sides of the mandate are in conflict, neither one takes precedent over the other. We believe this transparency about the balanced approach the FOMC takes has served us well over the past decade when high unemployment called for extraordinary policies that entailed some risk of inflation.

The review of our current framework will be wide ranging, and we will not prejudge where it will take us, but events of the past decade highlight three broad questions.

Three Questions

The first question is, “Can the Federal Reserve best meet its statutory objectives with its existing monetary policy strategy, or should it consider strategies that aim to reverse past misses of the inflation objective?”

Under our current approach as well as that of most flexible inflation-targeting central banks around the world, the persistent shortfalls of inflation from 2 percent that many advanced economies have experienced over most of the past decade are treated as “bygones.” This means that policy today is not adjusted to offset past inflation shortfalls with future overshoots of the inflation target (nor do persistent overshoots of inflation trigger policies that aim to undershoot the inflation target). Central banks are generally believed to have effective tools for preventing persistent inflation overshoots, but the

⁹ For a discussion of this terminology and references, see English, López-Salido, and Tetlow (2015) and Clinton and others (2015).

effective lower bound on interest rates makes persistent undershoots more likely.

Persistent inflation shortfalls carry the risk that longer-term inflation expectations become poorly anchored or become anchored below the stated inflation goal.¹⁰

In part because of that concern, some economists have advocated “makeup” strategies under which policymakers seek to undo, in part or in whole, past inflation deviations from target. Such strategies include targeting average inflation over a multiyear period and price-level targeting, in which policymakers seek to stabilize the price level around a constant growth path.¹¹ These strategies could be implemented either permanently or as a temporary response to extraordinary circumstances. For example, the central bank could commit, at the time when the policy rate reaches the ELB, to maintain the policy rate at this level until inflation over the ELB period has, on average, run at the target rate.¹² Other makeup strategies seek to reverse shortfalls in policy accommodation at the ELB by keeping the policy rate lower for longer than

¹⁰ These risks could be exacerbated if households and businesses expect monetary policy to be insufficiently accommodative because of proximity to the ELB. For related discussions, see Reifschneider and Williams (2000); Adam and Billi (2007); Nakov (2008); and Hills, Nakata, and Schmidt (2016).

¹¹ Eggertsson and Woodford (2003) provide an early discussion of how optimal monetary policy at the ELB entails a commitment to reflate the price level during the subsequent economic expansion. Nessén and Vestin (2005) discuss the relationship between average inflation targeting and price-level targeting. There is a dearth of empirical evidence on strategies seeking to make up for inflation deviations. Central banks that pursue an inflation goal generally seek to achieve a specific rate of inflation by some time horizon—typically a couple years ahead or over the “medium run”—without regard to past inflation deviations. One exception is the Reserve Bank of Australia, whose inflation goal is specified as a range of “2-3 per cent, on average, over the medium term” and thus might embed some notion of history dependence. However, Ruge-Murcia (2014) argues that the drift in the price level in Australia is comparable with the drifts observed in economies with purely forward-looking specification of the inflation goal. The only known historical example of price-level targeting occurred in Sweden from 1931 to 1933 when the country abandoned the gold standard and attempted instead to maintain its price level. The temporary adoption of price-level targeting is credited with helping Sweden avoid deflation, an outcome that contrasted with that in countries that stayed on the gold standard. See Berg and Jonung (1999).

¹² See Bernanke (2017) for a discussion of such a strategy. See Hebden and López-Salido (2018) for a quantitative assessment of that and other strategies. See also Kiley and Roberts (2017) for a strategy in which policymakers aim for inflation higher than 2 percent during economic expansions to compensate for below-target realizations of inflation during economic downturns.

otherwise would be the case.¹³ In many models that incorporate the ELB, these makeup strategies lead to better average performance on both legs of the dual mandate and thereby, viewed over time, provide no conflict between the dual-mandate goals.¹⁴

The benefits of the makeup strategies rest heavily on households and firms believing in advance that the makeup will, in fact, be delivered when the time comes--for example, that a persistent inflation shortfall will be met by future inflation above 2 percent. As is well known from the research literature, makeup strategies, in general, are not time consistent because when the time comes to push inflation above 2 percent, conditions at that time will not warrant doing so. Because of this time inconsistency, any makeup strategy, to be successful, would have to be understood by the public to represent a credible commitment. That important real-world consideration is often neglected in the academic literature, in which central bank “commitment devices” are simply assumed to exist and be instantly credible on decree. Thus, one of the most challenging questions is whether the Fed could, in practice, attain the benefits of makeup strategies that are possible in models.

The next question the review will consider is, “Are the existing monetary policy tools adequate to achieve and maintain maximum employment and price stability, or should the toolkit be expanded? And, if so, how?” The FOMC’s primary means of changing the stance of monetary policy is by adjusting its target range for the federal funds rate. In the fall of 2008, the FOMC cut that target to just above zero in response to

¹³ See Reifschneider and Williams (2000) for a strategy in which a central bank following a Taylor rule makes up for shortfalls in policy accommodation during ELB episodes by subsequently keeping the policy rate lower than otherwise. The box “Complexities of Monetary Policy Rules” in the Board’s July 2018 *Monetary Policy Report* contains an application of such a modified rule; see Board of Governors (2018, pp. 37-41).

¹⁴ See English, López-Salido, and Tetlow (2015) for applications of flexible price-level targeting and nominal income-targeting strategies to a quantitative model of the U.S. economy.

financial turmoil and deteriorating economic conditions. Because the U.S. economy required additional policy accommodation after the ELB was reached, the FOMC deployed two additional tools in the years following the crisis: balance sheet policies and forward guidance regarding the likely path of the federal funds rate.¹⁵

The FOMC altered the size and composition of the Fed's balance sheet through a sequence of three large-scale securities purchase programs, via a maturity extension program, and by adjusting the reinvestment of principal payments on maturing securities. With regard to forward guidance, the FOMC initially made "calendar based" statements, and, later on, it issued "outcome based" guidance. Overall, the empirical evidence suggests that these added tools helped stem the crisis and support economic recovery by strengthening the labor market and lifting inflation back toward 2 percent. That said, estimates of the effects of these unconventional policies range widely.¹⁶

In addition to assessing the efficacy of these existing tools, we will consider additional tools to ease policy when the ELB is binding. For example, as is presently Bank of Japan policy, the FOMC could, when the ELB is binding, establish a temporary ceiling for Treasury yields at longer maturities by standing ready to purchase them at a

¹⁵ As an illustration of the shortfall in policy support created by a binding ELB during the Global Financial Crisis, the simple policy rules considered in a January 2017 speech by then-Chair Janet Yellen prescribed setting the federal funds rate between negative 1-1/2 and negative 9 percent; see Yellen (2017). In addition to using these two additional monetary policy tools, the Federal Reserve implemented a number of other measures to stabilize the financial system, increase households and business confidence, and more generally support the economic recovery. These supplementary measures included the setting up of several credit facilities and the introduction of stress tests for systemically important financial institutions.

¹⁶ On the transmission channels of balance sheet policies, see D'Amico and others (2012), Joyce and others (2012), Clarida (2012), Woodford (2012), and Bauer and Rudebusch (2014). On the financial market effects of balance sheet policies, see Gagnon and others (2011), Joyce and others (2011), Hamilton and Wu (2012), D'Amico and King (2013), and Swanson (2017). For discussions of the macroeconomic effects of these policy actions, see Chen, Cúrdia, and Ferrero (2012); Baumeister and Benati (2013); Engen, Laubach, and Reifschneider (2015); Chung and others (2019), and the references therein. For related assessments of forward guidance, see Campbell and others (2012); Engen, Laubach, and Reifschneider (2015); Campbell and others (2017); and Swanson (2017).

preannounced floor price.¹⁷ During the crisis and its aftermath, the Federal Reserve reviewed but ultimately found this tool and some others deployed by foreign central banks wanting relative to the alternatives it did pursue. But the review will reassess the case for these and other tools in light of more recent experience in other countries.

The third question the review will consider is, “How can the FOMC’s communication of its policy framework and implementation be improved?” Our communication practices have evolved considerably since 1994, when the Federal Reserve released the first statement after an FOMC meeting. Over the past decade or so, the FOMC has enhanced its communication practices to promote public understanding of its policy goals, strategy, and actions, as well as to foster democratic accountability. These enhancements include the Statement on Longer-Run Goals and Monetary Policy Strategy; postmeeting press conferences; various statements about principles and strategy guiding the Committee’s normalization of monetary policy; and quarterly summaries of individual FOMC participants’ economic projections, assessments about the appropriate path of the federal funds rate, and judgments of the uncertainty and balance of risks around their projections.¹⁸

¹⁷ Compared with asset purchases during the financial crisis, this approach might give us greater rate control at medium to long maturities but carry a risk that the Federal Reserve’s balance sheet could become unduly large. Japan arguably offers the most direct example of such an approach. In September 2016, the Bank of Japan announced a target for the yield on the Japanese 10-year government bond and stated its commitment to expand the monetary base until inflation exceeded its 2 percent objective and stayed above that level in a stable manner.

¹⁸ Starting in 1979, the Federal Reserve published a summary of individual economic projections from various Board members, FOMC members, or FOMC participants in the semiannual *Monetary Policy Report*. With the introduction of the Summary of Economic Projections (SEP) in 2007, the FOMC increased the frequency of the releases of policymaker projections, expanded the set of economic variables included, and extended the forecast horizon. Because the SEP includes individual contributions of projections and assessments from all FOMC participants, it captures a broader range of views than those of FOMC members. For a discussion and data, see Bernanke (2007) and Romer (2010).

As part of the review, we will assess the Committee's current and past communications and additional forms of communication that could be helpful. For example, there might be ways to improve communication about the coordination of policy tools or the interplay between monetary policy and financial stability.

Activities and Timeline for the Review

The review will have several components.¹⁹ The Board and the Reserve Banks will be conducting town hall-style "Fed Listens" events this year. We will hear from a broad range of interested individuals and groups, including business and labor leaders, community development professionals, and academics. The first of these events will take place Monday in Dallas. Another is scheduled at the Federal Reserve Bank of Minneapolis in early April, and other Reserve Banks will host events over the course of the year.

In addition, we will sponsor a System research conference on June 4-5, 2019, at the Federal Reserve Bank of Chicago, with speakers and panelists from outside the Fed. The sessions will include overviews by academic experts of themes that are central to the review, including the FOMC's monetary policy since the financial crisis, assessments of the maximum sustainable level of employment, alternative policy frameworks and strategies to achieve the dual mandate, policy tools, global considerations, financial stability considerations, and central bank communications. Other sessions will feature panels of community leaders who will share their perspectives on the labor market and the effects of interest rates on their constituencies.

¹⁹ Information about the review and the events associated with it are available on the Board's website at <https://www.federalreserve.gov/monetarypolicy/review-of-monetary-policy-strategy-tools-and-communications.htm>.

We expect to release summaries of the “Fed Listens” events and to livestream the Chicago conference. Building on the perspectives we hear and on staff analysis, the FOMC will conduct its own assessment of its monetary policy framework, beginning around the middle of the year. We will share our conclusions with the public in the first half 2020.

Concluding Thoughts

The economy is constantly evolving, bringing with it new policy challenges. So it makes sense for us to remain open minded as we assess current practices and consider ideas that could potentially enhance our ability to deliver on the goals the Congress has assigned us. For this reason, my colleagues and I do not want to preempt or to predict our ultimate finding. What I can say is that any refinements or more material changes to our framework that we might make will be aimed solely at enhancing our ability to achieve and sustain our dual-mandate objectives in the world we live in today.

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