# A Look Back at the Consensus Statement

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The Federal Reserve has initiated a review of its monetary policy strategy, tools, and communications. The Fed's current monetary policy strategy is enshrined in a document titled "Statement on Longer-Run Goals and Monetary Policy Strategy" that was first approved by governors and Reserve Bank presidents in January 2012 and has been reaffirmed with minor changes at the beginning of every year since (Board of Governors 2019). During the internal deliberations that led up to adoption, Federal Open Market Committee (FOMC) participants commonly referred to the draft document as "the consensus statement." For convenience, and out of habit, I will continue to use that term.[1]

Congress established the Fed's monetary policy objectives in 1977 (Steelman 2011). Thirty-four years later, the FOMC's consensus statement translated that mandate into a publicly articulated strategic framework. It described the FOMC's approach to monetary policy in the terminology of flexible inflation targeting and formally

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[1]In addition, I will use the term "Committee" in its broad sense to refer to the entire set of what are called FOMC "participants"—all 12 Federal Reserve Bank presidents and all members of the Board of Governors—despite the fact that only 5 presidents are legally voting members of the Committee at one time.

announced the Committee's inflation target of 2 percent, as measured by the price index for personal consumption expenditures. It also explicitly declined to establish a numerical target for the unemployment rate.

Periodic review of the foundational framework and assumptions guiding strategic choices is a best practice for any sizable organization. The exigencies of meeting-to-meeting decisionmaking can divert attention from deeper questions that deserve attention over time. The Federal Reserve therefore is to be commended for launching this review.

The focus of the Fed's strategy review is on whether the effectiveness of the policy framework articulated in the consensus statement can be improved. This article reviews the consensus statement and the deliberations that led to its adoption. The Federal Reserve was late to the game compared to other central banks that had adopted transparent inflation targeting frameworks in the years since the Great Inflation of the 1970s (Bernanke et al. 1999). But the delay was not for lack of attention—serious discussions of inflation targeting began in the mid-1990s and resumed in the mid-2000s. Resistance stemmed from desires to preserve discretion and concerns that an inflation target would diminish commitment to the employment component of the Fed's mandate. To overcome the latter, an announced inflation target was framed as affirming and making transparent the strategy the FOMC was already pursuing—that is, as not signifying a change in the conduct of monetary policy. Work toward an explicit target was episodic and seemed to ebb and flow with tactical exigencies such as the perceived need for monetary stimulus. The final push that resulted in adoption of the consensus statement began in the run-up to the large-scale asset purchase program announced in November 2010 (QE2), when Bernanke advocated simultaneously adopting an inflation targeting framework in order to help stabilize inflation expectations and avoid the perception of a one-off "shock-and-awe action." It picked up further momentum in 2011 as the FOMC considered adopting forward guidance based on quantitative unemployment rate thresholds, which would have sent confusing signals in the absence of an explicit inflation goal. Both of these factors—the emphasis on continuity and the appearance of opportunism—may have diminished the effectiveness of the consensus statement at achieving its ultimate goal of improving transparency and helping to stabilize inflation expectations.

These historical insights are useful to bear in mind as the FOMC reviews their monetary policy framework. The dual mandate was handled awkwardly, and arguably confusingly, in the consensus statement; it disavows targeting “maximum employment,” but highlights longer-run committee unemployment rate forecasts in a way that suggests low unemployment is a targeted variable. Attention to clarifying the Fed’s view of the relationship between inflation and employment would be useful. Moreover, to avoid the appearance of opportunism, the bar should be high for adopting new strategic approaches, such as “makeup” strategies, that seem motivated by a desire to provide more short-term stimulus. Adopting such strategies would raise questions about what actions the Committee would take to elevate inflation as called for by makeup strategies, and why such actions could not be taken in any event to raise inflation closer to 2 percent if so desired.

## The FOMC Discusses Adopting an Explicit Inflation Target

The FOMC’s adoption of a formal strategy statement in January 2012 was the culmination of deliberations that stretched over decades. The idea of an explicit inflation target was broached as far back as 1983,[2] but interest picked up in the 1990s, coinciding with an international movement toward explicit inflation goals at central banks and interest by the new Republican majorities in Congress in

[2]In August 1983, the FOMC discussed “conceptual and presentational issues” that arise from “efforts in Congress and elsewhere to have the Federal Reserve specifically declare its ‘objectives’ for nominal GDP, real GDP, and prices.” Questions posed for discussion included consideration of whether the Committee should publicly announce “a specific numerical statement of objectives (with respect to prices or nominal or real GDP) over an extended period” (Board of Governors of the Federal Reserve System, “Transcript of the Discussion Held on August 22, 1983”). The session was not considered part of the formal FOMC meeting. In 1989, in the face of rising inflation and concerns about the Fed’s credibility, Cleveland Fed president Lee Hoskins argued for choosing a specific inflation objective (see Board of Governors of the Federal Reserve System, “Transcript of the Meeting of the Federal Open Market Committee, February 7–8, 1989”: 31.) In the interest of brevity, FOMC transcripts will be referred to as *Transcript* followed by the date of the meeting. All FOMC transcripts in this article can be found at www.federalreserve.gov/monetarypolicy/fomc_historical.htm.

giving the Fed a single price stability mandate (Bernanke et al. 1999; *Transcript*, January 31–February 1, 1995: 47). Fed Chairman Alan Greenspan organized a discussion for the January 1995 FOMC meeting that featured a debate on the merits of price stability between Janet Yellen, then a member of the Board of Governors, and Al Broaddus, president of the Federal Reserve Bank of Richmond (*Transcript,* January 31–February 1, 1995: 38–59). The committee was "split down the middle," according to Greenspan's characterization, and unable to adopt a common view (*Transcript,* January 31–February 1, 1995: 57)

A year and a half later, at the July 1996 meeting, the Committee again took up the issue, again prompted by the prospect of Greenspan being asked by Congress about potential legislation altering the Fed's mandate (*Transcript*, July 2–3, 1996: 41–68). This time, Broaddus and Yellen were able to agree that the Committee should "hold the line" and not let inflation rise above the then-current rate of 3 percent and should work over time to bring the inflation rate down to 2 percent.[3] Yellen argued that there was a permanent trade-off between inflation and employment due to downward nominal wage rigidities and that the costs of reducing inflation below 2 percent exceeded the benefits. The result was a broad "working consensus" to move the measured inflation rate down to 2 percent. Chairman Greenspan acknowledged the consensus but warned meeting participants against revealing the Committee objective to the public.[4]

The next full-fledged discussion of an inflation target was nine years later, at the February 2005 FOMC meeting (*Transcript*, February 1–2, 2005: 6–63).[5] Interestingly, eight participants voiced

[3]Marvin Goodfriend, an eyewitness on both occasions, presented an excellent account of the two discussions at the Federal Reserve Bank of Atlanta's conference marking the 100th anniversary of the Jekyll Island gathering at which the first draft of what became the Federal Reserve Act was created (Ireland 2007; Hetzel 2008: 196–97; Goodfriend 2013).

[4]Greenspan: "I will tell you that if the 2 percent inflation figure gets out of this room, it is going to create more problems for us than I think any of you might anticipate" (*Transcript*, July 2–3, 1996: 72).

[5]Although no public statement was issued, the topic of the discussion had been leaked ahead of the FOMC meeting in an article in the *Wall Street Journal* (Ip 2005).

support for stating the price stability goal as a target range for inflation and just three preferred a point target. Despite wide support for an announced target, Greenspan cited likely political fallout, doubts about the benefits, and the potential to limit discretion as adverse consequences. Action was deferred with the suggestion that the Committee discuss how it would respond to various scenarios that might arise.

The organized discussions of inflation targeting under Greenspan were prompted by congressional interest in legislation that would provide the Fed with a price stability mandate replacing the 1977 legislation. Greenspan did not encourage such discussions apart from instances in which he felt the need to provide a Committee view in response to questions from Congress.

## A "Modest Bit of Additional Transparency"

When Ben Bernanke was nominated as Federal Reserve Chairman in late 2005, he was already on record in favor of inflation targeting (Bernanke and Mishkin 1997; Bernanke et al. 1999; Bernanke, Mishkin, and Posen 2000; Bernanke 2003, 2004). The topic naturally arose at his nomination hearing, and Bernanke emphasized continuity with existing Fed practice:

> I view the explicit statement of a long-run inflation objective as fully consistent with the Federal Reserve's current policy approach, including its appropriate emphasis on the role of judgment and flexibility in policymaking. Most important, this step would in no way reduce the importance of maximum employment as a policy goal [Bernanke 2005].

He went on to promise to go slow and check with Congress before taking action:

> In any case, I assure this Committee that, if I am confirmed, I will take no precipitate steps in the direction of quantifying the definition of long-run price stability. This matter requires further study at the Federal Reserve as well as extensive discussion and consultation. I would propose further action only if a consensus can be developed that taking such a step would further enhance the ability of the FOMC to satisfy its dual mandate of achieving both stable prices and maximum sustainable employment [Bernanke 2005].

Under questioning, he pushed back repeatedly against the notion that adopting an inflation target would alter the Fed's mandate and require an act of Congress, as had been argued by Federal Reserve Governor Edward Gramlich in a January 2000 speech (Gramlich 2000). Bernanke called announcing an inflation target a "modest bit of additional transparency" (U. S. Senate, Committee on Banking, Housing, and Urban Affairs 2005: 20). Senator Paul Sarbanes (D-Md.), in particular, questioned whether an announced numerical inflation goal would not draw attention away from the dual mandate and stated that he did not think it was fully consistent with the Fed's then-current policy approach.

Bernanke's emphasis on continuity was clearly aimed at reassuring Democrats that announcing a numerical target for inflation would not diminish the Fed's emphasis on the employment side of the dual mandate. And his promise of extensive discussion and consultation implied that he would give key members of Congress a chance to weigh in.[6] His characterization of an inflation target as a "modest bit of additional transparency" seemed to conflict with the 1999 book he coauthored advocating inflation targeting for the United States (Bernanke et al. 1999). And his pledge to adopt an inflation target only if it were fully consistent with the Fed's existing practice—a proviso absent from the 1999 proposal—undermined the prospect of noticeably improving the effectiveness of monetary policy or affecting public expectations.

Bernanke began working on an inflation target shortly after he took office as chairman in early 2006. After the March meeting, he appointed a subcommittee on communications issues chaired by Governor Don Kohn, with Federal Reserve Bank presidents Gary Stern (Minneapolis) and Janet Yellen (San Francisco) as members (Board of Governors of the Federal Reserve System 2006). The subcommittee's agenda consisted of a broad array of efforts to improve transparency, including whether to communicate more, and more frequently, about the Committee's economic and policy projections, how to convey the Committee's goals, and whether to adopt and

[6]Interestingly, inflation targeting was not discussed at Bernanke's 2009 reconfirmation hearing.

announce an explicit inflation target.[7] Indeed, Bernanke made greater transparency a deliberate priority from the outset of his chairmanship.[8] He was noticeably more forthcoming and direct himself in communications with Congress and the public, and began allowing greater latitude to Reserve Bank presidents to comment publicly on policy prospects; under his predecessor, FOMC participants scrupulously avoided public commentary that could be construed as conveying information about imminent policy actions.[9]

Governor Kohn's subcommittee organized a discussion at the August 2006 meeting of the "goals, broad strategies, and philosophy" related to communications, after which the Committee tackled inflation targeting head-on in October. At that meeting there was substantial support for announcing a "numerical specification of price stability," and a strong majority favored moving in that general direction, but many were cautious and wanted to take a deliberate approach.[10] Discussion of an explicit inflation target resumed in March 2007 with more attention to the details of specifying a target, such as which price index to use, whether to specify a point target or a range, and what to say about the time horizon over which the objective should be achieved. Chairman Bernanke reported on preliminary consultations with Congress and said he was "generally pretty encouraged" and that he "had the sense that—and this is a very important caveat—so long as our commitment to the dual mandate remains strong both in word and in deed, we will get a fair hearing if we decide to go forward" (*Transcript,* March 20–21, 2007: 111).

[7]At the May 2006 meeting, Governor Kohn stated: "The Chairman has made it very clear to me that everything is on the table in terms of communication between the Committee members and the outside world" (*Transcript*, May 10, 2006: 107).

[8]Bernanke held one-on-one conversations with governors and Reserve Bank presidents in December 2005, after his confirmation. In my talk with him—and I believe he shared this in all his conversations—he said that one of his main goals as chairman was to make Fed communications with the public more open and transparent (also see Bernanke 2015).

[9]The Committee had long been on a gradual path toward fuller internal and external communications (see Lindsey 2003).

[10]Six participants favored announcing an inflation target (Kohn, Lacker, Pianalto, Plosser, Poole, and Stern) and another 10 were lukewarm or wanted to go slow (*Transcript,* October 24–25, 2006: 124–91).

The Committee then put inflation targeting aside as they focused on options for expanding publication of participants' forecasts of macroeconomic variables and the policy rate.[11] In May the Committee began a trial run of a new forecasting process: participants submitted individual projections for key macroeconomic variables—real GDP growth, the unemployment rate, and the core PCE inflation rate—for the current year and next two years, one year more than had been released in the past.[12] Anonymized summaries were circulated at the meeting and participants had a chance to revise their forecasts after the meeting. The new projections procedure went live at the October 2007 meeting, and the Summary of Economic Projections (SEP) was released along with the scheduled release of the meeting minutes three weeks after the meeting. The SEP has been published quarterly thereafter, and the release has been moved up to coincide with the postmeeting statement.

The additional year was added to the forecast horizon that October in the hope that participants' forecasts of inflation three years out (i.e., for 2010) would cluster around a single number, in which case that could serve as something of a substitute for a formal announcement of a numerical specification of the Committee's price stability objective.[13] While there had been a consensus within the Committee since at least 1996 that inflation should be kept low and stable, there still were differing views about the most appropriate numerical goal for inflation. The hope for a back-door inflation target was disappointed, however—participants' inflation forecasts did not converge over the

[11]The semi-annual Monetary Policy Report to Congress had been reporting the range and "central tendency" of the forecasts of Federal Reserve Governors and Reserve Bank presidents for nominal and real GDP growth, the core PCE inflation rate, and the unemployment rate. The July report included forecasts for the year in which the report was submitted and the subsequent year. The February report included forecasts for the current year only, until 2005 when it began including forecasts for the subsequent year as well.

[12]The overall CPI inflation rate was added for the June round of projections, but that was changed to the total PCE inflation rate for the August round.

[13]"A very important question is what is conveyed by the third-year projections, and I think that they are at the heart of the innovation created by this step. Assuming that we're not too far from the steady state initially, which I think characterizes our current situation, it is evident that the third-year projections—or, alternatively, the third through fifth or however we decide to do it—reveal a lot of information about our views on sustainable long-run growth; our views on sustainable unemployment; and, of course, our views of what price stability is" (Bernanke, *Transcript*, June 27–28, 2007: 141–42).

forecast horizon. For example, in the October 2007 SEP, participant forecasts for total PCE inflation in 2010 ranged from 1.5 to 2.0 percent. The Committee still had not agreed on an inflation target.

At that meeting, President Poole asked Chairman Bernanke how he would handle questions about the dispersion of 2010 inflation forecasts in the upcoming monetary policy hearings. Bernanke responded by saying he would avoid revealing his own forecast:

> On your second question, I think I'm kind of a special case because people will overweight what I say if I give a number. So I would not give a number, and what I would say is that what matters are the views of the broad Committee, and I don't want to distinguish myself from the broad Committee [*Transcript*, October 30–31, 2007: 133].

The distribution of out-year inflation forecasts did not converge in successive quarterly rounds of the new projections process. In fact, the dispersion was even wider a year later. The October 2008 projections for total PCE inflation in 2011 ranged from 0.8 to 1.8 percent. At the December meeting Governor Kohn noted that the "projections really weren't settling down and didn't look as though they would soon settle down into what would be consistent with where we would want things to be in the long term" (*Transcript*, December 15–16, 2008: 216). As a result, the subcommittee on communications proposed further extending the forecast process by asking each participant for their "best assessment of the rate to which each variable would converge over the longer term (say, five to six years from now) in the absence of shocks and assuming appropriate monetary policy" (*Transcript*, December 15–16, 2008: 216–17). The presumption was that longer-run inflation projections represented participants' views of the optimal inflation target. The January 2009 SEP included these new, "longer-run" projections. The range of projections for total PCE inflation in the longer run, however, remained nontrivial: 1.5 to 2.0 percent.

One by-product of this indirect approach to an inflation target was the elevation of employment as a policy objective. In the published longer-run forecasts, the unemployment rate was listed alongside inflation, apparently coequal in status.[14]

[14] Projections of the longer-run unemployment rate in January 2009 ranged from 4.5 to 5.5 percent.

The lack of convergence in longer-run inflation forecasts, along with the disparity in Committee participants' policy objectives, gave renewed impetus at the end of 2008 to the quest for an agreed inflation target. Bernanke's more liberal external communication norms had made the lack of an agreed Committee inflation goal more visible and problematic. As participants began saying more in public about their views regarding the most desirable future path for policy settings, they at times cited their own personal goals for inflation. Participants were articulating their own personal inflation objectives internally as well, as they explained the rationale for their policy views (Shapiro and Wilson 2019).[15] Transparency of the Committee as a whole lagged behind transparency at the level of individual participants.

The unfolding recession also gave rise to broader worries about price stability, which Bernanke explained at the opening of a conference call discussion of establishing a numerical inflation goal in January 2009:

> The reason that there has been interest—and I feel this interest has welled up to some extent from the Committee as a whole—is that, in the current situation, there are some circumstances that might make an explicit numerical objective more attractive. There are a number of considerations, but the two I would mention are, first, that we do face, if not deflation, certainly some disinflation; and disinflation, if it proceeds too quickly, can be counterproductive because it raises real interest rates. . . . At the same time that we are using every power we have to try to fight this incredible crisis, there are concerns on the other side that, by expanding our balance sheet and the like, we risk inflation increasing in the medium term. It is important for us to communicate that we will be effective and timely in removing that stimulus, so

[15]Governor Kohn: "I think a lack of clarity on this question has increasingly muddied discussions in this Committee and communication with the public. Within the Committee, it has sometimes been difficult to discern whether differing viewpoints reflect diverse perceptions of the course of inflation and economic growth or of the desirable end point or path for inflation. The public does not know whether the comfort zones enunciated by various Committee members reflect the views of the Committee or only those of the individuals. Coming to an agreement on an end point and on the role that end point should play in policy and announcing that agreement should help our discussions and enhance the public's understanding of our intentions" (*Transcript*, October 24–25, 2006: 159).

> that we will not have an inflation problem during the exit from our current policies. In that respect, there may be some special features of the current environment that make this topic worth thinking about once again [*Transcript*, January 16, 2009: 14–15].[16]

The chairman went on to note political considerations, which had shifted significantly, given the new administration taking office:

> We all agree—and we have discussed it also on numerous occasions—that this has to be managed very carefully from a political perspective. I think we need to go slowly on that front. Don and I and the staff met this morning with some representatives of the Administration.[17] I did not detect any strong opposition on the substance, but they didn't want to incur heavy political costs themselves or use up political capital at the beginning of the Administration. Their view was that whatever we did needed to be very carefully managed to avoid getting blown out of proportion in the political sphere. So we will work very carefully and closely with the Administration in thinking about this, not only in the substantive details but also in terms of the political communication [*Transcript*, January 16, 2009: 15].

Bernanke subsequently met with President Obama, who reportedly told Bernanke "the Fed should do what it believed necessary" (Bernanke 2015: 527). A meeting shortly thereafter with Rep. Barney Frank (D-Mass.), chair of the House Financial Services Committee, did not go as well. As Bernanke later recounted:

> Barney understood my logic, but he also understood the importance of political "optics." He thought the middle of a recession was the wrong time to risk giving the impression, by setting a target for inflation but not employment, that the Fed didn't care about jobs. He would not support the change.

[16]One of the policy alternatives circulated prior to the December 2008 FOMC meeting—Alternative A—included as an option a sentence announcing a 2 percent inflation target: "In support of its dual mandate, the Committee will seek to achieve a rate of inflation, as measured by the price index for personal consumption expenditures, of about 2 percent in the medium term" (Staff of the Board of Governors 2008: 35).

[17]Tim Geithner, Larry Summers, and Christy Romer (Bernanke 2015: 526).

> After I reported the results of my consultations to the FOMC, we decided once again to put off any major change in our policy framework. Instead, in February 2009, we inched closer by releasing the range of Committee members' individual projections 'under appropriate monetary policy' for inflation, unemployment, and economic growth "over the longer run"—defined as roughly three to five years. That would give people a pretty good idea of where we were trying to steer our economy, without our explicitly adopting a target [Bernanke 2015: 527].[18]

Another consideration was turnover on the Board of Governors. Referring to the meeting with administration officials, Bernanke explained to the Committee:

> One point that was made in the meeting this morning, which may affect our thinking on timing if we do decide to go forward, is that the new President has already appointed one member of the Board and will have two more slots to fill. We should pay attention to the schedule of appointments, and to the extent that appointments by the new President can be known and can be consulted in this process, it might ease the political consideration somewhat. That is something we may have to take into account, and it may somewhat affect our timing. [*Transcript,* January 16, 2009: 15].

Daniel Tarullo was sworn in as a member of the Board on January 28, President Obama's first appointment to the Board. He was skeptical about announcing an explicit inflation objective on grounds related to the dual mandate and ended up abstaining when the consensus statement was adopted in January 2012. Other turnover on the Board of Governors affected the inflation targeting debate as well. Rick Mishkin, an economist and strong proponent of an inflation target, had retired from the Board in August 2008, and Betsy Duke, a Virginia community banker and transparency skeptic, had come on.[19] The next FOMC discussion of adopting an

[18]The meeting with Frank took place after the January 28–29, 2009, FOMC meeting: see the transcript for that meeting, p. 213.

[19]Mishkin had published papers advocating inflation targeting, including some coauthored with Bernanke (see Bernanke and Mishkin 1997; Bernanke et al. 1999; Bernanke, Mishkin, and Posen 2000).

explicit inflation target was not until 21 months later, despite broad support on the Committee. One can reasonably infer that a lack of enthusiasm in the administration and in Congress and the changing composition of the Board of Governors were the main reasons for the delay.

A weakening outlook for growth and inflation prompted the resumption of work on an announced inflation goal in October 2010. Fears of disinflation or even deflation had risen since the end of the recession in mid-2009. Core PCE inflation had slowed from 1.8 percent in 2009 to 1.1 percent over the first half of 2010, and Board staff was forecasting core inflation to sag to under 1 percent within a year.[20] Moreover, measures of inflation expectations extracted from financial asset prices had fallen significantly since the spring—about a half a percentage point.[21] With the recovery in real economic activity turning out to be more sluggish than expected, some FOMC participants were citing fears of a "Japanese-style deflationary regime." St. Louis Federal Reserve Bank president James Bullard, in particular, had for several meetings emphasized the risk of descending into a deflationary trap (Bullard 2010).

Bernanke revived the idea of adopting an explicit FOMC inflation target as a way to enhance the stimulative effects of the asset purchase program that came to be known as QE2. In response to the deteriorating outlook, the FOMC was provided with several staff memos prior to the August meeting discussing options for providing additional monetary stimulus. One memo, focusing on potential enhancements to FOMC communications, discussed establishing an explicit inflation goal in order to anchor inflation expectations and avoid a liquidity trap (Eggertsson et al. 2010). The Committee decided to provide more stimulus at the August meeting by reinvesting principal payments on agency debt and MBS in Treasury securities, thereby ending the gradual reduction in the size of the Fed's balance sheet as agency securities rolled off. A new program of outright purchases of Treasury securities was one of the options

[20]See the Tealbook for the September meeting (Staff of the Board of Governors 2010a: 89).

[21]Expectations regarding inflation rates from 5 to 10 years ahead, however, had not fallen since 2008 (Staff of the Board of Governors 2010a: 56–57).

considered by the Committee—a program that was ultimately adopted at the November meeting.[22]

During the August meeting, Bernanke alluded to an outright purchase program and specifically linked it to an inflation targeting framework:

> I am becoming a Bullard acolyte in the following sense: The next time we do anything, I don't think we should go out and say, "Well, we're going $400 billion of Treasuries." I think we ought to have a framework that says, "Here's our objective." And then we say that we're trying to achieve an inflation rate, or a price level target or a nominal GDP target or something, and that we are going to calibrate our purchases or sales in a way that tries to reach that target. That would create some structure, and that would take away this perception that periodically we're going to go out and do a shock-and-awe action [*Transcript*, August 10, 2010: 136].

At the September 2010 meeting, Chairman Bernanke laid out the case for further action but then urged delay to give the Committee time to work out a new policy framework:

> The other reason I think we shouldn't take any explicit action today is that—and I think everyone agrees, even if we don't take action, we should be preparing for the possibility of action—if we're going to be considering going back into additional monetary stimulus, we really need to get more agreement of some kind on what our framework is going to be. . . . I think it's important to ask whether or not we might want to give an explicit number for our inflation objective. . . . My recommendation would be that in this next round we talk a bit about frameworks and think about whether or not we would like to set a process in place, so that, by the next meeting, if we decided that adding further stimulus was necessary, we would be able to do so in the context of a framework that we feel comfortable staying with for a period of time. . . . If we were to change our approach, it could very well signal a

[22]Market participants were speculating about such a program as well (*Transcript*, August 10, 2010: 5–6). The *Wall Street Journal* published an article prior to the August meeting reporting the leaked information that the FOMC would consider the reinvestment policy at its upcoming meeting (Hilsenrath 2010).

> change in regime that would have a beneficial effect on expectations and confidence. Second, we do need to give more clarity about our reaction function if we're going to come back into this type of activity, and, certainly, having a more explicit framework that could be communicated not only through the statement but also through other mechanisms could be very helpful there [*Transcript*, September 21, 2010: 76–77].

He went on to note that "something that looks like a regime break" can "have a beneficial effect on expectations and confidence," and cited the historical episodes of Roosevelt's 1934 change in monetary policy and the 1979 Volcker anti-inflation initiative (*Transcript*, September 21, 2010: 76). To back up his plea, one of the policy alternatives circulated for discussion at the September meeting stated a numerical inflation target by including the following sentence in the postmeeting statement:

> Measures of underlying inflation have trended lower in recent quarters. Underlying inflation is now running below the level of 2 percent or a bit less, as measured by the price index for personal consumption expenditures, that the Committee judges most consistent, over the longer run, with its mandate to promote maximum employment and price stability.[23]

In the run-up to the early November 2010 meeting that launched QE2, there was an FOMC conference call on October 15, 2010, at which the Committee discussed inflation targeting and other frameworks for stabilizing inflation expectations, including targeting the path of nominal income or a price level. Committee views were sharply divided, and nothing about a new framework or the Committee's price stability goal was included in the November postmeeting statement announcing the purchase of $600 billion in Treasury securities.

[23]See the Tealbook for the September 2010 meeting (Staff of the Board of Governors 2010b: 11). In a speech the following month, Chairman Bernanke highlighted that the "longer-run inflation projections in the SEP indicate that FOMC participants generally judge the mandate-consistent inflation rate to be about 2 percent or a bit below" (Bernanke 2010: 11).

## Getting to the Consensus Statement

Despite the significant push in the lead-up to the November meeting, the Committee voted to initiate QE2 unaccompanied by an articulated price stability framework. In the wake of that disappointment, Charles Plosser, president of the Federal Reserve Bank of Philadelphia, spoke with the chairman and offered to work on the issue, saying he believed that he could get broad support.[24] Bernanke encouraged him to give it a try. Plosser worked with James Bullard, president of the Federal Reserve Bank of St. Louis, to put together an ad hoc group with a few other presidents representing a broad range of views.[25] They worked together through the early months of 2011 to put together a draft stand-alone statement stating an inflation target and explaining the relationship to the employment mandate. In the spring, they circulated a draft to all the Reserve Bank presidents, who unanimously supported it. Plosser took the draft to Bernanke.

The renewed push was given further impetus as the Committee wrestled with the forward guidance language. After reducing the target federal funds rate to near zero in December 2008, the Committee had stated that it anticipated "that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period" (Contessi and Li 2013). At the August 9, 2011, meeting, the Committee had adopted date-based forward guidance, stating that economic conditions were "likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013." That decision was contentious and somewhat rushed, garnering three formal dissents and opposition among the nonvoting Reserve Bank presidents as well.

With lingering dissatisfaction with new forward guidance, one month later, Charles Evans, president of the Federal Reserve Bank of Chicago, publicly floated the idea of casting forward guidance in terms of a threshold for the unemployment rate, which Governor

[24]Author's conversation with Charles Plosser, October 25, 2019; *Transcript*, January 25–26, 2011: 156.

[25]Narayana Kocherlakota (Minneapolis), Charles Evans (Chicago), and Eric Rosengren (Boston). Author's conversation with James Bullard, November 15, 2019.

Yellen had proposed during the August meeting (Evans 2011; *Transcript*, August 9, 2011: 95). The idea was for the Committee to state that the federal funds rate would remain near zero "at least as long as" unemployment remained above a particular numerical level and inflation and inflation expectations were within bounds.[26]

Providing forward guidance about monetary policy using an explicit numerical threshold for unemployment, in the absence of an announced inflation target, would have been problematic. In discussion at the September 2011 meeting, Bullard cited the risk that the unemployment rate remained stubbornly high, as it had in Europe in recent decades, and pointed out that standard macroeconomic models tended to say little about the unemployment rate, as opposed to output or employment (*Transcript*, September 20–21, 2011: 44–45). Plosser and I both argued that a numerical unemployment rate threshold in the postmeeting statement, even if accompanied by articulation of a numerical goal for inflation, would lead people to the mistaken conclusion that the FOMC had an unemployment rate goal (*Transcript*, September 20–21, 2011: 50, 78–79). [27] Adopting an inflation objective thus seemed to be a prerequisite to formulating forward guidance in terms of an unemployment threshold without confusing the public.

The November 1–2, 2011, FOMC meeting teed up a "special topic" discussion of monetary policy frameworks with a staff memo analyzing three options: enhanced forward guidance, price level targeting, and nominal income targeting. All were viewed as versions of "flexible inflation targeting" that differed in how the policy rate would be conditioned on incoming data. Plosser, speaking early in

[26]The Committee ultimately adopted a version of threshold guidance in December 2012 with a threshold of 6.5 percent: "In particular, the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored" (FOMC Statement, December 12, 2012).

[27] One policy alternative the staff provided at the meeting included language articulating an explicit inflation target.

the go-round, argued that an explicit inflation target was not inconsistent with the dual mandate and urged further work:

> I suggest that the subcommittee on communications chaired by Governor Yellen be charged with the task of creating a first draft of such a principles document, which could then be circulated for review and comments. You will recall that the ad hoc committee on which I served earlier in the year drafted a document on an explicit numerical inflation objective within the context of the dual mandate, which we thought was broadly consistent with the description that the Chairman just gave on flexible inflation targeting. So some progress has already been made on this initiative, and I think we can build on that foundation and hopefully find a consensus [*Transcript*, November 1–2, 2011: 37].

Support for an explicit inflation target had solidified since a year earlier.[28] After observing that he did not hear much support for price-level or nominal-income targeting, Bernanke noted considerable support for a "statement of principles" that would formalize the Committee's flexible inflation-targeting framework:

> One element of that would be a numerical inflation objective, but I think it was made clear that other important elements would be a clear explanation of how this framework is consistent with the dual mandate: in particular, why it is that we have a number for inflation and not for unemployment, how those two things differ, how we think about the horizon under which we take various actions, and so on. I would ask the subcommittee, if Governor Yellen is willing, to begin a process of trying to put together such a document. The work that President Plosser and his group did, and President Plosser is a member of the subcommittee, is obviously a starting point for that, and—we're not making any commitment, to coin a phrase [laughter]—we should see what kind of agreement we can get on such a statement [*Transcript*, November 1–2, 2011: 93].

[28]Eleven participants spoke in favor of adopting an inflation target (Bullard, Duke, Evans, Fisher, Lacker, Lockhart, Pianalto, Plosser, Raskin, Williams, and Yellen). Three were skeptical (Dudley, Kocherlakota, and Tarullo). (*Transcript*, November 1–2, 2011: 31–92).

Subsequent drafting focused on finding language that would elicit the support or at least acquiescence of governors. The key point of resistance was the employment mandate. A couple of governors feared watering down the Fed's commitment to the maximum employment component of the Fed's legislative mandate or having to field hostile questions from Congress about it.

*Continuity*

In order to deflect worries about diminishing the FOMC's commitment to maximum employment, the consensus statement was promoted as affirming and making transparent the strategy the FOMC was already pursuing. When kicking off discussion of the consensus statement at the January 2012 FOMC meeting, Chairman Bernanke emphasized continuity with previous practice:

> In my view, this statement does not reflect, and should not be represented as, a change in the underlying policy approach of the FOMC. Our approach has stabilized into one in which we provide a firm anchor for inflation and inflation expectations in the longer term, which in turn gives us flexibility to offset short-term economic shocks. . . . Again, I do not want to interpret this statement as a change in the underlying policy approach, and I hope that people will not interpret it as such in their public comments. What this is trying to do is increase our transparency and our accountability by making our communication clearer to the public [*Transcript*, January 24, 2012: 43].

Governor Yellen, in her introductory remarks, also emphasized that the statement "does not represent a change in how" the FOMC conducts policy (*Transcript*, January 24, 2012: 45). At the press conference following the meeting, Bernanke said:

> This statement should not be interpreted as indicating any change in how the Federal Reserve conducts monetary policy. Rather, its purpose is to increase the transparency and predictability of policy [*Transcript of press conference,* January 25, 2012: 1].

In short, the FOMC announced an inflation target but said its conduct would not change. The consensus statement was not the announcement of a regime change, as Bernanke had wanted in 2010 in order to stabilize inflation expectations and "take away this perception that periodically we're going to go out and do a shock-and-awe action" (*Transcript*, August 10, 2010: 136). At the January 2012 meeting, at which the statement was adopted, Governor Tarullo questioned how Chairman Bernanke could characterize the statement as not representing a change in the conduct of monetary policy while Governor Yellen's described the statement as "momentous."[29] The idea of seamless continuity with past practice also is hard to reconcile with the dispersion in Committee participants' preferred inflation goals prior to 2012, or with Bernanke's nomination hearing pledge that stating an explicit inflation target was significant enough that, if confirmed, he would "take no precipitate steps" because the matter "requires further study at the Federal Reserve as well as extensive discussion and consultation."

### *Maximum Employment*

In the transition from the Reserve Bank presidents' draft to the final consensus statement, the section on employment was heavily edited. The consensus statement carefully avoided setting a formal Committee goal for the maximum employment component of the Fed's legislative mandate that would parallel the establishment of an inflation target. There was near-unanimous agreement that a numerical target for unemployment, fully co-equal to the announced goal for inflation, would not be appropriate. But the treatment of the employment mandate in the consensus statement had to delicately finesse the divergent philosophies of participants regarding the meaning of the term "maximum employment" and its role in

[29]Governor Tarullo said: "I'm having difficulty putting together your characterization of the statement, Mr. Chairman, with Governor Yellen's characterization of the statement. You seem to indicate that it was basically setting down as best we could what we think we currently do within this Committee. I think Governor Yellen used the term 'momentous' and indicated a broad agenda that would follow from this statement, and I'm wondering if you could comment in a little more detail on how you see the significance of this statement." Bernanke replied: "Sure. I view this basically as a communication device. That being said, while not representing a change in our policy, it will be a vehicle by which we can continue the conversation and make sure we clarify among ourselves what we agree on and what we don't agree on. . . . It will be a vehicle for discussions in the future about how best to conduct policy" (*Transcript*, January 24–25, 2012: 48–49).

monetary policy. In doing so, it elevated the employment mandate to close to target status and left behind a confusing passage, open to multiple interpretations.

After stating that "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 consensus statement went on to say: "The Committee judges 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." In contrast, maximum employment is described as driven by real factors, and the statement argues against setting an employment target:

> 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 [Board of Governors 2012].

The term "maximum employment" in the Fed's legislative mandate is interpreted as a latent variable determined by real, nonmonetary forces. Thus a central bank cannot independently choose a target value for employment the way it can for inflation.

The obvious approach to defining maximum employment is to identify it with the natural rate of employment—the level of employment that would occur in an equilibrium with flexible wage and prices, given current values of real disturbances (that is, tastes, technologies, government purchases, and the like). This definition corresponds to the natural rate of output (Friedman 1968, Woodford 2003) and responds to all manner of real shocks hitting the economy, in principle, exhibiting quite substantial fluctuations.[30] Identifying Congress's phrase "maximum employment" with the natural rate

[30]Indeed, in dynamic stochastic general equilibrium models with nominal frictions, calibrated to approximate modern economies, the natural rate is quite variable (Edge, Kiley, and Laforte 2008).

makes good sense because in standard dynamic models (with sticky prices or wages), the gap between actual output and the natural rate is what is relevant to the welfare of households in those economies and is what drives optimal policy responses (Goodfriend and King 1997, Woodford 2003).

In contrast, an older macroeconomic tradition identifies maximum employment as the level of employment corresponding to the "nonaccelerating inflation rate of unemployment" (NAIRU)—that is, an unemployment rate "below which inflation accelerates" (Ball and Mankiw 2002). Empirical estimates of NAIRU are generally quite smooth over time, consistent with an ad hoc maintained assumption that maximum employment is driven solely by longer-run, low-frequency variation in labor force demographics, but not other short-run supply or demand shocks. The widely used estimates published by the Congressional Budget Office, for example, show NAIRU rising gradually from 5.3 percent in 1950 to just over 6.2 percent in the late 1970s, and then falling smoothly to under 4.4 percent now (Shackleton 2018, U.S. Congressional Budget Office n.d.).

The consensus statement carefully avoids taking a stand on the meaning of maximum employment. Following the passage quoted above about maximum employment, the consensus statement goes on to discuss empirical indicators related to employment:

> 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, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent, roughly unchanged from last January but substantially higher than the corresponding interval several years earlier [Board of Governors 2012].

The striking, but easily overlooked, feature of the consensus statement's treatment of employment is that it does *not* equate maximum employment with Committee participants' longer-run projection for unemployment. The NAIRU interpretation of maximum employment suggests treating the two as the same thing. But under the natural rate view, there is no reason to believe that the unemployment rate that corresponds to current period maximum employment is the rate to which it would converge in the longer run "under appropriate monetary policy and in the absence of further shocks." The history of shocks up to and including the current period could push the natural rate above or below the longer-run "no-shock" level. Indeed, a major recurring theme in FOMC policy debates during the recovery following the 2008–2009 recession was the extent to which enough pure demand expansion ought to suffice to boost the rate at which unemployment was falling, as a NAIRU perspective would hold, or whether skill mismatches were impeding redeployment of less-skilled workers to other sectors, consistent with real economic shocks leaving a significant imprint on the natural rate.

Saying nothing about the relationship between maximum employment and "estimates of the longer-run normal rate of unemployment" that participants reported in the Summary of Economic Projections was critical to securing broad agreement on the consensus statement—all but one participant endorsed it, but at the price of obfuscation.[31] The consensus statement invites the reader to equate the maximum employment and the SEP longer-run projections, without coming right out and doing so. Indeed, the purpose appears to have been to allow different participants to interpret the passage differently.[32]

## Reflections on the Path to the Consensus Statement

The consensus statement clearly does represent a watershed for the FOMC, even if it only codified existing practice. It was the culmination of a broad movement toward Fed transparency about the thinking, or strategy, behind its actions, a movement that has included more rapid release of the minutes, more frequent and more detailed release of economic projections, and regular press conferences. The statement clarified the Committee's price stability objective by formally articulating a quantitative measure. It also disavowed establishment of a formal target for employment.

[31]When Chairman Bernanke polled participants in January 2012, Governor Tarullo abstained from supporting the document (*Transcript*, January 24–25, 2012: 50–51).

[32]Compare the comments of Lacker and Williams during the December 2011 discussion of the consensus statement (*Transcript*, December 13, 2011: 136–37 and 141).

What held back the adoption of an explicit price stability objective for so long? The reluctance of Greenspan and others to compromise future discretion kept an inflation target bottled up for years. Chairman Bernanke, steeped in the academic literature on monetary policy commitment, assumed office recognizing that implicitly sacrificing some discretion was essential to improving the stability of inflation expectations. Committee members still found it hard to give up discretion, however. At the first full Bernanke-era discussion in October 2006, there was widespread support, in principle, for announcing an inflation target. But the majority came down on the side of a cautious, go-slow approach, in part out of concerns about how it might constrain future policymaking.

The employment mandate was also a major factor slowing down the adoption of an explicit inflation target. Many central banks that had adopted inflation targeting frameworks had legislative objectives that placed less emphasis on employment (Doyle, Kole, and Wood 2007: 18). When Bernanke launched serious work on the idea of an inflation target, the most often-cited concern of skeptics on the Committee was the relationship of an inflation target to the employment mandate. Greenspan's formulation that price stability is the best contribution monetary policy can make to maximum employment was not enough. Participants worried that announcing a specific inflation target would be seen as diminishing the Fed's commitment to the employment mandate, or would actually reduce it in practice over time, or would spark a political backlash.

In the years that followed, the ebb and flow of tactical policy considerations played a role in the Committee's interest in inflation targeting. The limitations of the back-door approach of releasing individual inflation projections became clear at the same time that stabilizing inflation expectations emerged as a pressing concern; the accelerating decline in economic activity in late 2008 raised the risk of disinflation or even deflation, while the imminent ballooning of the Fed's balance sheet seemed as if it could incite fears of inflation. Chairman Bernanke undertook a new round of political consultations in January 2009 but was rebuffed primarily due to the employment mandate. Inflation targeting then remained dormant until softening inflation and disappointing growth in mid-2010 prompted Committee interest in further stimulus. Fears that another balance sheet expansion program would destabilize inflation expectations led some, including the chairman, to advocate asset purchases coupled with an articulation of the Committee's policy framework. But the push for a new policy framework fell by the wayside in the run-up to QE2.

Reserve Bank presidents, led by Charles Plosser, picked up the baton and began forging a stand-alone consensus document in early 2011. Later that year, dissatisfaction with labor markets led to consideration of forward guidance based on an unemployment rate threshold, which even skeptics had to admit would be confusing in the absence of an explicit inflation target. The urge to enhance forward guidance seemed to provide the final impetus for announcing an explicit inflation target.

To mollify concerns about the employment mandate, the consensus statement framework was sold inside and outside the Fed as merely codifying what the FOMC was already doing, consistent with Bernanke's claim at his original nomination hearing in 2005 that announcing a numerical inflation objective would be "fully consistent with the Federal Reserve's current policy approach."[33] The FOMC adopted an explicit inflation target and, to deflect political criticism, claimed that it would not make a difference in how it conducted policy. The compromises made on behalf of the employment mandate meant a statement that was less constraining and less of a commitment.

It should not be surprising, then, that the prominent emphasis on the continuity of the consensus statement with the FOMC's prior practice limited its effectiveness. The purpose of announcing an inflation target, after all, is to align private-sector expectations with the central bank's intended policy conduct. Policy framework announcements are often aimed specifically at convincing the public that a regime shift has occurred. For a central bank to announce a target and at the same time announce that they will not act any differently than before would seem to imply that market participants need not alter their expectations of how the central bank will act. Thus, it is not clear why an announcement framed that way would improve the anchoring of inflation expectations. The consensus statement may

[33]"I view the explicit statement of a long-run inflation objective as fully consistent with the Federal Reserve's current policy approach, including its appropriate emphasis on the role of judgment and flexibility in policymaking. Most important, this step would in no way reduce the importance of maximum employment as a policy goal" (Bernanke 2005).

not have added much to the FOMC's prominent June 2003 statement that a substantial fall in inflation would be "unwelcome."

Cursory examination of time series on inflation expectations suggests little if any improvement in the anchoring of inflation expectations has taken place. Measures of inflation expectations based on nominal and inflation-indexed Treasury securities seem to behave about the same before and after January 2012. Expectations do not appear to be noticeably better anchored now than they were before. Moreover, recent FOMC communications, including press conferences, minutes, and speeches, register concern about the extent to which inflation expectations might be drifting downward.

The role of tactical considerations in the timing of work on an explicit numerical definition of price stability and the ultimate adoption of the consensus statement also plausibly could have dampened its effectiveness. The perception that movement toward its adoption was motivated by episodic urges for more policy stimulus, rather than by timeless principles of monetary policy transparency, may have lent an appearance of opportunism to the process and limited the extent to which it enhanced the Fed's credibility.[34]

## Implications for the Fed's Current Strategy Review

The record of deliberations leading up to the adoption of the consensus statement suggests a few lessons for the FOMC's current review of monetary policy strategy. First, if the purpose is to improve the anchoring of expectations about the future conduct of monetary policy, FOMC policymakers should be prepared to surrender some discretion; one cannot strengthen credibility without sacrificing at least some optionality. Framing the consensus statement as representing no change in the FOMC's approach to policymaking meant holding on to the broad discretion that was the Committee's hallmark under both Greenspan and Bernanke. That in turn meant leaving language out of the statement that might otherwise have imposed additional constraints on future Committee actions. Reconsidering some of these omissions in the Fed's current strategic review would be useful.

[34]The Fed took a deliberately opportunistic approach to achieving disinflation in the 1980s and 1990s, letting inflation fall "on its own" but then cementing gains with tighter policy during the recoveries (Orphanides and Wilcox 2002).

## *How Close Is Close Enough?*

One key omission concerns a question to which a point target for inflation naturally gives rise: "How close is close enough?" Inflation running within one- or two-tenths of a percentage point of target certainly would have been understood as satisfactory when the consensus statement was adopted, and inflation persistently more than a full percentage point away from target would have been viewed as clearly unsatisfactory. But inflation running about a half a percentage point away from target for moderate stretches of time raises the question of whether strong corrective policy action is required. The Fed's ambiguity and inconsistency about its assessment of recent inflation experience appears to have contributed to confusion about its policy intentions in recent years. And it highlights the silence of the FOMC regarding how close it wants inflation to be to its target.

In the years prior to 2012, many Committee participants advocated describing the Fed's price stability goal as a range rather than as a point target.[35] Target inflation ranges had been adopted by several other central banks. In fact, Bernanke had argued early on for a "comfort zone" of 1.5 to 2 percent.[36] Advocates of a point target were concerned that a target range might be read as Committee indifference to any inflation rate within that range. In addition, a point target of 2 percent was likely to provide a stronger rationale for stimulus in 2010–2011 than a target range with, presumably, a lower bound less than 2 percent. The result was silence on the question of how close is close enough. There are formulations, however, that are intermediate between a singular point and a zone of complete indifference. FOMC communication could avoid confusion by placing strong emphasis on the mid-point of the target. For example, the Committee could supplement its announced 2 percent inflation goal with specification of a range, such as 1.5 to 2.5 percent, and state that deviations of realized inflation from target within that range would not likely elicit as strong a policy response as deviations

[35]See transcripts for the FOMC meetings on February 1, 2005; October 24–25, 2006; March 21–22, 2007; and January 16, 2009.

[36]"I would argue that we should define the comfort zone as the range in which core inflation should remain most of the time. Over the past ten years, it has remained between 1.5 to 2 percent most of the time" (Bernanke, *Transcript*, October 24–25, 2006: 190).

outside that range.[37] This type of approach would fill in valuable missing details about the FOMC's inflation goal.

### *Making Up*

A second implication of the historical record is that the Fed should avoid the appearance of opportunism. It diminishes the perceived strength of their commitment to long-standing principles, such as price stability. Here, the current review is aided by the extent to which it has been framed as a periodic "good-housekeeping" reexamination, rather than an ad hoc effort motivated by short-term policy considerations. On the other hand, some of the alterations that have been described as featuring prominently in the review raise the suspicion that they are being sought for tactical purposes. For example, the persistent inflation shortfalls of recent years, relative to the FOMC's 2 percent goal, have led to concerns that long-term inflation expectations might become poorly anchored or anchored below the FOMC's stated inflation goal (Clarida 2019). This appears to have motivated serious consideration of so-called makeup strategies, in which policymakers try to reverse past deviations of inflation from target. One such strategy would target average inflation over a number of years, implying that inflation shortfalls are followed by deliberate overshooting. Price-level targeting is another example, in which downward deviations from a specified target path for a price index would be followed by a deliberate increase in inflation.

There are good reasons to question the efficacy of announcing such makeup strategies in the current environment. The distinguishing feature of successful makeup strategies is that expected inflation rises and falls depending on whether the FOMC is below or above its price stability target. If the problem to be addressed is the risk that inflation expectations drift out of alignment with the (constant) 2 percent intention articulated in the FOMC's consensus statement, it is not at all clear that announcing a different Committee intention for inflation over some intermediate horizon will be effective. If the FOMC's January 2012 announcement did not succeed in keeping inflation expectations anchored as intended, it is hard to see why

[37]Fuhrer et al. (2018) propose that the Fed move to inflation target range, but in addition advocate movements in targeted inflation within the range to make up for past misses.

another announcement would.[38] As Governor Kohn remarked during an early exchange on inflation targeting, "Ultimately, credibility grows out of the barrel of an open market operation" (*Transcript,* February 7–8, 1989: 32). A strategy announcement alone is unlikely to bring about a material change in inflation expectations unless it convincingly portends a meaningful shift to a new policy regime—that is, the adoption of a new policy reaction function. If that is the objective, a revised strategy statement needs to be clear that it represents a regime change.

Would a revised policy reaction function under a makeup strategy bring about better inflation outcomes? A makeup policy function would presumably display stronger stimulus for any given deviation below target, and commensurately stronger restraint for any given deviation above target, all else constant. But if such a reaction function could reliably boost inflation when needed, why not take such actions now and bring inflation closer to 2 percent, without having to complicate the strategy statement and rely on engineering just the right time-variation in inflation expectations? Given that logic, adopting a makeup strategy in the current situation, with inflation somewhat below target, runs the risk of being seen as an opportunistic framework revision, meant to address a tactical desire for a more dovish policy stance. If so, it could fail to enhance the credibility of the FOMC's strategy framework and could confuse the public about the FOMC's intentions.

The consensus statement as currently written is silent on movements in expected inflation. It says that communicating the Committee's inflation goal "helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates." But monetary policy is described as seeking "to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessment of its maximum level." No mention is made of ever needing to act to keep inflation expectations well-anchored, as if the Fed's credibility is now complete. While the Fed's credibility is reasonably strong, in my view, it is not foolproof and is not likely to be any time soon. It would contribute usefully to clarity if the Committee would articulate

[38]One is reminded of "translation by volume," the tendency of international travelers to overcome a language barrier by simply speaking loudly.

how it would respond should inflation expectations deviate, rather than simply act as if the need will never arise.

## *The Many Mandates*

A look back at the consensus statement also suggests that the FOMC's stated interpretation of the employment mandate deserves constructive review. As detailed above, the treatment of maximum employment in the consensus statement is deliberately ambiguous, and as a result is confusing to outsiders. It elevates employment to near-target status and invites the reader to think of participants' longer-run unemployment rate forecasts as corresponding to the mandated maximum employment. What should be foundational instead for the Fed is household well-being. Employment or output gaps appear in reduced-form policy functions because of the extent to which real interest rates need to fluctuate under optimal policy (Goodfriend and King 1997; Woodford 2003) For example, an unemployment rate as low as 3.5 percent—the reading for September 2019—raises awkward questions. If more employment is always better, why doesn't every participant revise down their projection for longer-run unemployment rate? The Fed needs to explain that it construes its congressional mandate in the way it views most beneficial to U.S. households, and not act as if it would be willing to be held accountable for maximizing any arbitrary objective Congress might give it.[39]

In thinking about how to treat the employment mandate, it's useful to compare it to the often-overlooked third legislative mandate: "moderate long-term interest rates." The consensus statement cites the third mandate in its opening recitation of the legislative charge from Congress. While noting that long-term interest rates fluctuate over time, it says nothing more about that particular congressional directive. Perhaps it was viewed as too obvious to be worth mentioning that the best contribution monetary policy can make to moderate long-term interest rates is to predictably keep inflation low and stable. Notice, though, that fighting inflation can involve raising short-term interest rates, which can, for a time, raise long-term interest rates,

[39]President Lacker: "The Congress can put anything they want in a mandate. It's up to us to construe it. They can ask us to pursue maximizing the postseason performance of the Boston Red Sox, but we'd have to construe what that meant" (*Transcript*, September 20–21, 2011: 105).

even though the end result will be lower long-term rates on average. Precisely the same relationship exists with respect to inflation and unemployment: fighting inflation sometimes raises unemployment but leads to lower average unemployment rates over the longer run. If the moderate long-term interest rate mandate can safely be set aside, on the grounds that low and stable inflation does the job, why can't the employment mandate be described similarly?

## Conclusion

The consensus statement was a milestone in Fed history. It capped a broad movement toward greater transparency by stating clearly the quantitative meaning of the Fed's price stability objective—the central bank's core responsibility—and describing in broad terms the Fed's framework for thinking about monetary policy. With hindsight, however, its limitations are apparent. Adoption was delayed until the perceived need for further monetary stimulus motivated serious consideration. Out of a desire to preserve optionality and deflect criticism from staunch defenders of the employment mandate, the consensus statement was sold as "fully consistent" with the Fed's existing reaction function, rather than a consequential commitment to a new pattern of behavior by the FOMC, much less the "regime change" that was at one point envisioned. Thus it may have done much less to anchor inflation expectations than was hoped. Appeasing advocates for the employment mandate also led to ambiguous and confusing compromise language on how maximum employment relates to the Fed's pursuit of its inflation goal.

Useful lessons emerge from the historical record for the Fed's current review of its monetary policy framework—these are discussed above. The broader perspective that emerges is that the shortcomings of the consensus statement appear to be attributable to two factors—the urge to preserve discretion and the dilemma of the employment mandate. The credibility of the Fed's commitment to price stability was costly to attain in the 1980s and early 1990s. The long run of quiescent inflation from the mid-1990s on was achieved without the FOMC having explicitly announced and committed to their intentions. That achievement was impressive, given the FOMC's reticence, but it meant that the foundation of the Fed's credibility was, even to policymakers, somewhat uncertain. Indeed, many monetary policy debates prior to 2012 hinged on the extent to which a proposed easing action might erode credibility. Establishing an explicit inflation target, and committing to it by announcing it publicly, eliminated the discretion of Committee participants to adopt their own inflation objective. Credibility remains incomplete, however, and will remain incomplete until the Fed does more to reduce its future discretion.

The dual mandate has been problematic because it injects distributional politics directly into monetary policy. Monetary policy choices certainly have distributional consequences, but during the Great Moderation these have been considered ancillary to the central goal of price stability, reflecting the view that central banks are uniquely responsible for the value of money and the best contribution they can make to other objectives—such as "maximum employment" or "moderate long-term interest rates"—is price stability. The popularity of reduced-form models in which policymakers maximize a quadratic function of inflation and an output or employment gap has unfortunately diverted attention from the fact that those are merely indices of the underlying well-being of households. Such models have contributed to the idea that inflation and employment represent distinct and potentially competing values over which a policymaker can have arbitrary "preferences," rather than aspects of household welfare. Thus, analytical modeling shortcuts arguably have contributed to over-politicizing monetary policy. The employment mandate will continue to trouble the Fed until it delves deeper into what it thinks it means.

## References

Ball, L., and Mankiw, N. G. (2002) "The NAIRU in Theory and Practice." *Journal of Economic Perspectives* 16 (4): 115–36.

Bernanke, B. S. (2003) "Friedman's Monetary Framework: Some Lessons." *Federal Reserve Bank of Dallas Proceedings* (October): 207–14.

__________ (2004) "Panel Discussion: Inflation Targeting." *Federal Reserve Bank of St. Louis Review* 86 (4): 165–68.

__________ (2005) "Testimony of Ben S. Bernanke, Nomination Hearing." Available at www.federalreserve.gov/boarddocs/testimony/2005/20051115/default.htm (November 15).

__________ (2010) "Monetary Policy Objectives and Tools in a Low-Inflation Environment." Speech at the Revisiting Monetary Policy in a Low-Inflation Environment Conference, Federal Reserve Bank of Boston (October 15).

__________ (2015) *The Courage to Act: A Memoir of a Crisis and Its Aftermath*. New York: W.W. Norton.

Bernanke, B. S.; Laubach, T.; Mishkin, F. S.; and Posen, A. S. (1999) *Inflation Targeting: Lessons from the International Experience*. Princeton, N.J.: Princeton University Press.

Bernanke, B. S., and Mishkin, F. S. (1997) "Inflation Targeting: A New Framework for Monetary Policy?" *Journal of Economic Perspectives* 11 (2): 97–116.

Bernanke, B. S.; Mishkin, F. S.; and Posen, A. S. (2000) "What Happens When Greenspan Is Gone?" *Wall Street Journal* (January 5).

Board of Governors of the Federal Reserve System (1983) "Transcript of Discussion Held on August 22, 1983." Available at www.federalreserve.gov/monetarypolicy/files/FOMC19830823 material.pdf.

__________ (1989) "Transcript of the Meeting of the Federal Open Market Committee, February 7–8, 1989." Available at www.federalreserve.gov/monetarypolicy/files/FOMC19890208meeting.pdf.

__________ (2006) "Minutes of the Federal Open Market Committee, May 10, 2006." Available at www.federalreserve.gov /fomc/minutes/20060510.htm.

__________ (2012) "Federal Reserve Issues FOMC Statement of Longer-Run Goals and Policy Strategy." Available at www.federal reserve.gov/newsevents/pressreleases/monetary20120125c.htm.

__________ (2019) "Statement on Longer-Run Goals and Monetary Policy Strategy." Available at www.federalreserve.gov/monetary policy/files/FOMC_LongerRunGoals.pdf.

Bullard, J. (2010) "Seven Faces of 'The Peril.'" *Federal Reserve Bank of St. Louis Review* 92 (5): 339–52.

Clarida, R. H. (2019) "The Federal Reserve's Review of Its Monetary Policy Strategy, Tools, and Communication Practices." Speech given at Fed Listens: Distributional Consequences of the Cycle and Monetary Policy Conference, hosted by the Opportunity and Inclusive Growth Institute, Federal Reserve Bank of Minneapolis (April 9).

Contessi, S., and Li, L. (2013) "Forward Guidance 101A: A Roadmap of the U.S. Experience." *Federal Reserve Bank of St. Louis Economic Synopses* No. 25.

Doyle, B.; Kole, L.; and Wood, P. (2007) "Foreign Experience with the Formulation and Discussion of Inflation Objectives." Memorandum to FOMC. Available at www.federalreserve.gov/monetarypolicy/files/FOMC20070103memo01.pdf.

Edge, R. M.; Kiley, M. T.; and Laforte, J. P. (2008) "Natural Rate Measures in an Estimated DSGE Model of the U.S. Economy." *Journal of Economic Dynamics and Control* 32 (8): 2512–35.

Eggertsson, G.; Guha, K.; Levin, A.; Meyer, S.; and Potter, S. (2010) "Potential Enhancements to FOMC Communication." Memorandum to FOMC. Available at www.federalreserve.gov/monetarypolicy/files/FOMC20100805memo06.pdf.

Evans, C. L. (2011) "The Fed's Dual Mandate Responsibilities and Challenges Facing U.S. Monetary Policy." Speech presented at the European Economic and Financial Centre, London (September 7).

Friedman, M. (1968) "The Role of Monetary Policy." *American Economic Review* 58 (1): 1–17.

Fuhrer, J.; Olivei, G. P.; Rosengren, E. S.; and Tootell, G. M. B. (2018) "Should the Fed Regularly Evaluate Its Monetary Policy Framework?" Federal Reserve Bank of Boston, Working Papers 18–8.

Goodfriend, M. (2013) "Policy Debates at the Federal Open Market Committee: 1993–2002." In M. D. Bordo and W. Roberds (eds.), *The Origins, History, and Future of the Federal Reserve: A Return to Jekyll Island*, 322–73. New York: Cambridge University Press.

Goodfriend, M., and King, R. (1997) "The New Neoclassical Synthesis and the Role of Monetary Policy." In B. S. Bernanke and J. J. Rotemberg (eds.), *NBER Macroeconomics Annual*, 231–83. Cambridge, Mass.: MIT Press.

Gramlich, E. M. (2000) "Inflation Targeting." Speech presented at the Charlotte Economics Club (January 13).

Hetzel, R. L. (2008) *The Monetary Policy of the Federal Reserve: A History*. New York: Cambridge University Press.

Hilsenrath, J. (2010) "Fed Mulls Symbolic Shift." *Wall Street Journal* (August 3).

Ip, G. (2005) "Fed Meeting to Pose Question of Setting Clear Inflation Rate; Issue of Numerical Objective Is on Next Week's Agenda, but Greenspan Is Resistant." *Wall Street Journal* (January 27).

Ireland, P. N. (2007) "Changes in the Federal Reserve's Inflation Target: Causes and Consequences." *Journal of Money, Credit, and Banking* 39 (8): 1851–88.

Lindsey, D. E. (2003) "A Modern History of FOMC Communication: 1975–2002." Washington: Board of Governors of the Federal Reserve System.

Orphanides, A., and Wilcox, D. W. (2002) "The Opportunistic Approach to Disinflation." *International Finance* 5 (1): 47–71.

Shackleton, R. (2018) "Estimating and Projecting Potential Output Using CBO's Forecasting Growth Model." Congressional Budget Office, Working Paper 2018–03.

Shapiro, A., and Wilson, D. J. (2019) "The Evolution of the FOMC's Explicit Inflation Target." *Federal Reserve Bank of San Francisco Economic Letters*, No. 2019–12 (April).

Staff of the Board of Governors of the Federal Reserve System (2008) "Monetary Policy Alternatives (Bluebook)." Washington: Board of Governors of the Federal Reserve System (December 11).

__________ (2010a) "Report to the FOMC on Economic Conditions and Monetary Policy, Book A, Economic and Financial Conditions: Current Situation and Outlook." Washington: Board of Governors of the Federal Reserve System (September 15).

__________ (2010b) "Report to the FOMC on Economic Conditions and Monetary Policy, Book B, Monetary Policy: Strategies and Alternatives." Washington: Board of Governors of the Federal Reserve System (September 16).

Steelman, A. (2011) "The Federal Reserve's 'Dual Mandate': The Evolution of an Idea." *Federal Reserve Bank of Richmond Economic Brief*, No. EB11–12 (December).

U.S. Congressional Budget Office (n.d.) "Natural Rate of Unemployment (Short-Term) [NROUST]. Retrieved from FRED, Federal Reserve Bank of St. Louis." Available at https://fred.stlouisfed.org/series/NROUST.

U. S. Senate, Committee on Banking, Housing, and Urban Affairs (2005) "Nomination of Ben S. Bernanke: Hearing Before the Committee on Banking, Housing, and Urban Affairs, United States Senate." 109th Congress, 1st Session, November 15. Washington: U.S. Government Printing Office. Available at https://fraser.stlouisfed.org/title/273.

Woodford, M. (2003) *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton, N.J. : Princeton University Press.