

on this question, last month's Summary of Economic Projections, or SEP, is instructive.<sup>5</sup> Most FOMC participants—including me—have the unemployment rate moving considerably below their estimate of NAIRU by 2020, with inflation climbing slightly above 2 percent and the federal funds rate moving above their estimates of its likely long-run value. Thus, the March SEP implies that most FOMC participants expect that monetary policy will need to become slightly restrictive in the years ahead.

Recent fiscal and trade policy developments are likely to increase the uncertainty around the distance to a neutral monetary policy stance and the possibility that the FOMC will have to move to a restrictive stance. The shift in fiscal policy toward stimulus is somewhat challenging because of its timing—it is unusual to move fiscal policy sharply in a stimulative direction at a mature stage of a business cycle—and because the shift puts the nation's fiscal path on an unsustainable trajectory. According to the projections released earlier this month from the Congressional Budget Office, or CBO, the federal budget deficit is anticipated to exceed 4½ percent of GDP in 2019, well above the level that would be needed to keep the federal debt-to-GDP ratio from rising.<sup>6</sup> Moreover, the CBO expects that the pressures on the budget will be substantial over the next decade, with deficit projections ranging between 4½ and 5½ percent of GDP throughout the period. Debt service costs will move sharply upward in coming years as federal debt continues to grow and interest rates likely increase further. Additionally, entitlement spending is likely to increase sharply as members of the baby boom generation continue to retire—myself included.<sup>7</sup>

The shift toward a more aggressive U.S. posture on trade also likely increases uncertainty. On the one hand, such a posture could lead to revised trade agreements that provide the United States with greater access to foreign markets and better protection of intellectual property. This would tend to raise U.S. productivity and real GDP growth. On the other hand, tougher bargaining could lead to retaliation and higher trade barriers, here and abroad. In contrast to the first scenario, this outcome would be quite negative—leading to higher inflation, lower productivity, and slower potential GDP growth.<sup>8</sup> Over time, how U.S. trade policy evolves will have important implications for the performance of the U.S. economy—and, by extension, for U.S. monetary policy. By increasing uncertainty around the economic outlook, these shifts in fiscal and trade policy could make it more difficult for the FOMC to achieve its dual mandate objectives in the years ahead.

### Longer-term Monetary Policy Issues

Over the longer term, the FOMC will also need to address a number of other important issues. These include: 1) Determining the appropriate long-term implementation framework for U.S. monetary policy, and 2) deciding whether the strategic framework underlying monetary policy decisions needs to be adjusted to mitigate the risks associated with getting pinned at the effective lower bound for short-term interest rates.<sup>9</sup>

For the first issue, I see two options: return to the “corridor”-type system that was in place prior to the financial crisis, or remain with the framework that has been in place since the crisis—namely, a “floor” system. In a corridor system, reserves in the banking system are scarce, and the federal funds rate is set by adjusting the supply of reserves through open market operations to balance demand and supply at the FOMC's target range. In contrast, in a floor system, reserves are abundant, so that the interest rate the Federal Reserve pays on excess reserves, or IOER, is the primary tool used to control the federal funds rate.

In my view, the case for retaining the current floor system is very compelling for a number of reasons. First, it is operationally much less complex than a corridor system. In the current regime, the setting of IOER is largely sufficient to maintain the federal funds rate within the FOMC's target range, as we have seen over the past few years.<sup>10</sup> In contrast, a corridor system requires forecasting the many exogenous factors that affect the amount of bank reserves outstanding, and then engaging in open market operations on a near daily basis to keep reserves at a level consistent with the FOMC's target range.<sup>11</sup> This task would likely be more difficult now because of greater fluctuation in these exogenous factors relative to when the corridor regime was last in place.

Second, a corridor system constrains the Federal Reserve's ability to provide the types of lender-of-last-resort backstops that can help support financial stability. Prior to gaining the authority to pay interest on reserves in the fall of 2008, Federal Reserve officials—myself included—were faced with a question: if the take-down on a proposed liquidity facility were large, how would we be able to drain the added reserves on a timely basis to maintain control of the federal funds rate? This was not just a theoretical issue during the financial crisis. The

initial auctions of the Term Auction Facility, or TAF, were kept relatively small, in part, because of concerns that larger programs would make it more difficult for the manager of the System Open Market Account (me, in that particular case) to drain sufficient reserves to offset the TAF reserve additions. Similarly, the Term Securities Lending Facility (TSLF)—which involved the swap of Treasury collateral from the Federal Reserve against lower-quality collateral held by primary dealers—was introduced in large part because collateral swaps, unlike cash loans, did not affect the amount of reserves in the banking system. My overall point is that broad-based, open-ended lender-of-last-resort facilities are more difficult to accommodate in a corridor system because of the need to drain any reserve additions to keep the federal funds rate close to the FOMC's target.

I see this as an important shortcoming of the pre-crisis corridor regime that does not get sufficient attention. Having the ability to introduce broad and credible lender-of-last-resort backstops—well secured by pledged collateral—can be critical when confidence falters and financial stability is at risk. Private sector participants are more likely to continue to engage with their counterparties—and to borrow and lend—when they know a central bank backstop will be available if economic and financial conditions deteriorate. A corridor regime could cause the Federal Reserve to delay or avoid providing such backstops, which could increase financial stability risks by causing lenders and borrowers to disengage with one another earlier.<sup>12</sup>

Although the FOMC has not made a final decision about a future framework for implementing monetary policy, meeting minutes confirm that participants recognize the advantages of a floor system. As the November 2016 FOMC minutes note: "Meeting participants commented on the advantages of using an approach to policy implementation in which active management of the supply of reserves would not be required....[S]uch an approach was seen as likely to be relatively simple and efficient to administer, relatively straightforward to communicate, and effective in enabling interest rate control across a wide range of circumstances."<sup>13</sup>

The second major issue facing the FOMC is whether to change its strategic framework to mitigate the risk of a return to the effective lower bound for interest rates. Once the federal funds rate is close to zero, the FOMC is constrained in its ability to lower short-term interest rates further, and the other available policy options to provide monetary policy stimulus may be less effective. If the FOMC were unable to provide sufficient stimulus, the economy could have difficulty recovering. In turn, inflation and inflation expectations could fall—and thus raise real interest rates—effectively tightening monetary policy and making the task of generating a sustainable recovery even more difficult.

Some have argued that a desirable way to reduce this risk would be to raise the FOMC's inflation objective from 2 percent to perhaps 3 or 4 percent. Their reasoning is that if the inflation objective were somewhat higher, nominal interest rates at the later stages of the business cycle would also tend to be higher, which would provide greater scope for the FOMC to cut short-term interest rates to stimulate the economy, if necessary.

While recognizing that there is a legitimate effective lower bound risk, I do not support the option of raising the inflation objective, for three reasons. First, I doubt that a higher inflation target would be viewed as consistent with the Federal Reserve's Congressional mandate to pursue price stability. Our employment and inflation mandates have been established by Congress, not by the Federal Reserve.

Second, the risks of being pinned at the effective lower bound for interest rates may be overstated. Only once in the postwar period have we reached the zero lower bound. Upending several decades of effort to anchor inflation expectations around 2 percent might be too high a price to pay to reduce the effective lower bound risk by what might prove to be a small amount. In this vein, it is important to recognize that the FOMC now has a more credible set of tools available to use at the effective lower bound than it did in 2008, when those tools were largely unproven. Forward guidance about the path of short-term interest rates and quantitative easing have been effective in providing monetary policy stimulus in the post-crisis period. Because this is now more broadly appreciated, households and businesses should be more confident that the Federal Reserve has sufficient tools available at the effective lower bound to generate a sustainable economic recovery. This greater confidence, in turn, should help keep inflation expectations from declining—which should also mitigate the risks associated with hitting the lower bound.

Third, there are arguably better ways of reducing risks associated with the effective lower bound than a higher inflation objective. In particular, Congress could increase the size and scope of the automatic fiscal stabilizers that support economic activity and income during economic downturns. For example, Congress could enact legislation