



Taking Stock of the New Fed and ECB Monetary Policy Frameworks

David Wessel & Eric Milstein

HUTCHINS CENTER ON FISCAL & MONETARY POLICY
THE BROOKINGS INSTITUTION

This report is available online at:

<https://www.brookings.edu/research/taking-stock-of-the-new-fed-and-ecb-monetary-policy-frameworks/>

Introduction

After years of struggling to get inflation up to their publicly-announced targets, several episodes of short-term interest rates hitting the effective lower bound, and substantial evidence that the long-term equilibrium rate of interest (the one that is expected to prevail when an economy is at full employment and price stability) has been falling, the Federal Reserve in 2020 and the European Central Bank in 2021 revised their monetary policy strategy statements.

This report summarizes the discussion of these new frameworks at two panels hosted by the Hutchins Center on Fiscal and Monetary Policy in November 2021. The first panel, moderated by Rachana Shanbhogue of The Economist, included Richard Clarida, then vice chair of the Federal Reserve Board and a key architect of the new framework; Philip Lane, a member of the ECB's Executive Board and its chief economist; and Ben Bernanke, distinguished senior fellow at Brookings and former chair of the Federal Reserve. Following that, David Wessel of the Hutchins Center moderated a panel of Fed watchers: Julia Coronado of MacroPolicy Perspectives; William Dudley, former president of the Federal Reserve Bank of New York; Ayşegül Şahin of the University of Texas at Austin; and Tiffany Wilding of PIMCO. Video and transcript of the event are available on the [Brookings website](#).

Background

In the U.S., the Federal Reserve Act defines the Fed's mandate as promoting "maximum employment" and "price stability," but leaves the definition of those terms and the best means of achieving those goals to the Fed. In 2012, under the leadership of Ben Bernanke, the Fed for the first time publicly specified a numerical goal defining price stability as 2%, measured by the annual change in the Commerce Department's price index for Personal Consumption Expenditures. "[Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored](#)," it said. In 2016, the Fed amended the statement to emphasize that it "[would be concerned if inflation were running persistently above or below](#)" 2%. (The Fed and some other major central banks chose 2% as their inflation target several years ago, describing it as a reasonable definition of "price stability" and as a way to keep nominal interest rates above zero so they could be cut in a recession. [Some economists argue](#) that with the benefit of hindsight, 2% is too low.)

The Fed did not specify how it would gauge the maximum level of employment, but did note that in 2012, most Federal Open Market Committee (FOMC) participants estimated that the longer-run normal rate of unemployment (also known as the "non-accelerating inflation rate of unemployment," or NAIRU) was between 5.2% and 6.0%. As the unemployment rate declined throughout the decade without much upward pressure on inflation, Fed policymakers lowered their estimates of NAIRU. In the FOMC's [June 2020 Summary of Economic Projections](#), prior to the announcement of the new framework, the median FOMC participant's projection of the longer-run unemployment rate was 4.1%.

After a process of extensive public consultation known as [Fed Listens](#), the Fed revised its [Statement on Longer-Run Goals and Monetary Policy Strategy](#) in August 2020. On inflation, it reaffirmed the 2% target but said that to keep expectations anchored, "following periods when inflation has been running persistently below 2%, appropriate monetary policy will likely aim to achieve moderately above 2% for some time." This new strategy was dubbed Flexible Average Inflation Targeting (FAIT)—because it gave the Fed *flexibility* to define the magnitude and duration of overshoots of its target and set the inflation

target as an *average* over time, taking past misses into account. (The previous strategy didn't take past inflation into account, sometimes known as "let bygones be bygones.") At the time the strategy was unveiled, the Fed was holding its key interest rate at zero in response to the pandemic, inflation had been running below its 2% target for most of the prior decade, and inflation expectations were falling below levels consistent with the 2% target.

The Fed also altered the definition of its employment goal. It added the words "broad-based and inclusive" to describe its employment mandate, and in a subtle but significant change, said it would respond only to "shortfalls of employment from its maximum level" rather than the previous "deviations from its maximum level." This indicated that the Fed would no longer preemptively tighten monetary policy only because unemployment was approaching or even falling below estimates of its long-run normal rate. "[This change signals that high employment, in the absence of unwanted increases in inflation or other risks that could impede the attainment of the Committee's goals, will not by itself be a cause for policy concern.](#)" the Fed said in a Q&A on the new framework.

In Europe, Article 105(1) of the treaty that established the European Central Bank says that its "[primary objective... shall be to maintain price stability.](#)" While this single mandate differs from the Fed's dual mandate, it also says that "without prejudice to the objective of price stability," the ECB shall support the "general economic policies" of the European Union. The ECB in 1998 defined price stability as annual increases in the Harmonised Index of Consumer Prices of "below 2%." In 2003, it modified that to "[inflation rates below, but close to 2% over the medium term.](#)"

After an extensive review, the ECB in July 2021 [revised its inflation objective](#) to "2% over the medium term," and said that it considered "negative and positive deviations from this target as equally undesirable"—a policy often described as a "symmetric" target. Unlike the Fed, however, the ECB did not say that it would aim for above 2% inflation after periods of below 2% inflation. Instead, the ECB said that there might be a "transitory period" in which inflation is moderately above target. Lane also said that the ECB will set policy so that inflation is forecast to be "durably," rather than temporarily, at 2% before the end of its three-year projection horizon, and that it will not adjust the stance of policy until it sees "real-life progress in underlying inflation" towards the 2% target.

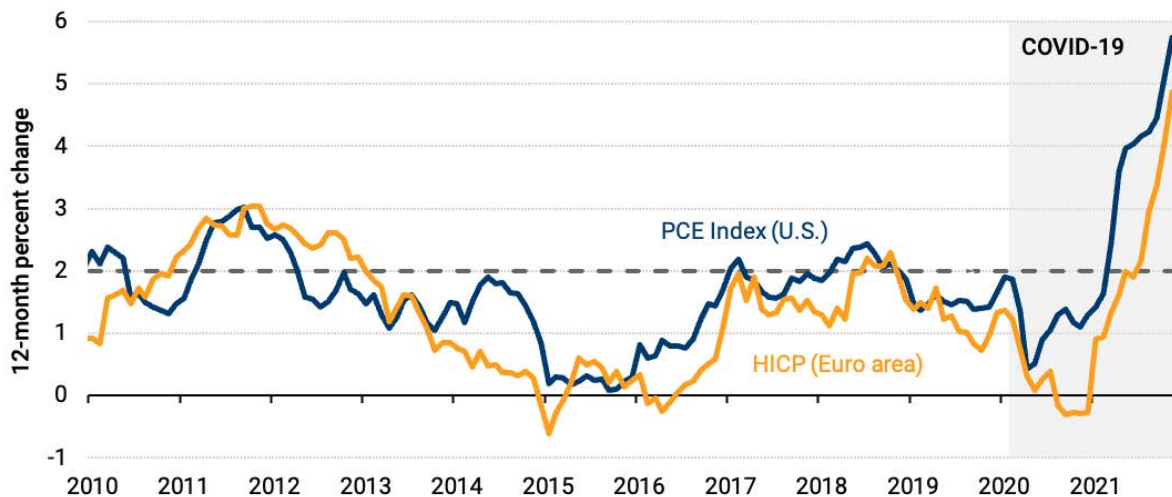
At the Hutchins Center event, Bernanke said he was impressed by the progress that the two central banks have made in articulating their frameworks: "Good frameworks help to make policy more coherent, more transparent, and more credible." Both the Fed and the ECB plan to review their frameworks every five years.

Why did the Fed and ECB update their frameworks?

Throughout the 2010s, the Fed and the ECB had difficulty getting inflation up to their targets (Figure 1). This undermined their credibility and threatened to erode market, household, and business inflation expectations, which central bankers monitor carefully. As the Fed explained in a [Q&A](#) accompanying its new monetary strategy statement, "If inflation runs below 2% following economic downturns but never moves above 2% even when the economy is strong, then over time inflation will average less than 2%." This, the Fed added, "can lead to an unwelcome fall in longer-term inflation expectations, which in turn can pull actual inflation lower."

FIGURE 1

The Fed and ECB undershot their 2% inflation targets in the 2010s



Source: Bureau of Economic Analysis, Eurostat.

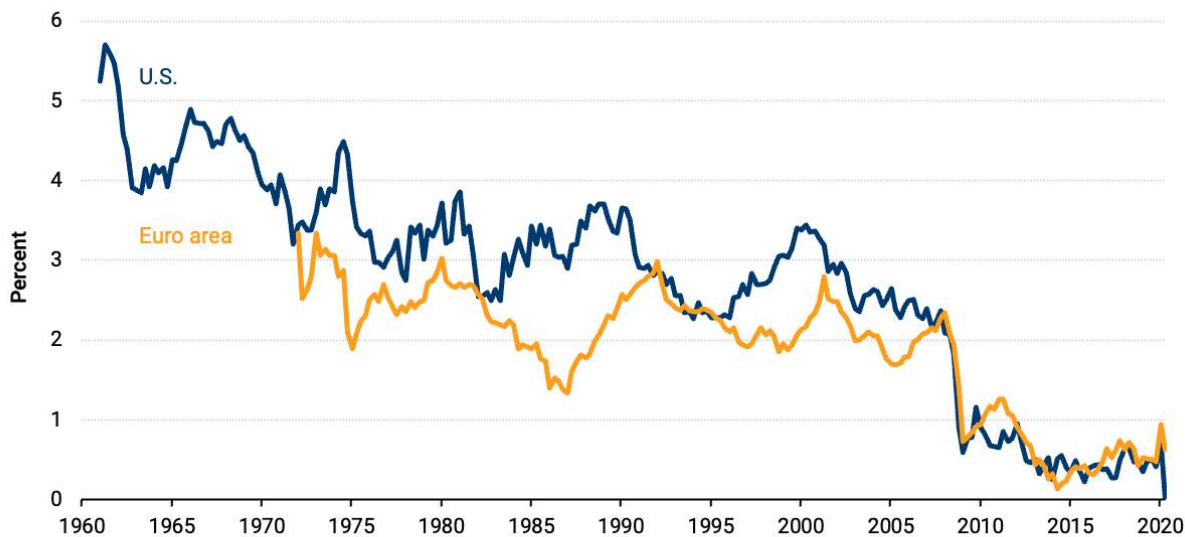
Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

Before the pandemic, economists proposed various explanations for central banks' challenges in achieving their inflation targets. In particular, the past few decades have seen various [changes in inflation dynamics](#). These include a perceived strengthening in central banks' ability to anchor inflation expectations at low levels, a weakening in the traditional [Phillips curve relationship](#) between inflation and unemployment, a decline in the incidence and persistence of one-time positive shocks to inflation, and the emergence of new developments related to globalization and technology.

This period also saw the continuation of a long-term downward trend in nominal interest rates, due in part to lower pre-pandemic inflation rates. (In general, when inflation or expected inflation rises, investors demand compensation, pushing up nominal interest rates.) However, this downward trend holds even when looking at inflation-adjusted, or "real," interest rates. U.S. and Euro area estimates of the [real neutral rate of interest](#) (known as r^*)—the short-term interest rate expected to prevail when the economy is at full employment and prices are stable—continued their steady decline throughout the decade (Figure 2).

Economists offer a variety of explanations for the decline in real interest rates. Bernanke's "[global savings glut](#)" hypothesis posits that heightened global demand for safe assets, especially in emerging market economies, has pushed down long-term real rates. A related explanation, the "[secular stagnation](#)" hypothesis, suggests that the aging populations, slowdowns in technological progress, and a lack of productive investment opportunities have yielded low demand for capital investment and correspondingly lower borrowing costs.

FIGURE 2

Estimates of the real neutral rate of interest (r^*) have been falling for decades

Source: Holston-Laubach-Williams (2017) model.

 Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

As a result of these developments, both the Fed and ECB concluded that their key interest rates were likely to be at or close to the Effective Lower Bound (ELB) more frequently than had been anticipated when their predecessors articulated their monetary policy strategies. (In the U.S., the Fed has seen zero as the ELB; in Europe, the ECB has pushed nominal interest rates slightly below zero.) When interest rates are at or close to the ELB, a central bank has less room to cut rates to stimulate a sagging economy. Faced with this development, central banks have adopted so-called [“unconventional” monetary policies](#) to support economic growth and hit inflation targets, including large-scale asset purchases (known as quantitative easing, or QE) and communications about the future path of policy (known as forward guidance).

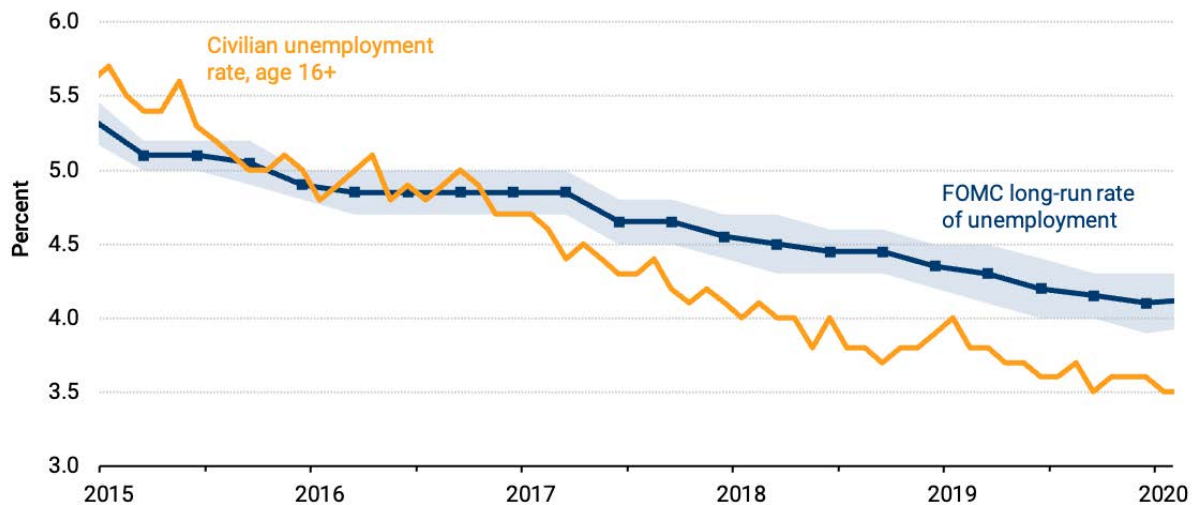
Lane explained that although the ECB’s preferences for inflation are “symmetric”—deviations on either side of the 2% target are equally undesirable—“the world out there is not symmetric” because interest rates can bump up against the ELB. As a result, he said, the ECB statement indicates that it will be particularly aggressive when inflation is below target and interest rates are low. “Monetary policy needs to be forceful or persistent in the neighborhood of that lower bound,” he said. “Using interest rate policy may not be enough if you have a very large macro shock.” The Fed’s FAIT framework also incorporates asymmetry to deal with the ELB constraint: Fed leaders have said they will not attempt to compensate for past overshoots of the 2% target with intentional undershoots.

In the U.S., the other major economic development that prompted the Fed to alter its strategy was the evolution of the labor market. Before the pandemic, the civilian unemployment rate in the U.S. fell to 3.5% without generating unwelcome increases in inflation. This was below previous estimates of the [natural rate of unemployment](#) (known as u^*)—the lowest level of unemployment associated with stable prices (Figure 3). This suggested that the Fed had been misjudging the extent to which it could run the economy “hot” without triggering increases in inflation. Fed officials noted economic research, as well as

commentary from the public at its Fed Listens events, that underscored the benefits of a strong labor market for bringing groups on the margins—especially lower-income and minority communities—into the workforce. “History shows... the longer you're at a healthy labor market, the broader and deeper are the gains to different groups in society,” Clarida said.

FIGURE 3

The Fed lowered its estimates of the natural rate of unemployment (u^*) in the late 2010s



Source: Bureau of Labor Statistics, Federal Reserve.

Notes: FOMC long-run estimates are the low point, midpoint, and high point of the central tendency released in the quarterly Summary of Economic Projections.

Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

Avoiding the deflationary trap in which Japan found itself was also a factor in the Fed’s thinking. As Clarida observed in a [2022 review of the new framework](#): “[The] downward bias in inflation expectations under inflation targeting in an ELB world can in turn reduce already scarce policy space—because nominal interest rates reflect both real rates and expected inflation—and it can open up the risk of the downward spiral in both actual and expected inflation that has been observed in some other major economies.”

How do the Fed and ECB frameworks differ?

Under its new framework, the Fed will explicitly aim to overshoot its inflation target to make up for past shortfalls, with the goal of averaging 2% over time. In contrast, ECB leaders have stated that they will tolerate periods of temporary overshoot of their 2% target, but not aim for them outright. Bernanke summarized the difference between the two frameworks:

“Both the Fed and the ECB reviews were motivated by the constraints imposed by the effective lower bound, or ELB, and the concern that under previous frameworks, the ELB would result in inflation

remaining most of the time below target. To offset that downward bias, you can either adopt a policy of systematically overshooting the target after a period of low inflation, as the Fed has done, or you can avoid intentional overshoots but simply try to return inflation to target relatively more quickly when inflation has been too low, which appears to be the ECB's approach.”

Bernanke likened the ECB's new framework to the Fed's symmetric inflation target as it stood in 2012. He cautioned that the ECB's approach could generate the same problem of limited policy space that prompted the Fed to reexamine its framework. “I think there is a substantive difference [between the Fed and ECB] and that the zero lower bound will remain a concern after we get through this unusual period,” Bernanke said.

Lane challenged the view that the ECB's new strategy would face greater difficulties at the lower bound. He said that although the ECB moved to a symmetric target, the Fed's model-based simulations of unconventional policies informed the ECB's thinking about its responses to the asymmetry of the ELB. In terms of the actual implementation of monetary policy, he said there was not a “dramatic difference” between the two frameworks, and that the Fed and ECB's responses to economic developments would likely be similar in practice. Lane added that when inflation has been around 1%, as it was in Europe before the pandemic, the difference between aiming for or tolerating a moderate overshoot of 2% inflation is not a first order issue.

In comparing the two frameworks, Clarida highlighted that the Fed's dual mandate focuses both on employment and inflation, unlike the ECB's single mandate of price stability. In his view, the acknowledgement of this trade-off in the FAIT framework allows the Fed to respond more flexibly than other central banks to adverse developments, such as the pandemic supply shock. He also contrasted the Fed's “broad-based and inclusive” language on maximum employment with the more general notions of labor market slack used by the ECB and other global central banks.

In response, Lane said that although the ECB has a single mandate, its medium-term orientation still allows it to act flexibly. “When we think about similarities and differences across mandates, our medium-term perspective delivers quite a bit,” he said. Lane explained that the ECB's extended timeline for ensuring price stability implies that it will not automatically tighten in response to an adverse supply shock driving inflation above target, unlike a single-mandate central bank trying to return immediately to its target. In its [monetary policy strategy statement](#), the ECB says that its medium-term perspective allows it “to cater for other considerations relevant to the pursuit of price stability.” The statement explains that when faced with a supply shock, the ECB “may decide to lengthen the horizon over which inflation returns to the target level in order to avoid pronounced falls in economic activity and employment.”

TABLE 1

Fed and ECB monetary policy frameworks

	Fed	ECB
Central bank mandate	Maximum employment & price stability	Price stability
Date implemented	August 2020	July 2021
Inflation target	2% average over time	2%
Inflation index	Personal Consumption Expenditures Price Index (BEA)	Harmonised Index of Consumer Prices (Eurostat)
Response to low inflation	Aim for overshoots to average 2% inflation over time	Aim to return to 2%, but will tolerate transitory periods of overshoot
Account for past shortfalls?	Yes	No
Symmetry	Asymmetric: will seek overshoots but not undershoots of target	Symmetric: positive and negative deviations "equally undesirable"
Timeline	Does not define the averaging period	"Medium term orientation"
Previous framework	Symmetric 2% inflation target (2012-2020)	Inflation "below, but close to 2% over the medium term" (2003-2021)

Source: Federal Reserve, European Central Bank.



How have the Fed and ECB implemented their frameworks so far?

The Fed and ECB framework reviews were motivated by economic developments that occurred prior to the COVID-19 pandemic—especially the concerns posed by inflation running persistently below target. The frameworks have encountered an early test, given the unusual economic conditions resulting from the pandemic.

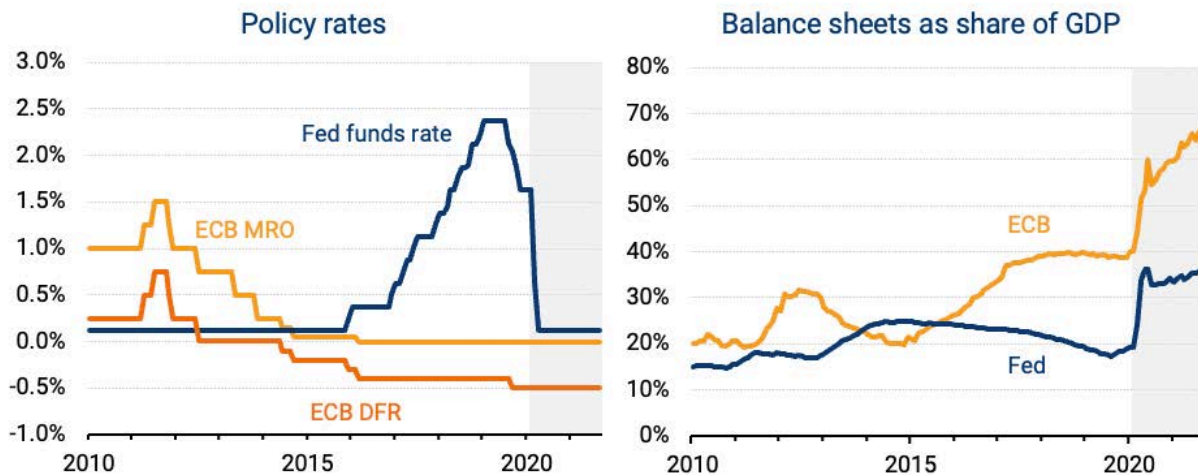
In early 2020, the Fed and ECB took extraordinary measures to support the economy amidst severe job losses, government-enforced lockdowns, and market dysfunction at the onset of the pandemic. The Fed cut its target for the federal funds rate to near zero, restarted its quantitative easing program, and [established various emergency lending facilities](#). With its primary policy rates already at or below zero, the ECB also engaged in large-scale asset purchases through both its existing [Asset Purchase Programme](#) (APP) and the new [Pandemic Emergency Purchase Programme](#) (PEPP). These programs, along with other

steps taken by the two central banks, kept borrowing costs low and brought the sizes of the Fed and ECB balance sheets to historic levels (Figure 4).

FIGURE 4

The Fed and ECB took aggressive actions during the pandemic

Both central banks kept interest rates low, purchased large quantities of government debt, and set up emergency lending facilities.



Source: Federal Reserve, ECB, Bureau of Economic Analysis, Eurostat.

Notes: MRO refers to the ECB's main refinancing operations rate and DFR to its deposit facility rate. Shares of GDP are the monthly end-of-period central bank assets held over quarterly nominal GDP (SAAR) for the U.S. and Euro area.

Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

Due in part to this monetary and fiscal support, the U.S. and Euro area economies recovered quickly from the COVID-19 recession, [albeit at different speeds](#). Strong consumer demand and a rapid labor market recovery contributed to robust growth in late 2020 and 2021, even as new variants of the virus threatened to derail the economic progress. This growth—along with pandemic-related labor shortages and uncertainties—led to stresses in global supply chains and surging inflation rates in the U.S. and Europe. These elevated levels of inflation have posed challenges for the Fed and ECB.

It is likely that the new frameworks did not affect the Fed and ECB's immediate responses to the pandemic, but they did influence the forward guidance both central banks gave about the future evolution of policy. In [September 2020](#), the Fed established a three-part test for raising its funds rate target (consistent with its FAIT framework), saying that it would only raise rates once it judged "labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2% and is on track to moderately exceed 2% for some time."

In [December 2020](#), the Fed established separate forward guidance for its QE program, saying it would slow down, or "[taper](#)," its purchases of Treasury and mortgage-backed securities once "substantial further progress has been made toward the Committee's maximum employment and price stability goals." Although it left the definition of "substantial further progress" ambiguous, the Fed described this as a less stringent test than its criteria for raising rates, and repeatedly indicated that it would not consider raising rates until it had finished tapering. Following several months of elevated inflation and continued job growth, the Fed in [November 2021](#) decided that taper test had been met and began reducing the pace of

its purchases. The Fed accelerated the pace of the taper at its December meeting and indicated that it would be raising interest rates in 2022.

The ECB has faced similar economic developments, although the European recovery has lagged behind the U.S. In its current [forward guidance](#), first released in [July 2021](#), the ECB laid out three conditions for its raising of rates: “The Governing Council expects the key ECB interest rates to remain at their present or lower levels until it sees inflation reaching two per cent well ahead of the end of its projection horizon and durably for the rest of the projection horizon, and it judges that realised progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilising at two per cent over the medium term.” The ECB has also continued to adjust the pace of its asset purchase programs. In [December 2021](#), the ECB’s Governing Council announced it would begin to reduce its asset purchases under the PEPP, with the goal of ending the program in March 2022 (although it scaled up its other asset purchase program to ease the transition).

Have the Fed and ECB frameworks been successful during the pandemic?

At the Hutchins Center event, participants discussed the suitability of the Fed and ECB’s frameworks to the current economic environment, as well as the effectiveness of the central banks’ implementation of their frameworks.

Bernanke outlined his view of the Fed’s two strategies for offsetting the downward bias on inflation: (1) to overshoot its inflation target, and (2) to avoid raising rates until it reaches its full employment goal. However, he said “there is no guarantee that avoiding preemptive inflation strikes and anchoring medium term inflation expectations at target will always be neutrally consistent objectives.” The Fed encountered this scenario soon after the introduction of its framework in August 2020. With potentially destabilizing inflation rates but the labor market not yet fully recovered, the Fed has been forced to navigate this tension between its goals.

Clarida acknowledged the Fed’s difficulties in setting policy during the pandemic, saying “we did not anticipate the depth and the breadth of the global supply shock.” Clarida explained how the Fed responded to this trade-off between the two sides of its dual mandate. He mentioned the clause in the Fed’s [new framework](#) that has informed its thinking during the pandemic, which indicates that the Fed will focus primarily on the goal furthest from its target:

“The Committee’s employment and inflation objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it takes into account the employment shortfalls and inflation deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.”

For most of 2020 and 2021, the Fed judged that the employment shortfall was the more pressing concern. It kept monetary policy accommodative to stimulate job growth, welcoming a moderate inflation overshoot under its new framework to make up for the shortfalls of the prior decade. By the latter half of 2021, however, with inflation nearing 40-year highs and strong progress toward its full employment goal, the Fed switched its focus to taming inflation.

Clarida and Lane maintained that the guidance offered by the Fed and ECB frameworks has been beneficial in the current economic environment. Since the Fed believes that inflationary pressures will eventually subside, Clarida said, “it’s actually a feature of the new framework that you would be approaching [2% inflation] from above because you’re delaying liftoff.” In his view, the transitory nature of the current inflation scenario will allow the Fed to achieve its objective of anchoring expectations at target while simultaneously supporting the labor market by avoiding preemptive strikes.

Similarly, Lane said that the ECB’s “determination to be persistent near the lower bound... caters quite well to this kind of supply shock that we’re currently facing.” He explained that the currently elevated inflation rates in the Euro area align with the ECB’s desire to see realized 2% inflation ahead of its projection horizon. Lane also said that the economic environment is likely to result in the ECB more durably achieving its 2% target, given the combination of temporarily high inflation rates and the expectation that price pressures will moderate over time. In this environment, Lane explained, the ECB needs to be persistent in keeping rates low. In his view, since a constant policy rate and increasing inflation result in lower real rates, remaining patient will further support economic activity and help inflation to move towards the ECB’s target.

Other participants were more critical of the central banks’ implementation of their frameworks. Dudley, the former New York Fed president, said that he had “no quarrel” with the shift in the Fed’s long-term strategy, but he outlined several risks related to the Fed’s sequencing of policy. In particular, he criticized the Fed’s guidance that it would not begin raising rates until the labor market reached full employment, which he argued would leave the Fed behind the curve in responding to inflation. He also stated that given the current economic environment and high rates of inflation, raising the funds rate would require monetary policy to go beyond a neutral setting to an explicit tightening. Dudley viewed this as increasing the risk of a “hard landing” that might cause a recession.

Dudley also took issue with the Fed’s pledge that it would not raise interest rates until it had stopped buying Treasury and mortgage-backed securities. He said that this forward guidance prevented the Fed from being more flexible in being able to quickly raise rates, since a Fed announcement to accelerate the taper could provoke a repeat of the 2013 “taper tantrum” in bond markets. (After the Hutchins event, at the [December 2021](#) FOMC meeting, the Fed accelerated the pace at which it tapered bond purchases without a repeat of the tantrum.)

Several panelists evaluated the Fed’s framework as it relates to its maximum employment goal. Şahin, the University of Texas economist, characterized the labor market as generally tight, but cited ongoing uncertainties related to the virus and its impact on labor force participation. “When we look at different indicators, almost all of them are at 2017-2018 levels,” she said, except for the labor force participation rate. Regarding the framework, she said that the Fed’s goal should be to “make sure when [reentrants to the labor force] come in, there are job opportunities.” She described the pandemic as a labor supply shock that has increased the reservation wages of workers, leading to stronger growth across different measures of wages.

What do the frameworks imply for inflation expectations?

Both new frameworks were motivated by declines in inflation expectations relative to the 2% targets. [Inflation expectations](#) are a key way that central banks evaluate household, business, and market

understanding of their policies. These expectations reflect confidence in central banks' ability to achieve price stability and are important because rising inflation expectations can be self-fulfilling by influencing business and consumer decisions.

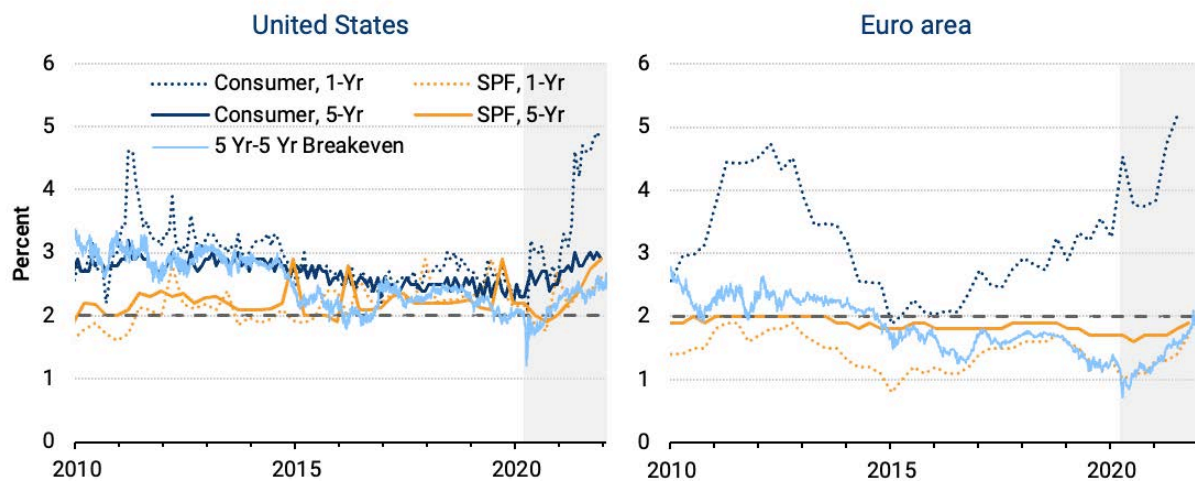
Clarida was optimistic about the Fed's ability to anchor inflation expectations at 2% under its new framework. Although he cited historical episodes where inflation expectations had drifted up after prolonged periods of low inflation, he said that a [de-anchoring of expectations](#) "would require a systematic and persistent policy mistake relative to our avowed framework." Regarding the current burst of inflation, Clarida mentioned that measures of five-year-ahead inflation expectations from the [Michigan Survey of Consumers](#) remained similar to their level between 2004 and 2014. This suggests that the Fed's FAIT framework is successful: consumers are seeing beyond the current supply shock, which has created a burst of near-term inflation, and expect inflation to decline to the Fed's 2% target over the medium-term. Wilding agreed, saying the Fed's new framework has successfully delivered long-term expectations to its target.

Lane described similar trends in the Euro area (Figure 5). He mentioned the findings of the ECB's new [Consumer Expectations Survey](#), which shows that three-year inflation expectations have remained steady even as one-year expectations have increased. Although he pointed out heterogeneity in the data between different groups, he said, "consumers are paying attention" to inflation and the ECB's mandate. He also mentioned recent increases in market-based expectations in the Euro area. However, he attributed this partially to changing investor preferences for risk, rather than the market's fears that the ECB has lost control of its inflation target.

FIGURE 5

Inflation expectations rose moderately in 2021

Both the U.S. and Euro area saw upticks in survey and market-based expectations measures.



Source: University of Michigan Consumer Survey, Philadelphia Fed Survey of Professional Forecasters, European Commission Business and Consumer Surveys, ECB Survey of Professional Forecasters, Bloomberg LP.

H Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

Clarida, Lane, and Coronado, the private-sector analyst, noted the importance of looking at wages and labor costs in addition to survey-based measures of inflation expectations. By monitoring these indicators, central banks can better evaluate how inflation expectations propagate into real economic activity. For

this reason, Clarida said that productivity-adjusted wages are one of the Fed’s key metrics for assessing its progress toward its dual mandate. Lane also said wages play a significant role in the ECB’s decision-making and discussed the potential for wage increases in the Euro area in the upcoming year. However, he cautioned against reading too much into medium-term inflation expectations from these developments. Lane explained how such increases might reflect the multi-year wage bargaining process for European trade unions or a “catching up” from slow pandemic-era wage gains, rather than a changing understanding of the ECB’s framework.

How well do market participants understand the new frameworks?

Since monetary policy transmission in both the U.S. and Euro area occurs primarily through financial conditions, it is also critical to central banks that market participants correctly interpret the new frameworks—the focus of a panel discussion at the Hutchins Center event.

Most agreed that U.S. market participants understand the Fed’s new framework and its application to the current policy environment. Said Coronado: “The fact that the effective lower bound means that [the Fed] will err on the side of being behind the curve and very outcomes-based rather than preemptive and forecast-based, that’s well understood.” Wilding agreed: “Markets are still providing the Fed a lot of credibility around its 2% inflation goal.” Although she noted an uptick in her clients’ desire to manage inflation risk in recent months, she said “the risks around [longer-term inflation expectations] are now balanced, instead of to the downside as they were previously.”

Coronado, Dudley, and Wilding all mentioned that, at least in November 2021, market projections for interest rates reflected expectations of continued Fed dovishness despite elevated inflation rates, implying the Fed’s forward guidance under the new framework has been successful. Said Dudley: “Markets are not very worried about the [inflation] scenario... the amount of policy tightening priced in is pretty modest.” (Since the November event, market expectations have become more hawkish, as have Fed officials’ projections. In the New York Fed’s surveys of [primary dealers](#) and [market participants](#) conducted prior to the December 2021 FOMC meeting, the median respondent expected two quarter-point rate hikes in 2022. The [Summary of Economic Projections](#) released after the December 2021 meeting showed the median FOMC participant anticipated three hikes.)

However, in the Euro area, Lane said that the understanding of the framework was revealed less by market-based measures than by the survey expectations of consumers and professional forecasters. He referenced a [recent supplement](#) to the ECB’s Survey of Professional Forecasters that found over three-quarters of respondents viewed the new framework as an improvement, citing the increased clarity of the ECB’s symmetric 2% inflation target.

The panelists also highlighted some areas where markets remained confused about aspects of Fed policy, especially under the current economic environment. Wilding noted ongoing confusion as to how the Fed would treat the unemployment-inflation tradeoff in the future. She said many in markets questioned how long the Fed was willing to tolerate inflation above its target, given that inflation expectations appear to be re-anchored. Wilding also mentioned uncertainty about the Fed’s behavior surrounding supply shocks and how these would fit into its framework.

Have the central banks communicated these new frameworks well?

While participants agreed that the Fed and ECB have been successful in anchoring market and consumer expectations, they also mentioned several ongoing issues related to communications. One topic of discussion was communicating under uncertainty. Bernanke noted the potential for miscommunications resulting from central banks' inability to fully explain all the possible contingencies involved with setting policy. He cited several unanticipated developments related to the pandemic that clouded the Fed's messaging in 2021, including the larger-than-expected fiscal response and supply chain problems. Bernanke also discussed the need for central banks to formally explain how they might incorporate uncertainty into their frameworks.

Still, Coronado praised the Fed's communications given the uncertainties of the pandemic: "I think the Fed has done a really good job of communicating the different thresholds that they are currently applying this cycle to tapering vs. raising interest rates. They've been trying to be nimble and fold in these unusual and unforeseen circumstances into the framework," she said. Wilding agreed, saying the Fed's communications during the pandemic have been largely clear.

Another theme that emerged was the need for central banks to better communicate how their frameworks align with the current policy environment. For example, several participants noted that the Fed's deliberate ambiguity regarding the time horizon of its inflation-averaging period made it difficult to understand how the framework would be implemented in practice. "I think that the so-called averaging period was left fuzzy when they were devising this target because, ultimately, they didn't know how much above-target inflation they would need in order to re-anchor inflation expectations," Wilding explained. She said that given current economic developments, it would be welcome for the Fed to explicitly state how much additional overshoot it would tolerate under its framework.

Bernanke, Dudley, and Şahin all mentioned that the Fed's communications are too ambiguous regarding the indicators used to define maximum employment. In particular, Şahin said the characterization of full employment in the framework as "broad-based and inclusive" was unclear, since it was not directly measurable. She discussed the Fed's ambiguity regarding the specific indicators it uses, its methods for evaluating the dispersion of these indicators across the population, and the subset of indicators that the Fed believes it can influence through monetary policy. Coronado agreed that the Fed could provide more clarity, but also acknowledged the Fed's difficulty in communicating this successfully. "There's no way you're going to delineate concrete metrics given the complexity of the global economy," she said. Clarida noted that his assessment of the labor market was summarized well by the [Kansas City Fed's Labor Market Conditions Indicators](#).

Coronado also contended that the Fed's framework focuses too heavily on interest rates and does not sufficiently discuss its toolkit at the ELB. She said, "In future iterations... I think we need to expand [the framework] to include the other pieces of the toolkit and what we know about them and how they integrate together." She explained that while current discussions surrounding the Fed have mostly focused on its tapering of asset purchases, it is still unclear how that tool fits into the Fed's framework more broadly.

What other issues about the Fed and ECB frameworks were raised?

Measuring unobservable variables

One challenge Bernanke highlighted at the event was the difficulty of measuring unobservable variables such as the natural rate of unemployment (u^* , or “u-star”) and the neutral rate of interest (r^* , or “r-star”). While these model-based quantities are important to central banks in understanding how the current stance of policy relates to their targets, uncertainty surrounding their estimation makes them difficult to rely on for policymaking. In his [speech at the Fed’s 2018 Jackson Hole conference](#), Fed Chair Jerome Powell referred to the use of these variables for policy analysis as “navigating by the stars,” saying “guiding policy by the stars in practice... has been quite challenging of late because our best assessments of the location of the stars have been changing significantly... The stars are sometimes far from where we perceive them to be.”

Participants discussed the implications of various pandemic-related developments for the behavior of r^* . Clarida referenced Bernanke’s global savings glut hypothesis and the international co-movement of interest rates, saying the neutral rate of interest is “is a global general equilibrium outcome... countries don’t have the luxury of having an independent r^* .” Lane mentioned that future developments in long-term rates in the Euro area will depend on the demand for safe assets and levels of accumulated household savings, both of which were elevated throughout the pandemic. He also explained that estimates of r^* are subject to a range of other structural factors, including demographics, inequality, productivity, and technology. Bernanke added that large pandemic-related fiscal deficits—which tend to push up government bond yields—could increase the neutral rate.

Others were more skeptical of the use of these unobservable variables to begin with. Dudley argued that the linkages between r^* and economic developments are tenuous. “Monetary policy works through its effects on financial conditions, not through short-term interest rates directly,” he said. “If the linkage between financial conditions and short-term rates is pretty flexible, just focusing on r^* is missing the forest for the trees.” Clarida acknowledged this uncertainty surrounding the use of r^* , but noted that regardless of its actual location, the Fed’s eventual rate hikes would be gradual. “The Fed is not going to go from zero to whatever its neutral view is in one meeting... there will be a time when you’re essentially ramping up until you get in the vicinity,” he said.

Evolving role of fiscal policy

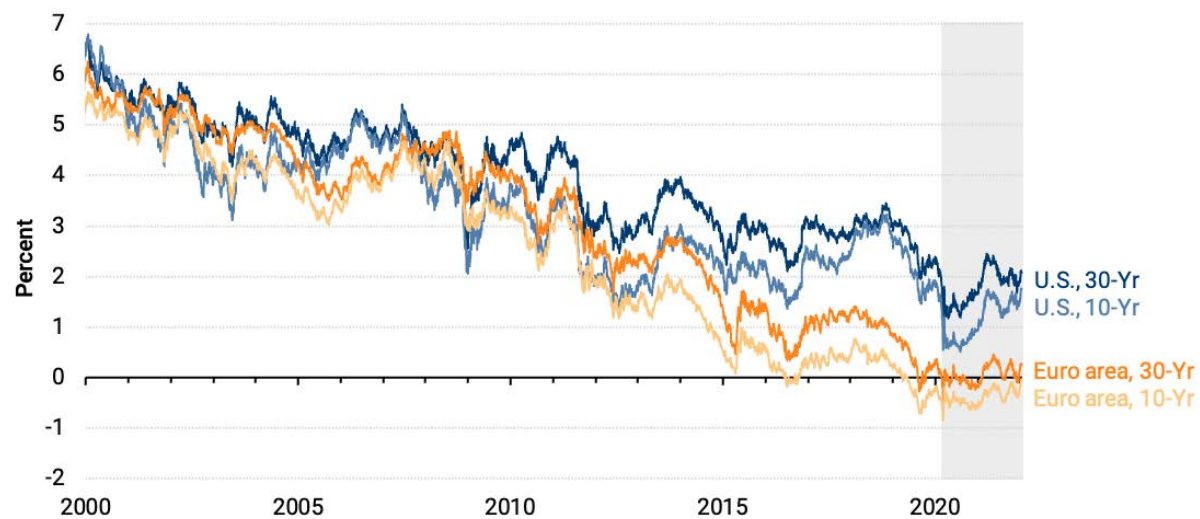
Fiscal policy (government taxation and spending) is another important consideration in Fed and ECB decision-making. Both central banks account for technical issues surrounding government debt management in their implementation of monetary policy. They also incorporate the effects of fiscal policy into their macroeconomic outlooks and occasionally advocate for the increased use of fiscal stimulus to provide economic support at the ELB.

Since one of the Fed and ECB’s primary policy tools during the pandemic has been quantitative easing—which includes large-scale purchases of government bonds—fiscal authorities’ decisions on debt issuance can impact central banks’ considerations surrounding interest rates. Given this context, Wessel asked discussants why long-term rates in the U.S. have not risen along with the increase in government spending on pandemic-era fiscal stimulus. According to a standard supply-and-demand framework,

Treasury's increased issuance of long-term debt securities to fund this spending should drive down prices on those securities, pushing up yields and increasing long-term rates across bond markets.

FIGURE 6

Long-term rates remained low during the pandemic



Source: Bloomberg LP.

Notes: Euro area yields are a composite of French and German euro-denominated fixed rate government bonds, constructed by Bloomberg.

Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

Dudley attributed this lack of movement to monetary policy. He said that the Fed's QE program has been successful in keeping long-term rates low by reducing the quantity of debt securities available to private investors. He also noted that the increase in bank reserves associated with QE has incentivized banks to search for higher yields on those reserves, driving up prices on risky assets and narrowing credit spreads. (Under QE, when the Fed purchases Treasury and mortgage-backed securities, it increases bank reserves by the corresponding amount.) According to Dudley, these two channels have allowed the Fed to offset most of the impact of the increased debt issuance on long-term rates.

The relationship between monetary and fiscal policies has become an increasing topic of discussion internationally during the COVID-19 pandemic. At least [21 global central banks](#) have engaged in QE programs during the pandemic, with many—including the Bank of England—[moving more explicitly towards central bank financing](#) of government spending. Other pandemic-related initiatives have blurred the lines between monetary and fiscal policy in both the U.S. and Euro area. For example, many of the Fed's emergency lending facilities operated with a Treasury backstop and funding from the CARES Act.

Another consideration is the ability of fiscal policy to provide stimulus even when central banks have reached the ELB. Throughout the pandemic, Powell [called for additional fiscal support](#) from Congress to support the economy. Clarida emphasized the importance of fiscal policy and his view that the Fed should incorporate it into its decision-making:

“While the ELB can be a constraint on monetary policy, the ELB is not a constraint on fiscal policy, and appropriate monetary policy under the new framework, to me, must and can incorporate this fact. Indeed, under present circumstances, I judge that the support to aggregate demand from fiscal policy, including the more than two trillion dollars in accumulated excess savings, in tandem with appropriate policy, can fully offset the constraint that the ELB imposes on [monetary policy].”

Bernanke echoed this point, saying “I think in very large recessions that fiscal assistance will be necessary; that we’re no longer in a world where monetary policy can take full responsibility for stabilization.”

Although the EU does not have a single fiscal authority, in describing the ECB’s actions at the lower bound, Lane also stressed the significance of fiscal policy in the European recovery from the pandemic. “It doesn’t hurt if fiscal adds to [the stimulus] by also being kind of cyclical,” he said. He emphasized that the ECB discussed fiscal policy considerations in its [extended outline of its monetary policy strategy](#) (Section 3.2) and published a paper on [monetary-fiscal interactions in the Euro area](#) as part of its strategy review.

Inflation measurement

While both the Fed and ECB target inflation at 2%, inflation is measured differently in the U.S. and Europe. The Fed defines its inflation target using the Personal Consumption Expenditures (PCE) price index, which is published by the Bureau of Economic Analysis (BEA)—and usually shows inflation running slightly below the rate of increase in the Consumer Price Index. The ECB uses the Harmonised Index of Consumer Prices (HICP), a composite indicator published by the European Union’s statistical agency Eurostat.

Bernanke noted that the HICP currently excludes owner-occupied housing, although the ECB and Eurostat are [planning to incorporate this into their measure](#) in the future. He also mentioned that unlike the PCE index, the HICP does not include the prices of government spending on health care and education.

Lane acknowledged these distinctions between the two inflation measures. On the planned reforms to housing, he said that the ECB wanted to incorporate the costs of home repairs and construction costs in addition to house prices (the PCE index uses an imputed measure known as [owners’ equivalent rent](#)). While he noted that this update would be a multi-year project, Lane said “there’s no doubt” that revising the HICP to align with the PCE index’s treatment of housing would yield higher inflation rates than the current data suggests.

Regarding the HICP’s treatment of health care and education, Lane emphasized that a larger fraction of spending in these areas is supplied by the public sector in Europe. He said that arguments for the inclusion of these categories in the HICP depend on one’s conceptual interpretation of inflation. Since consumers only pay for these government services indirectly through taxes, they do not reflect out-of-pocket spending by the average European, and therefore may not be relevant for cost-of-living measures. However, those who believe spending in these areas are broadly relevant to the economy might argue for their inclusion.



Hutchins Center
on Fiscal & Monetary Policy
at BROOKINGS

The mission of the Hutchins Center on Fiscal and Monetary Policy is to improve the quality and efficacy of fiscal and monetary policies and public understanding of them.

Questions about the research? Email communications@brookings.edu.
Be sure to include the title of this paper in your inquiry.