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In its 2020 "Statement on Longer-Run Goals and Monetary Policy Strategy," the Federal Reserve adopted a new policy framework. The framework was announced with substantial fanfare, and was explained by the Chair and other Fed officials in speeches and testimony. At the September 2020 meeting of the Federal Open Market Committee (FOMC), policymakers implemented forward guidance that they said reflected the new framework. The statement has since been ratified each January as the operating framework of the Committee.

Less than a year after adoption of the new framework, inflation began to rise in the United States. The 12-month change in the PCE price index (the inflation series emphasized by the FOMC) first breached the 2 percent target in March 2021, topped 5 percent by October 2021, and reached a peak of 7.1 percent in June 2022. The FOMC waited a full year after inflation went above 2 percent before the first increase in the funds rate. An obvious and important question is whether the new framework played a role in this slow response. That is the question we tackle in this short paper. This question is particularly pressing because the Fed is set to launch a thorough review of the operating framework in 2025, and potentially adopt changes.

Key Components of the New Framework. Though quite brief, the new framework included a number of important changes in the Federal Reserve's approach to monetary policymaking. The most obvious was a move to flexible average inflation targeting. The Fed reiterated that it was aiming to keep expected inflation anchored at 2 percent over the long run. To accomplish this in an environment where the federal funds rate may be constrained by the zero lower bound, the FOMC said that following a period of inflation below 2 percent, policy would aim for inflation above 2 percent for a while—so that inflation averaged 2 percent over some interval.

A more subtle change was the strengthening and elevating of the maximum employment side of the Federal Reserve's dual mandate. The new framework describes maximum employment as a broad-based and inclusive goal, and Fed officials to pains to emphasize the benefits of a robust labor market. This points to a more aggressive employment goal than had been in place before.

Furthermore, in setting the September 2020 forward guidance based on the new framework, the FOMC said that it wasn't enough to have inflation above two percent before raising the funds rate; the maximum employment goal also had to be reached. This was a change from previous policy, where the two goals were more balanced and often traded off against each other.

A related change contained in the new framework was the introduction of an asymmetry in the maximum employment goal. The FOMC said that "the Committee seeks over time to mitigate shortfalls of employment from the Committee's assessment of its maximum level." Implicit in this, and discussed explicitly in various speeches, was that the Federal Reserve would not respond to employment above what it believed was the maximum level, absent other causes for concern.

A fourth change emphasized in speeches and policy discussions, but not in the statement itself, was a movement away from preemptive policy actions. Though it acknowledged that policymaking must be forward looking, the FOMC emphasized that it would focus closely on actual inflation, rather than forecasts, in deciding policy. More importantly, consistent with the elevation of the maximum employment goal and its asymmetric nature, policymakers pledged not to raise the fund rate until actual labor market conditions achieved their more aggressive concept of maximum employment.

Our investigation of the role of the new framework in the slow response to inflation is organized around the four changes we have highlighted. Section I considers flexible average inflation targeting; Section II turns to the strengthening and elevating of the maximum employment goal; Section III considers the asymmetric interpretation of that goal; and Section IV discusses the move away from preemption. For each change, we document the nature of the change, and then analyze whether it delayed the Fed's response to the post-Covid inflation. In Section V, we provide some broader historical evidence about the consequences of the Fed aiming for (or being willing to accept) a very hot labor market. Finally, in Section VI, we consider the implications of our findings for the Fed's upcoming review of its policy framework.

Sources. The key official descriptions of the new framework and its implementation in

2020–2022 are very brief. The most important, of course, is the official statement of the new framework—the "Statement on Longer-Run Goals and Monetary Policy Strategy" (hereafter, "Statement on Longer-Run Goals"), which takes up just a page. The two key official descriptions of implementation are even shorter. The first and more important is the forward guidance about the federal funds rate target issued at the first meeting after the adoption of the new framework, which was continued without change through November 2021. It states (FOMC Statement, 9/16/2020, p. 1):

> The Committee decided to keep the target range for the federal funds rate at 0 to ¼ percent and expects it will be appropriate to maintain this target range until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time.

The other is the forward guidance about asset purchases issued in December 2020 and continued through June 2021 (FOMC Statement, 12/16/2020, pp. 1–2):

> the Federal Reserve will continue to increase its holdings of Treasury securities by at least $80 billion per month and of agency mortgage-backed securities by at least $40 billion per month until substantial further progress has been made toward the Committee's maximum employment and price stability goals.

An important difference between the two sets of forward guidance is the more stringent criteria for raising the federal funds rate. A change in asset purchases required only substantial further progress toward the FOMC's goals; a change in the funds rate required actually meeting those goals. Both the September and December statements included the clause, "The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals," (p. 2) which seemed to give it leeway to not follow the forward guidance. However, the Committee never invoked this clause.

To understand how these overarching formulations of the new framework and its implementation were interpreted by the FOMC, and whether they delayed the Committee's response to inflation, we examine documents where the Committee and its members explained their thinking. One set of documents are official ones associated with monetary policy: the brief

"FOMC Statements" released at the conclusion of each FOMC meeting, the longer Minutes released three weeks later, and the Board of Governors' semi-annual *Monetary Policy Reports*. We consider these sources starting with the last version of each one before the adoption of the new framework through the end of 2022.[1] The other set of documents are remarks by leading Federal Reserve officials: speeches, testimonies, and press conferences of Fed Chair Jerome Powell, speeches by FOMC Vice Chair John Williams, and speeches by Board of Governors Vice Chairs Richard Clarida (who led the development of the new framework) and Lael Brainard.[2] For Powell and Williams, we consider the period from the adoption of the new framework in August 2020 through the end of 2022. For Clarida, the end date is January 2022, when he left the Board of Governors. For Brainard, the start date is November 2021, when the President announced his intention to nominate her to replace Clarida as Vice Chair.[3]

We supplement these qualitative sources with some quantitative ones: the "Summaries of Economic Projections" (SEPs) prepared by FOMC members for every second FOMC meeting, and real-time data on inflation and unemployment from the adoption of the new framework through the end of 2022. In addition, in looking at some evidence from past episodes, we use historical

[1] These materials are available on the website of the Board of Governors of the Federal Reserve System under "Monetary Policy": https://www.federalreserve.gov/monetarypolicy.htm.

[2] The speeches and testimonies of Powell, and the speeches of Clarida and Brainard are available on the website of the Board of Governors of the Federal Reserve System under "News and Events": https://www.federalreserve.gov/newsevents.htm. Williams's speeches are available on the website of the Federal Reserve Bank of New York: https://www.newyorkfed.org/aboutthefed/orgchart/williams.

[3] These documents make clear that the FOMC viewed the forward guidance about the funds rate target and asset purchases as central to the implementation of the new framework. In his press conference following the September 2020 meeting, Powell said, "The changes we made in today's policy statement reflect our strategy to achieve our dual-mandate goals by seeking to eliminate shortfalls from maximum employment and achieve inflation that averages 2 percent over time, as we articulated in our Statement on Longer-Run Goals and Monetary Policy Strategy" (press conference, 9/16/2020, p. 3). Regarding the forward guidance for asset purchases, Powell explained, "We have provided rate guidance that is tightly linked to the goals as expressed in that new framework. And now we've done the same for, for asset purchases" (press conference, 12/16/2020, p. 7). And speaking to both elements of the forward guidance, Clarida began a speech in January 2021 by saying, "On August 27, 2020, the Federal Open Market Committee (FOMC) unanimously approved a revised Statement on Longer-Run Goals and Monetary Policy Strategy, which represents a robust evolution of its monetary policy framework. At its September and December FOMC meetings, the Committee made material changes to its forward guidance to bring it into line with the new policy framework" (Clarida speech, 1/13/2021, p. 1) He went on to discuss key features of the "the new framework and fall 2020 FOMC statements" jointly (p. 5).

estimates of the natural rate and forecasts of unemployment prepared by the Fed staff in their Greenbooks and Tealbooks.

Overview of Findings. Our key finding is that the elevation of the maximum employment side of the dual mandate played a crucial role in limiting the Fed's response to inflation. Having emphasized the importance of a robust labor market for greater inclusion and job opportunities, monetary policymakers appear in the narrative record to have been very hesitant to switch to inflation control before labor market conditions were extremely tight. Policymakers appear to have felt bound by the forward guidance that said meeting both the inflation goal and the maximum employment goal was crucial. Relatedly, the hesitancy to use preemption also may have delayed the Fed's response. By the fall of 2021, policymakers believed that inflation was above the objectives they had set out in their forward guidance and expected that the economy would reach maximum employment soon, but they refused to act until that actually occurred.

The other two changes we analyze do not appear to have been important in the slow response to inflation. The move to average inflation targeting did not play a role—simply because inflation rose quickly enough that within a few months, the average was above two percent and was expected to remain so. Likewise, because employment was still below the FOMC's estimates of its maximum level when inflation surged, the Fed was in the situation of facing a shortfall, and so the asymmetry of the employment goal was not an issue. However, we provide evidence from previous episodes that aiming for a hot labor market (which could reflect either an ambitious employment goal or a reluctance to tighten in response to overshoots of a more moderate goal) has often been associated with important macroeconomic problems.

We conclude by considering the implications of our findings for the framework review. Our overarching view is that the framework was designed to fit a particular set of circumstances—inflation persistently below target, a flat Phillips curve, and heightened concerns about job opportunities in historically disadvantaged communities—that do not capture the range of situations the Fed may face or conditions that monetary policy can affect. Our findings imply that the framework review should seek to revise the strategy to be more general and flexible.

In particular, the flexible average inflation targeting approach is sensible, but the framework should be adjusted to emphasize that it is only relevant to inflation undershoots when monetary policy is constrained by the zero lower bound. The maximum employment goal should be revamped to recognize that monetary policy cannot lower the natural rate of unemployment, reduce poverty, or counter rising inequality. The Fed should aim to adopt a realistic view of maximum employment, and respond to both shortfalls from and overshoots of that objective. It should not deliberately seek a hot labor market. More fundamentally, the "flexible" piece of the flexible average inflation targeting means that the two goals of the dual mandate—inflation at 2 percent and maximum employment—need to be traded off against one another when the goals are in conflict. Finally, because monetary policy works with a substantial lag, preemptive monetary policy actions are not only appropriate, but necessary. Concerns about persistently flawed forecasts should be remedied by improving and revising forecasts in light of errors, not by disregarding them.

Related Work. Of course, our approach is not the only possible way of obtaining evidence about how the new framework and its implementation influenced monetary policy in 2020–2022. For example, Bocola, Dovis, Jørgensen, and Kirpalani (2024) study this issue by examining the shift in the relationship between changes in expectations of future inflation and expectations of future interest rates using daily financial market data. We view our approach as complementary to other approaches. For example, Bocola et al.'s approach has the advantages of using a large sample of high-frequency observations to precisely estimate relationships, and of employing a structural model to estimate the contribution of the shift that they find to the overall rise in inflation; but it has the downsides that it cannot disentangle the separate roles of the different features of the revised framework to the shift, and that the results may be affected by the widespread view in 2021–2022 that inflation would be unusually transitory.

The two papers that are most closely related to ours are Eggertsson and Kohn (2023) and Cieslak, McMahon, and Pang (2024). Both papers also provide detailed analyses of the changes in the framework and their contributions to the Federal Reserve's slow response to inflation in 2021–2022. Both find, as we do, that the changes contributed importantly to the slow response. However, they reach very differ conclusions than we do about which features of the new framework were most important: both argue that the flexible average inflation targeting and the asymmetry of the maximum employment goal played major roles in the slow response, in contrast to our evidence that neither was a major factor.

I. Flexible Average Inflation Targeting

The feature of the new framework with the most obvious potential to have contributed to the Federal Reserve's slow response to inflation in 2021–2022 is its explicit call to aim for above-target inflation in circumstances like those that prevailed when it was adopted. The Statement on Longer-Run Goals said: "In order to anchor longer-term inflation expectations at [2 percent], the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time."

In his speeches about the new framework, Clarida made clear that this aspect of the framework concerned how policy would be conducted when it was constrained by the lower bound on interest rates. For example, paralleling the original proposal by Bernanke "for temporary price-level targeting," which Bernanke described as applying "a price-level target and the associated 'lower-for-longer' principle *only to periods around ZLB* [zero lower bound] *episodes*" (Bernanke 2017; emphasis in the original), Clarida characterized the flexible average inflation targeting as "*temporary price-level targeting (TPLT, at the ELB* [effective lower bound]*) that reverts to flexible inflation targeting (once the conditions for liftoff have been reached)*" (Clarida speech, 11/16/2020, p. 4; emphasis in the original). He also said, "the only way in which average inflation enters the policy rule is through the timing of liftoff itself" (p. 9).

The September forward guidance implementing the new framework specified two conditions regarding inflation that had to be met before the FOMC would raise interest rates: "inflation has risen to 2 percent" and "is on track to moderately exceed 2 percent for some time." Both conditions were met very quickly. The monthly readings for both headline and core PCE inflation began running consistently well above 2 percent (at an annual rate) in December 2020. The 12-month inflation rate went above 2 percent in March 2021 for headline inflation, and above 3 percent in April for both headline and core inflation.[4] In looking at the behavior of average inflation, we follow Clarida and use August 2020, the month the new framework was adopted, as our starting point (Clarida speech, 11/16/2020, p. 8). By nine months after August (May 2021), inflation measured using the PCE price index had averaged 3.8 percent (again, at an annual rate), and core inflation had averaged 3.2 percent.[5]

Like almost all private forecasters, as well as the Fed staff (judging by the information provided in the Minutes), the participants in the FOMC believed inflation would be largely transitory. Importantly, however, they expected it to return toward 2 percent from above, not to fall below. The December 2020 SEP was the last one where a median forecast for either headline or core PCE inflation for any year covered by the projection was less than 2 percent. By June 2021, the median forecasts for the period 2020Q4–2021Q4 were 3.4 percent for headline inflation (implying a 2.4 percent rate of inflation over the rest of 2021) and 3.0 percent for core inflation (implying 2.3 percent inflation over the rest of the year), before falling to slightly over 2 percent

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[4] The initial estimates for each month are available in the Bureau of Economic Analysis's archived news releases at https://www.bea.gov/news/archive (downloaded 8/16/2024). For headline PCE inflation, the lowest initial estimate of monthly inflation (at an annual rate) over the period December 2020–December 2021 was 2.8 percent. For core PCE inflation, one initial observation (for February 2021) was 1.0 percent, but all others in the December 2020–December 2021 period were 2.6 percent or higher. Revisions to inflation data over this period were largely upward.

[5] These figures are based on the first data releases with numbers for the May 2021 indexes—the 6/25/2021 vintage, downloaded from Archival Federal Reserve Economic Data (ALFRED), 8/16/2024. The figures are slightly higher using the most recently available numbers (as of mid-August 2024).

in 2022 and 2023.[6] Moreover, the June 2021 SEP reports that a large majority of participants viewed inflation risks as weighted to the upside. Thus by mid-2021, both inflation criteria specified in the forward guidance had been satisfied with room to spare: inflation had risen to well over 2 percent, and it was on track to more than moderately exceed 2 percent for at least a year.

In short, although in practice the flexible average inflation targeting that was introduced in the new framework could have slowed the Federal Reserve's response to the inflation of 2021–2022, in practice the conditions it set out were satisfied quickly enough that it wasn't an important constraint on policy.

II. Maximum Employment as a Broad-Based and Inclusive Goal

What we see as perhaps the most important change in the framework is included only obliquely in the actual Statement on Longer-Run Goals. The statement says of the maximum employment goal: "The maximum level of employment is a broad-based and inclusive goal that is not directly measurable and changes over time owing largely to nonmonetary factors that affect the structure and dynamics of the labor market." However, in speeches and the forward guidance issued in September 2020, it is clear that the FOMC interpreted the maximum employment goal in a new way. Whereas monetary policy in the past had typically aimed to keep unemployment at the natural rate, the new framework aimed for a robust (or even hot) labor market that would increase job opportunities for historically disadvantaged groups.

A. Evidence of a New Interpretation of the Maximum Employment Goal

Powell's speech announcing the new framework is a key source of evidence on this change. He said: "With regard to the employment side of our mandate, our revised statement emphasizes that maximum employment is a broad-based and inclusive goal. This change reflects our

[6] In making this calculation, we begin with the data the FOMC would have had available as of the June 2021 meeting (the 5/28/2021 vintage, downloaded from ALFRED, 8/16/2024). We then find the constant rates of headline and core inflation over the remaining months of 2021 that would have yielded the median SEP projections of inflation over the four quarters of 2021.

appreciation for the benefits of a strong labor market, particularly for many in low- and moderate-income communities" (Powell speech, 8/27/2020, p. 11). Powell also emphasized that the flattening of the Phillips curve in recent decades meant "that a robust job market can be sustained without causing an outbreak of inflation" (p. 11). This belief leads naturally to viewing the maximum employment goals as almost separate or parallel to the inflation goal, rather than potentially in conflict.[7]

Powell elaborated on both these points in a speech entitled "Getting Back to a Strong Labor Market" in February 2021. He said: "A strong labor market that is sustained for an extended period can deliver substantial economic and social benefits, including higher employment and income levels, improved and expanded job opportunities, narrower economic disparities, and healing of the entrenched damage inflicted by past recessions on individuals' economic and personal well-being" (Powell speech, 2/10/2021, p. 1). He also said: "I have already mentioned the broad-based benefits that a strong labor market can deliver and noted that many of these benefits only arose toward the end of the previous expansion. I also noted that these benefits were achieved with low inflation. Indeed, inflation has been much lower and more stable over the past three decades than in earlier times" (p. 7). Powell's focus on the benefits of a strong labor market suggests that he and the FOMC were interpreting the maximum employment goal in a more aggressive way than in the past.

Williams also described the maximum employment goal as something close to a hot labor market. In a speech in September 2021, he said: "Clearly, demand for workers is very high—we see this in an elevated number of job postings and hires. At the same time, people are leaving their jobs in large numbers, either to look for new work or exit the labor force altogether. These conditions reflect the extraordinary nature of the pandemic, and also illustrate that we still have a long way to go until we achieve the Federal Reserve's maximum employment goal" (Williams

[7] The Statement on Longer-Run Goals does acknowledge that the employment and inflation goals, while usually complementary, could be otherwise. However, it is clear that monetary policymakers, perhaps scarred by a decade of inflation below target, did not expect to find the two objectives in conflict.

speech, 9/27/2021, p. 1). In a speech in May 2022, he described the labor market as “sizzling hot,” and noted that the “ratio of job vacancies to the unemployed is near its all-time high, workers are quitting jobs at a record rate, and employers are bidding up wages” (Williams speech, 5/10/2022, p. 1). He also said: “With the unemployment rate back to very low pre-pandemic levels, and a variety of indicators showing the labor market is very strong, maximum employment has been achieved” (p. 1). Both these comments suggest a very aggressive interpretation of what counts as maximum employment.

The forward guidance for monetary policy also contains important evidence about the elevation of the maximum employment goal. As noted above, the statement following the September 2020 FOMC meeting said that the Committee expected to keep the target range for the funds rate at 0 to ¼ percent “until labor market conditions have reached levels consistent with the Committee’s assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time” (Statement, 9/16/2020, p. 1). What is striking about the forward guidance is the repeated use of the word “and.” The maximum employment goal is described as a stand-alone objective that was to be met alongside the goal of inflation at 2 percent and on track to exceed 2 percent for some time. Whether the FOMC had just not contemplated the possibility that the inflation goal could be exceeded before employment was at its maximum level, or truly meant that inflation control could not begin until maximum employment was reached, is impossible to tell. But as written (and we as show below, interpreted), that was the implication. This is a striking change from traditional Fed policy that traded off the two goals if one threatened to be far away from its target.

B. <u>Did This Aspect of the New Framework Matter</u>?

The narrative record suggests that the reinterpretation of the maximum employment goal played a crucial role in slowing the Federal Reserve’s response to rising inflation. Over most of 2021, policymakers did not even consider raising the funds rate—despite the fact that their inflation goals were not merely met, but strongly exceeded. They were hamstrung by their forward guidance and their very optimistic interpretation of maximum employment. Only in March 2022, when the labor market was extremely hot, did they raise the funds rate for the first time.

Missing Both Goals from Below. For the first eight months under the new framework, the reinterpretation of the maximum employment goal mattered little because inflation and employment were both below the FOMC's goals, and expected to remain there for some time. For example, at the December 2020 FOMC meeting, "Participants remarked that labor market conditions generally had continued to improve, but they were still a long way from those consistent with the Committee's maximum employment goal," and "noted that increases in consumer prices had been soft of late" (Minutes, 12/15–16/2020, p. 8). As a result, even under the previous interpretation of the maximum employment goal, the FOMC would not have considered raising the funds rate at this meeting.

As late as the April 2021 FOMC meeting, policymakers still felt they were missing both goals on the downside. The unemployment rate at the time of the meeting was 6 percent and "participants judged that the economy was far from achieving the Committee's broad-based and inclusive maximum employment goal" (Minutes, 4/27–28/2021, p. 9). The latest available 12-month PCE inflation rate, which reflected data through February, was 1.6 percent (p. 5). Like the Fed staff, "participants anticipated that inflation as measured by the 12-month change of the PCE price index would move above 2 percent in the near term as very low readings from early in the pandemic fall out of the calculation," but that "After the transitory effects of these factors fade, participants generally expected measured inflation to ease" (p. 9). Thus, it is again likely that even absent the reinterpretation of the maximum employment goal, the Committee would not have contemplated raising interest rates.

Acknowledging Inflation. Over the summer and fall of 2021, Federal Reserve policymakers couldn't help but acknowledge that inflation was rising to disturbing levels. For example, at the June FOMC meeting, "PCE price inflation was 3.6 percent over the 12 months ending in April" (Minutes, 6/15–16/2021, p. 6). Both the staff and many participants continued to believe that the rise would be mostly temporary. The Minutes report that "Looking ahead, participants generally expected inflation to ease as the effect of these transitory factors dissipated, but several participants remarked that they anticipated that supply chain limitations and input shortages would put upward pressure on prices into next year" (p. 10). There is little doubt based on the Minutes that the conviction that inflation would be transitory contributed to the Fed's slow response. However, another reason given for not moving at the June meeting was the belief that the economy was still far away from the maximum employment goal. The Minutes said: "Many participants pointed to the elevated number of job openings and high rates of job switching as further evidence of the improvement in labor market conditions. Many participants remarked, however, that the economy was still far from achieving the Committee's broad-based and inclusive maximum-employment goal, and some participants indicated that recent job gains, while strong, were weaker than they had expected" (p. 10).

Powell's speech at the Jackson Hole Symposium in August 2021 provides insight into why the Federal Reserve didn't act in the summer of 2021. While acknowledging that "The rapid reopening of the economy has brought a sharp run-up in inflation" (Powell speech, 8/27/2021, p. 4), he discussed a number of reasons why the inflation was likely to be transitory. He also discussed the labor market recovery in detail, saying: "The pace of total hiring is faster than at any time in the recorded data before the pandemic. The levels of job openings and quits are at record highs, and employers report that they cannot fill jobs fast enough to meet returning demand" (p. 3). Nevertheless, he explained: "If a central bank tightens policy in response to factors that turn out to be temporary, the main policy effects are likely to arrive after the need has passed. The ill-timed policy move unnecessarily slows hiring and other economic activity and pushes inflation lower than desired. Today, with substantial slack remaining in the labor market and the pandemic continuing, such a mistake could be particularly harmful. We know that extended periods of unemployment can mean lasting harm to workers and to the productive capacity of the economy"

(p. 9). He drew an explicit link from this view that the labor market was weak relative to an optimistic interpretation of maximum employment to monetary policy. He said: “we will continue to hold the target range for the federal funds rate at its current level until the economy reaches conditions consistent with maximum employment, and inflation has reached 2 percent and is on track to moderately exceed 2 percent for some time. We have much ground to cover to reach maximum employment, and time will tell whether we have reached 2 percent inflation on a sustainable basis” (p. 11).

By the September 2021 FOMC meeting, the PCE inflation rate was 4.2 percent and the unemployment rate was 5.2 percent (Minutes, 9/21–22/2021, pp. 3–4). There was a growing sense among FOMC members that inflation was likely to be above target for a substantial period. The Minutes reported: “Participants marked up their inflation projections, as they assessed that supply constraints in product and labor markets were larger and likely to be longer lasting than previously anticipated” (p. 8). But in discussing monetary policy, “Various participants stressed that economic conditions were likely to justify keeping the rate at or near its lower bound over the next couple of years” (p. 10). The more hawkish members “raised the possibility of beginning to increase the target range by the end of next year because they expected that the labor market and inflation outcomes specified in the Committee’s guidance on the federal funds rate might be achieved by that time” (p. 10). Given that participants thought inflation was going to be noticeably elevated in the coming year, the fact that no one contemplated beginning to raise the federal funds rate before the end of 2022 indicates they wanted substantially more labor market strength. This suggests the aggressive maximum employment goal was important in causing the slow response to inflation.

Determination to Foster a Hot Labor Market. The importance that the FOMC attached to generating a hot labor market was quite explicit at the December 2021 FOMC meeting. With the unemployment rate down to 4.2 percent, “Participants pointed to a number of signs that the U.S. labor market was very tight, including near-record rates of quits and job vacancies, as well as a notable pickup in wage growth" (Minutes, 12/14–15/2021, pp. 9–10). At the meeting (p. 10):

> Participants discussed the progress the economy had made toward the criteria the Committee had specified in its forward guidance for the federal funds rate. Participants agreed that the Committee's criteria of inflation rising to 2 percent and moderately exceeding 2 percent for some time had been more than met. … With respect to the maximum-employment criterion, participants noted that the labor market had been making rapid progress as measured by a variety of indicators, including solid job gains reported in recent months, a substantial further decline in a range of unemployment rates to levels well below those prevailing a year ago, and a labor force participation rate that had recently edged up. Many participants judged that, if the current pace of improvement continued, labor markets would fast approach maximum employment. Several participants remarked that they viewed labor market conditions as already largely consistent with maximum employment.

Nevertheless, at the end of the meeting, members "agreed that the inflation criteria in the guidance had been met and that the postmeeting statement should note that with inflation having exceeded 2 percent for some time, the Committee expected that it would be appropriate to maintain the current target range of 0 to ¼ percent until labor market conditions had reached levels consistent with the Committee's assessments of maximum employment" (p. 12). This formulation conveys strongly that they viewed the maximum employment criterion as a separate or additional goal, and that it involved labor market conditions that were very strong indeed.[8] It also suggests that the reinterpretation of the maximum employment goal implicit in the new framework was important to the slow response to inflation. Policymakers were waiting to raise rates even though inflation was high because they wanted a hot labor market.[9]

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[8] In perhaps a case of the exception proving the rule, the Minutes report that "Some participants also remarked that there could be circumstances in which it would be appropriate for the Committee to raise the target range for the federal funds rate before maximum employment had been fully achieved—for example, if the Committee judged that its employment and price-stability goals were not complementary in light of economic developments and that inflation pressures and inflation expectations were moving materially and persistently higher in a way that could impede the attainment of the Committee's longer-run goals" (12/14–15/2021, p. 11). That some participants felt they needed to make this point suggests that our view that the framework elevated the maximum employment criterion to be a separate goal is accurate.

[9] Another factor that may have slowed the decision to raise the target for the federal funds rate was a desire on the part of the FOMC to cease net asset purchases before the first rise in the funds rate. At the July 2021 FOMC meeting when there was an extended discussion of asset purchases, "Many participants saw potential benefits in a pace of tapering that would end net asset purchases before the conditions currently specified in the Committee's forward guidance on the federal funds rate were likely to be met" (Minutes, 7/27–28/2021, p. 5). Furthermore, though not an explicit part of the statement containing the forward guidance on asset purchases, the Minutes for this period repeatedly included a sentence to the effect that "In addition,

The FOMC raised the target for the federal funds rate for the first time since the pandemic in March 2022. Though the inflation criteria in the forward guidance had been met for many months, this was the first meeting where participants indicated that they had achieved their maximum employment criterion as well. In the discussion of current conditions, members emphasized just how strong the labor market was. The Minutes report that: "Participants observed that various indicators pointed to a very tight labor market. … The unemployment rate had fallen to a post-pandemic low, and quits and job openings were at all-time highs. Although payroll employment remained below its pre-pandemic level, the shortfall was concentrated in a few sectors and reflected a shortage of workers rather than insufficient demand for labor. Consistent with a tight labor market, nominal wages were rising at the fastest pace in many years" (3/15–16/2021, p. 9). That policymakers did not feel comfortable raising rates until the labor market was this tight suggests that the perceived need to meet the new framework's enhanced maximum employment goal played a key role in the slow timing of the interest rate increase.

In his remarks to the National Association of Business Economists shortly after the March FOMC meeting, Chair Powell began by saying: "At the Federal Reserve, our monetary policy is guided by the dual mandate to promote maximum employment and stable prices. From that standpoint, the current picture is plain to see: The labor market is very strong, and inflation is much too high. … There is an obvious need to move expeditiously to return the stance of monetary policy to a more neutral level, and then to move to more restrictive levels if that is what is required

participants reiterated their intention to provide notice well in advance of an announcement to reduce the pace of purchases" (Minutes, 6/15–16/2021, p. 11). The combination of these two desires may have generated a delay in when the FOMC felt it could raise the funds rate. However, two facts suggest this constraint was not dispositive. First, the Minutes for the July 2021 meeting also included the statement: "At the same time, participants indicated that the standards for raising the target range for the federal funds rate were distinct from those associated with tapering asset purchases and remarked that the timing of those actions would depend on the course of the economy" (p. 5). Second, at the December 2021 meeting, FOMC participants did not appear to hesitate to increase the pace of asset purchases without explicit notice: "They remarked that a quicker conclusion of net asset purchases would better position the Committee to set policy to address the full range of plausible economic outcomes. Participants judged that it would be appropriate to double the pace of the ongoing reduction in net asset purchases" (Minutes, 12/14–15/2021, p. 11).

to restore price stability" (Powell speech, 3/21/2022, p. 1). He spent a great deal of the speech elaborating on the strength of the labor market. He said: "The labor market has substantial momentum. Employment growth powered through the difficult Omicron wave, adding 1.75 million jobs over the past three months. The unemployment rate has fallen to 3.8 percent, near historical lows …. While disparities in employment remain, job growth has been widespread across racial, ethnic, and demographic groups" (p. 2). He also pointed out that "By many measures, the labor market is extremely tight, significantly tighter than the very strong job market just before the pandemic" (p. 2). That Powell took such pains to emphasize the strength of the labor market in a speech primarily focused on action to restore price stability suggests that achieving the aggressive maximum employment goal was an important prerequisite to inflation control. This is again consistent with the new framework's enhanced maximum employment goal playing a key role in the slow response to inflation.

III. Only Respond to Shortfalls from Maximum Employment

A third prominent feature of the 2020 framework is its asymmetric treatment of deviations from maximum employment: monetary policy will work to counter employment below the FOMC's estimate of its maximum level, but will not stand in the way of employment above its maximum. Specifically, the Statement on Longer-Run Goals says, "the Committee seeks over time to mitigate *shortfalls* of employment from the Committee's assessment of its maximum level" (emphasis added). In his speech unveiling the new framework, Powell explained that relative to the previous language of "deviations," "The change to 'shortfalls' clarifies that, going forward, employment can run at or above real-time estimates of its maximum level without causing concern, unless accompanied by signs of unwanted increases in inflation or the emergence of other risks that could impede the attainment of our goals" (Powell speech, 8/27/2020, p. 11).[10]

[10] Our sources make clear that employment above maximum would not by itself be interpreted as providing "signs of unwanted increases in inflation or the emergence of other risks." For example, in his speeches,

Although this feature of the framework could delay monetary policy tightening in some situations, the Federal Reserve's aggressive interpretation of maximum employment made it unimportant in the recent episode. As we document in the previous section, it was not until March 2022 that the FOMC thought maximum employment had been reached. As we describe there, by that point the Committee viewed the labor market as exceptionally tight, consistent with its interpretation of maximum employment as corresponding to a very strong labor market.

In addition, the FOMC did not expect the labor market to become substantially hotter. The median forecast in the March SEP had the unemployment rate creeping down from the most recently available figure of 3.8 percent to 3.5 percent by the end of the year and staying there in 2023 before ticking up to 3.6 percent by the end of 2024. And indeed, the labor market did not become noticeably (if at all) hotter. Unemployment fell slightly and then held steady between 3.4 and 3.6 percent from May 2022 through July 2023, and both the vacancy-unemployment ratio and wage growth fell gradually from their early-2022 peaks.

In summary, we have found no instances in the documents we have examined of FOMC participants arguing that employment was—or was likely to become—noticeably above their view of its "maximum" level. Thus, the FOMC did not hold off on tightening in the recent episode because its new framework called for it not to respond to employment above its maximum level. Rather, its optimistic interpretation of maximum employment caused it to believe that employment exceeding that level was never relevant.

IV. Do Not Undertake Preemptive Policy

The final aspect of the new framework that could have slowed the Federal Reserve's

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Clarida said, "going forward, a low unemployment rate, in and of itself, will not be sufficient to trigger a tightening of monetary policy absent any evidence from other indicators that inflation is at risk of moving above mandate-consistent levels" (Clarida speech, 10/14/2020, p. 4). He also said, "Consistent with our new framework, the relevant policy rule benchmark I will consult after the conditions for liftoff have been met is an inertial Taylor-type rule with a coefficient of zero on the unemployment gap" (11/16/2020, p. 11). And he argued that low unemployment was a poor predictor of inflation, including referring to "the world that prevails today, with flat Phillips curves" (8/31/2020, p. 5).

response in the recent episode was the greatly reduced emphasis on being preemptive or forward-looking in setting policy. The new Statement on Longer-Run Goals was little changed from the previous version in this regard, saying, "Monetary policy actions tend to influence economic activity, employment, and prices with a lag. … Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks." But the implementation of the framework in the September 2020 forward guidance greatly downplayed forward-looking policy. As we have described, the key sentence in that guidance stated that the FOMC expected to maintain the 0 to ¼ percent target range for the federal funds rate "until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time" (Statement, 9/16/2020). Two of these three criteria were about conditions that had to actually be met for the funds rate to be raised, not about the outlook.

This emphasis on actual outcomes rather than expected developments was intentional and understood by the members of the FOMC. For example, the Minutes of the April 2021 meeting reported, "Participants … noted that the existing outcome-based guidance implied that the path of the federal funds rate and the balance sheet would depend on actual progress toward reaching the Committee's maximum-employment and inflation goals. In particular, some participants emphasized that an important feature of the outcome-based guidance was that policy would be set based on observed progress toward the Committee's goals, not on uncertain economic forecasts" (Minutes, April 27–28, 2021, p. 10). And indeed, some members expressed qualms about this feature of policy: the Minutes continued, "However, a couple of participants commented on the risks of inflation pressures building up to unwelcome levels before they become sufficiently evident to induce a policy reaction" (p. 10).

The Federal Reserve's records show that this decision not to be strongly forward-looking slowed its response to inflation. This is clearest in December 2021. At that point, inflation had averaged well over 2 percent even going back to the start of the pandemic in March 2020; the median SEP inflation forecast was for it to remain over 2 percent for the next several years; and the median SEP unemployment forecast was for unemployment to be 3.5 percent in the fourth quarters of each of 2022, 2023, and 2024. The vast majority of participants viewed the risks to inflation as tilted to the upside and the risks to unemployment as broadly balanced. But as we describe in Section II, the Committee decided that it would hold off on raising the funds rate until it judged the maximum employment had actually been achieved. The Minutes reported that the horizon over which the FOMC expected that to occur was short, saying that the FOMC decided to maintain the current funds rate target "until labor market conditions had reached levels consistent with the Committee's assessments of maximum employment, a condition most participants judged could be met relatively soon if the recent pace of labor market improvements continued" (Minutes, 12/14–15/2021, p. 11). That is, with inflation projected to be above target, and with the labor market expected to reach the FOMC's interpretation of maximum employment at a horizon shorter than ones over which changes in monetary policy could plausibly have any noticeable impact on the economy, the FOMC decided to keep the funds rate at essentially zero. And since it was clear that once the FOMC started raising the funds rate, it would take at least several meetings, and likely more, to increase it by the 250 basis points needed to return it to what the Committee judged was its long-run level, this meant that monetary policy would be accommodative (in the sense of the target rate being less than the long-run equilibrium rate) well after those conditions had been achieved.

The same analysis largely applies to the situation in September 2021, and arguably as early as June. In September, the median SEP forecast was for inflation to approach 2 percent from above and for unemployment to reach 3.8 percent in 2022Q4 and 3.5 percent in 2023Q4 (with views of risks similar to those in December). And the SEP in June was little different from September's. Yet the Minutes suggest essentially no discussion of increasing the funds rate target, either immediately or in the near future, at either meeting (nor in July or November). It is hard to see a reason for this other than that, as in December, the Committee believed it had committed itself to not raising the funds rate until its ambitious goal for maximum employment had actually been reached.

V. Some Historical Evidence on the Consequences of a Hot Labor Market

In William McChesney Martin's classic description, "The Federal Reserve … is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up" (Martin 1955, p. 12). That is, a key role of the Federal Reserve is to prevent the economy from running too hot in order to avoid excesses that could have costs greater than the benefits of the temporarily hot economy. The FOMC's new framework, at least as it was implemented in the recent episode, disavows that approach: there is an ambitious employment goal, a repudiation of the view that employment exceeding that goal is a reason to tighten, and, to a considerable extent, an eschewal of forward-looking policy. A particularly strong statement of that view came from Clarida in November 2020. He stated, "the Committee now defines maximum employment as the highest level of employment that does not generate sustained pressures that put the price-stability mandate at risk" (Clarida speech, 11/16/2020, p. 10). Coupled with his (and the framework's) explicit statements that the Fed wouldn't view employment above maximum as a reason to tighten, this implies that absent direct evidence of inflation or other problems, employment exceeding what the Committee judged to be the highest possible safe level would not be grounds to tighten.

We have shown that in the recent episode, a desire to have a hot labor market and an unwillingness to act preemptively contributed to the slow response to inflation. An important question is whether these features of the new framework are likely to cause problems more generally. To obtain a small amount of systematic evidence on this issue, we look at macroeconomic outcomes following times over history when the Federal Reserve aimed for or tolerated a projected hot labor market. To identify these times, we compare the Fed staff forecasts of the unemployment rate and their estimates of the natural rate. For the period starting in 1989, we use the staff's real-time estimates of the natural rate, which are available on a meeting-by-meeting basis from the Federal Reserve Bank of Philadelphia. For the years from the start of the Federal Reserve's Greenbook/Tealbook forecasts in 1967 through 1988, we use the retrospective time series for the natural rate that was employed in the most recently available Tealbook, which is the December 2018 version and is again reported by the Federal Reserve Bank of Philadelphia. Throughout, the forecasts of actual unemployment are from the Greenbooks or Tealbooks.[11]

It is important to note that this exercise may involve some biases in evaluating the macroeconomic effects of a hot economy. In general, and especially in recent decades, the Fed may have pursued policies it thought would lead to below-normal unemployment precisely when it had information—for example about high productivity growth, moderation in wage demands, or strongly anchored inflation expectations—that suggested that low unemployment would not lead to inflation or other undesirable outcomes. Operating in the other direction for the period before 1989, the use of an ex-post series for the natural rate—which is likely influenced by what inflation turned out to be—may introduce a bias toward finding that below-normal unemployment is associated with higher inflation.[12] Thus our results should be interpreted cautiously.

A first observation is that the architects of the new framework are correct that in the decades immediately before the recent episode, a hot labor market wasn't associated with inflation: in both the late 1990s and late 2010s, the Fed was following policies it expected would be associated with

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[11] The estimates of the natural rate are from https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/nairu-data-set, files "NAIRU_1989-1997_Web.xls" and "NAIRU_1997-Recent_Web.xlsx," downloaded 7/12/2024 and 7/13/2024, respectively. The unemployment forecasts are from https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/philadelphia-data-set, file GBweb_Row_Format.xlsx, downloaded 9/8/2024.

[12] Unfortunately, there are no reliable real-time estimates of the natural rate for the early period. For the very first part of our sample, the natural rate hypothesis was essentially unknown. And at least through the 1970s, public estimates of the natural rate reported by such agencies as the Council of Economic Advisers were influenced by considerations of what was politically acceptable. See for example Romer and Romer (2002).

unemployment well below its estimate of the natural rate, yet in neither case was there a noticeable inflation problem.

But taking a broader historical perspective and a more expansive view of potential macroeconomic problems that could be caused by a hot economy leads to a much less comforting view. Table 1 lists the periods when the staff projected that the unemployment rate would be substantially below the natural rate (concretely, an average of at least 0.5 percentage point below the natural rate over the next four quarters), along with the undesirable macroeconomic outcome, if any.[13] Every such episode before 1990 was associated with rising inflation. Since then, the 1996–2000 period was associated with the dot-com boom and bust; and the 2021–2022 period (when the staff forecasts are not available but the SEP projected unemployment well below the participants' estimates of long-run unemployment, and when the labor market is generally agreed to have been even tighter than suggested by the unemployment rate) was again associated with rising inflation. The period just before the pandemic is the only time in modern U.S. macroeconomic history when projections of a hot labor market were not associated with the development of significant macroeconomic problems.

VI. Implications for the Framework Review

The Federal Reserve adopted a revised policy framework in August 2020. Soon after, it held off on raising interest rates for a year after inflation crossed the 2 percent target on the way to its highest level in four decades. We have shown that two changes in the framework contributed to this slow response: the elevation of the maximum employment side of the dual mandate, and the downplaying of forward-looking policy in implementing the framework. The two other main

[13] For Greenbook forecasts that do not extend four quarters into the future, we use the average projected departure of unemployment from the natural rate from one quarter ahead through the end of the forecast. Table 1 omits periods of just one or two meetings in 1979, 1984, 1987, and 1994–95 when the staff projected unemployment substantially below the natural rate. All the periods listed in the table lasted at least a year (with the exception of 1988, which held for the final 7 of the 8 meetings). The reason the period before the Great Recession does not appear in the table is that the staff never projected that unemployment would be more than a few tenths of a percentage point below its estimate of the natural rate.

changes in the framework—the shift to flexible average inflation targeting, and the change to not responding to employment exceeding the FOMC's assessment of its maximum level—did not significantly contribute.

The Federal Reserve is about to start a thorough review of its policy framework, to be completed in 2025. What do our findings imply for that review?

Keep Flexible Average Inflation Targeting, with a Small Amendment. We show in Section I that inflation rose so rapidly in the recent episode that the FOMC's response was not noticeably slowed by the new policy that "following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time." In addition, that policy has the potential both to provide valuable stimulus when inflation is below target and monetary policy is constrained by the lower bound on interest rates, and to counteract the tendency for the lower bound to cause average inflation to be below target under conventional inflation targeting (see, for example, Kiley and Roberts 2017; Mertens and Williams 2019; and Hebden et al. 2020).

Keeping this aspect of the framework therefore seems desirable. However, its purpose was to address issues created by the lower bound on interest rates, and it was intended to apply only in lower-bound episodes. Thus, why not make the link explicit? This could be accomplished just by adding language along the lines of, "and policy has been constrained by the effective lower bound on the federal funds rate," after, "inflation has been running persistently below 2 percent."

Back Off from the Changes to the Employment Goal. The revised framework and its implementation elevated the employment side of the dual mandate and adopted an ambitious interpretation of maximum employment. Section II documents that these changes were important causes of the FOMC's extended wait to raise interest rates in 2021–2022. And Section V shows that in earlier episodes, the Federal Reserve's pursuit of policies it expected to result in unemployment substantially below its estimates of the natural rate generally led to inflation or other macroeconomic problems—which in turn led to recessions that arguably imposed the largest costs on the disadvantaged Americans the Fed was most attempting to help with its 2020 elevation of the employment goal. More broadly, the Fed has long recognized that monetary policy cannot lower the natural rate or address the sources of poverty and inequality. Thus, it would be preferable to return to interpreting maximum employment as corresponding to the best available evidence of the normal long-run equilibrium of the labor market, rather than as an ambitious and potentially unsustainable goal. Of course, with the definition of "maximum employment" revised to make it more realistic and less aspirational, it would be essential to continually and carefully reassess the evidence about maximum employment. For example, when labor market conditions were approaching those thought to correspond to maximum employment, it would be important to be attuned to possible changes in the labor market that might have reduced the natural rate.

Closely related, it is hard to see a case for requiring that one side of the dual mandate be fully achieved before attention is paid to the other. That is, consistent with the revised Statement on Longer-Run Goals but not with its recent implementation, when the goals are in conflict, the FOMC should follow "a balanced approach in promoting them."

Instead, Make Clear that All Relevant Tools Will Be Used in Pursuit of the Goals. The conduct of monetary policy during the sluggish recovery from the Great Recession was an important motivation for the elevation of the employment side of the dual mandate. But this period is better described not as the Federal Reserve having overly cautious goals, but as it being overly cautious in pursuing its goals. Until late 2014—five years after the trough of the recession—the SEPs consistently pointed to unemployment above the FOMC's estimates of the natural rate, and inflation below the FOMC's target. This suggests that the FOMC was well aware it was missing both its inflation and employment goals from below, but nevertheless chose not to take more aggressive action. Moreover, the tightening moves that the Committee ultimately made were not an important contributor to the slow recovery. The FOMC did not raise the funds rate above 1 percent until June 2017, at which point the most recent figure for the unemployment rate was 4.3 percent, and the tightening did not prevent unemployment from falling to below 4 percent in 2018 and 2019. More generally, we know of no cases in the postwar era where monetary policy was clearly overly tight because of unduly pessimistic estimates of maximum employment.

Recent research suggests that even when policy is constrained by the lower bound on interest rates, extended periods of weak real performance and below-target inflation are largely avoidable through forceful use of such tools as quantitative easing and flexible average inflation targeting (for example, Bernanke 2020, and Eberly, Stock, and Wright 2020). Thus, rather than specifying an employment goal that is intentionally optimistic about what is feasible in order to reduce the chances of overly tight policy, it would be better for the Federal Reserve to specify a realistic employment goal and pledge to make every effort to achieve it.

Emphasize Forward-Looking Policy. The forward guidance the FOMC adopted in 2020 in implementing its revised framework was framed largely in terms of actual outcomes, not projections. We show in Section IV that this framing contributed to the slow response to inflation. More broadly, since monetary policy works with lags, decisions should be based on the best available information about likely conditions when policy actions have their effects. Being forward-looking will inevitably lead to some preemptive tightenings and loosenings that prove to be mistaken. But since current conditions are not the relevant ones, acting based on current conditions is even more prone to producing incorrect decisions. Thus the Fed should maintain the framework's acknowledgement of the need for forward-looking policy, and—in contrast to its behavior in 2021–2022—conduct policy accordingly.

It also makes sense for preemption to extend to cases where employment is expected to exceed estimates of its maximum level. Although we find in Section III that the asymmetric treatment of deviations from maximum employment in the new framework did not slow the FOMC's response to inflation in the most recent episode, our evidence in Section V shows that times when the Federal Reserve expected the labor market to be much stronger than its normal long-run situation generally did not end well. Further, Kiley (2024) presents model-based evidence that asymmetric rules of this type perform poorly, even in the presence of substantial uncertainty about sustainable employment.

Use Explicit Forward Guidance Sparingly. Our evidence about the sources of the delay in the Fed's response to inflation, and the resulting implications for the framework, imply that providing explicit forward guidance may generally be unnecessary. The combination of clear goals, a firm pledge to use all relevant tools, and making clear that policy is forward-looking would allow observers to make reasonable inferences about the likely path of policy. And statements by Fed officials and the FOMC members' projections of appropriate policy in the SEPs would provide additional information. Thus, little would be gained by having forward guidance in official policy statements.[14]

Moreover, moving away from forward guidance could make policy more nimble. Explicit forward guidance raises the threshold for departing from the settings laid out in the guidance, and so can slow the response of policy to new information. We have shown that this was very true in the recent episode. But it appears to have been relevant in others as well. For example, it is unlikely that making the same decision at 17 consecutive FOMC meetings in 2004–2006 (a 25-basis point increase in the funds rate each time) was the optimal response to the presumably variable flow of information. Rather, the various pronouncements in the statements that the Committee expected to raise the funds rate at a "measured pace" likely made policy less flexible.

The one case where explicit forward guidance is clearly useful is when the FOMC wants to at least partially tie its hands relative to what is implied by its framework. The feature of the 2020 framework that calls for aiming for above-target inflation following periods when it has run persistently below removed what had been the most natural candidate for wanting to deviate from the earlier framework. But one can imagine other cases where departures might be desirable, in which case explicit forward guidance would likely be helpful. Even then, however, it would be

[14] The fact that forward guidance would usually be essentially redundant means there is no inconsistency between saying that the FOMC should use all relevant tools and that it should not normally use forward guidance.

important for the Fed to think through various possibilities rather than tailoring the guidance to one particular scenario.

Concluding Comments. The 2020 changes to the policy framework were tailored to fit important recent developments, notably the greater importance of the lower bound on interest rates, heightened concern about job opportunities for disadvantaged communities, and the increasing evidence that inflation does not respond strongly to modest deviations of economic activity from normal. But, as we show, when confronted with the decidedly different conditions of the post-Covid recovery, the new framework performed poorly. The overly optimistic interpretation of maximum employment and the move away from preemptive policy slowed the Federal Reserve's response to rapid inflation. In its next iteration, the framework should be revised to be more general, and robust to a wide range of possible developments. It should keep what is good in the new framework—particularly the move to flexible average inflation targeting and a healthy questioning of assumptions about sustainable employment—but return to a more balanced and realistic view of the dual mandate, and embrace the fact that monetary policy must inevitably be forward looking.

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TABLE 1

Outcomes of Episodes When the Federal Reserve Staff Projected a Hot Labor Market

Period	Undesirable Macroeconomic Outcome
1967–1970	Inflation
1972–1973	Inflation
1978	Inflation
1988	Inflation
1996–2000	Dot-com boom and bust
2017–2018	none

Notes: The periods in the first column are times when the Federal Reserve staff projected average unemployment over the coming four quarters at least 0.5 percentage point below their estimate of the natural rate.