The Road Ahead Under a New Monetary Policy Framework

Charles L. Evans President and Chief Executive Officer Federal Reserve Bank of Chicago

Economic Prospects and Policies After COVID-19 A Panel Hosted by NABE (National Association for Business Economics) at the ASSA (Allied Social Science Associations) 2021 Virtual Annual Meeting January 4, 2021

FEDERAL RESERVE BANK OF CHICAGO

The views expressed today are my own and not necessarily those of the Federal Reserve System or the FOMC.

The Road Ahead Under a New Monetary Policy Framework

Charles L. Evans President and Chief Executive Officer Federal Reserve Bank of Chicago

Introduction

Thank you for the introduction and the opportunity to participate alongside these distinguished panelists in today's important discussion. I had hoped to welcome all of you to Chicago in person, but, well, here we are in our virtual world. Wherever you are, I wish you a happy and healthy new year. Before I begin my remarks, I should note that these views are my own and do not necessarily represent those of my colleagues on the Federal Open Market Committee (FOMC) or others in the Federal Reserve System.

The current upsurge in Covid cases is a serious problem. But progress on the vaccine front has been very positive, and it looks like the health crisis will be brought under control as we move through the year. So as we look forward to life after Covid-19, what is in store for monetary policy?

Of course, we'll be entering this period with policy rates at the effective lower bound (ELB), where we swiftly brought them last March in recognition of the severe impact the pandemic would have on economic activity and inflation.¹ And we have been in a similar situation before—when we brought policy rates to the effective lower bound with the Great Financial Crisis and, in the end, held them there for seven years.²

¹ See Federal Open Market Committee (2020e, 2020f).

² See Federal Open Market Committee (2008).

The effective lower bound has become all too familiar. Its threat is now clearly a persistent feature of the economic landscape. It poses profound challenges for central banks to provide sufficient accommodation to meet their monetary policy goals. One of these goals is hitting an inflation target. Recall that the Fed first announced a formal inflation target of 2 percent in 2012.³ And in 2016, we clarified that we would be concerned if inflation were running persistently above or persistently below 2 percent.⁴ Yet, with only a few exceptions, inflation has consistently undershot our 2 percent objective ever since we announced that target.

This experience, together with a growing body of research, strongly shows that under traditional monetary policies, proximity to the effective lower bound imparts a downward bias to inflation expectations and actual inflation.⁵ This is a serious problem. The inflation rate over the longer run is primarily determined by monetary policy. It is the central bank's responsibility. So in my view we can't spend the next five years underrunning our target and just offer up explanations for why bringing inflation up to 2 percent is so hard. Instead, we have to avoid such poor outcomes by using policy strategies that offset this downward bias.

With these challenges in mind, the FOMC recently revised our long-run monetary policy strategy that guides our policy responses.⁶ In my remarks today I will review a couple of its key points. I will also discuss how I see our new framework relating to recent research on how monetary policy can address the downward bias in inflation

³ Federal Open Market Committee (2012).

⁴ Federal Open Market Committee (2016).

⁵ Adam and Billi (2007).

⁶ Federal Open Market Committee (2020d).

expectations. And I will end with some thoughts on what policy may actually look like under the revised framework.

The revised long-run framework

To me, the biggest impetus for updating our monetary policy strategy came from an undeniable realization: The effective lower bound on the federal funds rate was not just an anomaly we stumbled into during the Great Financial Crisis, but a persistent threat to the achievement of our dual mandate goals.

The research here is clear. For all the well-known structural reasons, the long-run equilibrium real fed funds rate⁷ is much lower now than it was in the 1980s and '90s. This means even average business cycle shocks will drive the funds rate to its effective lower bound—let alone the kind of shock we received in March. Research also shows that under traditional monetary policy strategies, the limits on reducing policy rates presented by the proximity of the ELB will impart a downward bias to inflation and inflation expectations relative to our 2 percent target. This bias is always present; it's not just an occasional risk associated with a large negative shock. In addition, these limits on reducing rates will also impede achievement of our maximum employment mandate.

These facts imply a couple of things. First, a systematic adjustment to monetary policy strategy is needed to offset the bias. Second, at times this bias-adjustment will require generating inflation above 2 percent in order to center inflation and inflation

⁷ The equilibrium, or neutral, federal funds rate is the funds rate associated with a neutral monetary policy (policy that is neither expansionary nor contractionary).

expectations at target. I am happy to say that the new monetary policy strategy delivers on these two fundamental principles with its flexible inflation averaging goal. Namely, it explicitly seeks to achieve inflation that averages 2 percent over time, and it recognizes that following a period when inflation has been persistently underrunning 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.

The new framework also emphasizes that our maximum employment mandate is a broad-based and inclusive goal and that monetary policy will seek to eliminate *shortfalls* from maximum employment. Recall that the old strategy sought to minimize *deviations*—both positive and negative—from maximum employment, not just shortfalls. This was an important refinement. The new framework recognizes that we should not rush to raise rates and risk ending a vibrant, more inclusive job market unless inflation threatens to become uncomfortably high.

A lot of factors can enter the characterization of an inclusive job market. One relevant statistic, for example, is the gap between Black and White unemployment rates. This gap fell to an all-time low of 2-1/4 percentage points with the strong labor market in 2019. This and other related indicators mean that the many individual and community benefits that come with high employment are more effectively reaching a broader share of the population. Indeed, the valuable features of a strong job market were a major theme brought out by community leaders in the public Fed Listens events we held as

5

part of the framework review process—events we held to hear about how monetary policy impacts communities in the real world.⁸

Monetary policy should not put these benefits of a strong labor market at risk if inflation is quiescent. Indeed, as we all are well aware, the link between unemployment and inflation pressures is subject to a great deal of uncertainty. For example, before the pandemic, inflation was running below target despite a historically low 3-1/2 percent unemployment rate. This experience highlights the challenge of interpreting monetary policy strictly through the lens of a simple bivariate Phillips curve.⁹ Importantly, even when rates are low and labor markets appear to be tight, we can't definitely say policy is accommodative if inflation is still mired below our 2 percent average objective. This is important to remember when evaluating the lower-for-longer interest rate policies that accompany episodes at the ELB. In the end, it is actual inflation outcomes that matter.

In a related vein, the new strategy statement does not include specific operational details for how to achieve our goals. I think that is a feature, not a bug. I have long thought that no specific formulaic monetary policy rule will be robust to all of the changes in the economic environment that inevitably will occur. The strategy statement is, instead, a commitment to an outcome-based policy approach—a philosophy that I have supported throughout my tenure on the FOMC. The precise policy tools and their

⁸ Federal Reserve System (2020).

⁹ The Phillips curve is a statistical relationship that describes a negative correlation between inflation and unemployment—that is, lower unemployment is associated with higher price and wage inflation. It is often drawn as a negatively sloped curve that has a measure of labor market tightness, such as the unemployment rate, on the horizontal axis and a measure of wage or price inflation on the vertical axis. See Phillips (1958).

settings may vary with economic conditions, but the ultimate policy goals remain the same.

Policy research

Now let me take a step back and talk about the academic literature. I believe our new framework is quite consistent with researchers' conclusions about optimal monetary policy in the presence of the ELB.

This literature has established that the ELB induces a downward bias to achieving an inflation target under standard symmetric policy responses. It also has proposed a range of alternative monetary policy frameworks to address this bias. Such frameworks include flexible average inflation targeting, as the Federal Reserve has adopted; price level targeting; so-called dovish policies, such as described by Thomas Mertens and John Williams; and also asymmetric reaction functions and target ranges, as found in work by Francesco Bianchi, Leonardo Melosi, and Matthias Rottner.¹⁰ An important feature of some of these frameworks is an asymmetry in how the central bank responds to shocks that push inflation either above or below target. By responding less aggressively to upside shocks than to downside ones, these policies can shift up the distribution of inflation outcomes, thereby offsetting the downward bias from the effective lower bound and aligning expected inflation at target.

Now, these types of models involve very strong assumptions: completely rational and forward-looking agents, complete credibility of the monetary authority, and no

¹⁰ See Mertens and Williams (2019) and Bianchi, Melosi, and Rottner (2019).

adjustment lags or other inertias in the economy. Under such conditions, these models offer clear policy prescriptions and their implementation works perfectly. Rational agents immediately align their views with the bias-corrected distribution of inflation generated by the new policy rule.

Of course, this idealized setting is unrealistic when it comes to actually implementing monetary policy. I view our new flexible average inflation target strategy as a way of delivering on the spirit of some of these models while acknowledging the complexities of the real world. Importantly, in the real world, actual outcomes are needed to build credibility. Some actors will need to see inflation actually average 2 percent in practice before they fully adjust their expectations. Real-world implementation also will require extensive and ongoing communication so that the public understands our efforts to offset the inflation bias. Well-articulated outcome-based forward guidance will be a key part of this process.

Policy under the new framework

This naturally brings us to the forward guidance the Committee issued in September.¹¹ This guidance created a two-pronged plan. The first prong calls for the federal funds rate to remain at the effective lower bound until our employment mandate is met, inflation reaches 2 percent, and inflation is on target to overshoot. Then, the second prong involves increasing the federal funds rate slowly enough to maintain the accommodation needed to achieve moderate overshooting for some time, so that

¹¹ Federal Open Market Committee (2020c).

inflation actually averages 2 percent. And last month we augmented this with guidance saying we will maintain our current pace of asset purchases until substantial further progress has been made toward our maximum and inclusive employment and price stability goals.¹² For this approach to be successful, economic agents must have strong confidence that policy will remain sufficiently accommodative to generate these outcomes.

How will this work out in practice? After all, there are multiple paths that could achieve 2 percent average inflation, depending on the horizon and the extent of overshoot tolerated. Let me give you a couple of examples. Suppose that we take as our benchmark the average of inflation beginning in the first quarter of 2020. According to the most recent Summary of Economic Projections, core PCE inflation is projected to be 1.4 percent in 2020 and to gradually rise to 2 percent in 2023.¹³ Suppose then that core PCE inflation reaches 2-1/4 percent in 2024 and stays there. In this scenario, average core inflation would not reach 2 percent until late 2025 or early 2026. A 2 percent average could be achieved about a year sooner if inflation rose to 2-1/2 percent in 2024.

Now, we are not going to follow a strict numerical formula for moving policy. Still, these examples illustrate an inevitable bottom line: It likely will take years to get average inflation up to 2 percent, which means monetary policy will be accommodative for a long time. This translates into low-for-long policy rates, and indicates that the Fed likely will

¹² Federal Open Market Committee (2020b).

¹³ Federal Open Market Committee (2020a). While our objective is stated in terms of overall inflation measured by the Price Index for Personal Consumption Expenditures (PCE), core inflation—which strips out the volatile food and energy sectors—is a better gauge of sustained inflationary pressures and where inflation is headed in the future.

be continuing our current asset purchase program for a while as well. The examples also show that if we try to fine-tune a very modest inflation overshoot of only a tenth or two, we run a very large risk of failing to achieve our 2 percent averaging goal within any reasonable amount of time. For me, getting inflation moving up with momentum and delivering rates around 2-1/2 percent is important for achieving on our inflation objective in as timely a manner as possible.

Risk management also argues for accommodative policy. This is because the close proximity of the ELB limits the Fed's capacity to lower short-term policy rates. Instead, if the actual path of inflation turns out to be higher than expected, monetary policy can always react with higher policy rates to dampen inflation. But if we overestimate the underlying strength of the economy, the ELB could impede our ability to provide adequate interest rate accommodation and achieve our dual mandate goals within a reasonable amount of time.

This is a question that my co-authors Jonas Fisher, François Gourio, Spencer Krane, and I analyzed when thinking about exiting from the ELB back in 2015.¹⁴ To avoid the heavy costs of a return to the ELB, our analysis showed that, in both forward- and backward-looking models, optimal monetary policy under discretion should tilt toward being more accommodative than it otherwise would be and should risk inflation running above 2 percent for a time. Finding ourselves again at the effective lower bound, I believe this risk-management argument is as relevant today as it was back then.

¹⁴ Evans et al. (2015).

Conclusion

The bottom line is that it will take a long time for average inflation to reach 2 percent. To meet our objectives and manage risks, the Fed's policy stance will have to be accommodative for quite a while. Economic agents should be prepared for a period of very low interest rates and an expansion of our balance sheet as we work to achieve both our dual mandate objectives.

References

Adam, Klaus, and Roberto M. Billi, 2007, "Discretionary monetary policy and the zero lower bound on nominal interest rates," *Journal of Monetary Economics*, Vol. 54, No. 3, April, pp. 728–752.

Bianchi, Francesco, Leonardo Melosi, and Matthias Rottner, 2019, "Hitting the elusive inflation target," Federal Reserve Bank of Chicago, working paper, No. 2019-07, August, available online, https://www.chicagofed.org/publications/working-papers/2019/2019-07.

Evans, Charles, Jonas Fisher, François Gourio, and Spencer Krane, 2015, "Risk management for monetary policy near the zero lower bound," *Brookings Papers on Economic Activity*, Vol. 46, No. 1, Spring, pp. 141–196, available online, https://www.brookings.edu/bpea-articles/risk-management-for-monetary-policy-near-the-zero-lower-bound/.

Federal Open Market Committee, 2020a, Summary of Economic Projections, Washington, DC, December 16, available online, https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20201216.pdf.

Federal Open Market Committee, 2020b, "Federal Reserve issues FOMC statement," press release, Washington, DC, December 16, available online, https://www.federalreserve.gov/newsevents/pressreleases/monetary20201216a.htm.

Federal Open Market Committee, 2020c, "Federal Reserve issues FOMC statement," press release, Washington, DC, September 16, available online, https://www.federalreserve.gov/newsevents/pressreleases/monetary20200916a.htm.

Federal Open Market Committee, 2020d, "Statement on longer-run goals and monetary policy strategy," Washington, DC, as amended effective August 27, available online, https://www.federalreserve.gov/monetarypolicy/review-of-monetary-policy-strategy-tools-and-communications-statement-on-longer-run-goals-monetary-policy-strategy.htm.

Federal Open Market Committee, 2020e, "Federal Reserve issues FOMC statement," press release, Washington, DC, March 15, available online, https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315a.htm.

Federal Open Market Committee, 2020f, "Federal Reserve issues FOMC statement," press release, Washington, DC, March 3, available online, https://www.federalreserve.gov/newsevents/pressreleases/monetary20200303a.htm.

Federal Open Market Committee, 2016, "Statement on longer-run goals and monetary policy strategy," Washington, DC, as amended effective January 26, available online, https://www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals_2016012 6.pdf.

Federal Open Market Committee, 2012, "Federal Reserve issues FOMC statement of longer-run goals and policy strategy," press release, Washington, DC, January 25, available online,

https://www.federalreserve.gov/newsevents/pressreleases/monetary20120125c.htm.

Federal Open Market Committee, 2008, "FOMC statement," press release, Washington, DC, December 16, available online,

https://www.federalreserve.gov/newsevents/pressreleases/monetary20081216b.htm.

Federal Reserve System, 2020, *Fed Listens: Perspectives from the Public*, report, Washington, DC, June, available online, https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf.

Mertens, Thomas M., and John C. Williams, 2019, "Tying down the anchor: Monetary policy rules and the lower bound on interest rates," Federal Reserve Bank of New York, staff report, No. 887, revised August 2019, available online, https://www.newyorkfed.org/research/staff_reports/sr887.html.

Phillips, A. W., 1958, "The relation between unemployment and the rate of change of money wage rates in the United Kingdom, 1861–1957," *Economica*, new series, Vol. 25, No. 100, pp. 283–299.