

What the Federal Reserve Should Do Now: An Elaboration

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*Paper prepared for delivery at the Peterson Institute for International Economics,
November 18, 2021*

This paper was updated February 11, 2022, to remove references to real wage growth by earnings level and an accompanying figure. The timing of the inflation adjustment used to adjust nominal wage growth was inconsistent with the timing of the nominal wage growth measures.

The US economy has not fully recovered, and continued shortfalls in employment and gross domestic product (GDP) warrant continued expansionary monetary policy. Nevertheless, the stance of monetary policy should move in a less expansionary direction as a result of three developments over the last 18 months, some of which have accelerated in the last three months. First, the unemployment rate is falling rapidly and is now where it was at the beginning of 2017 while job openings are much higher than they were then. Second, the inflation rate has risen to the highest it has been since 1990 and at least some of the elevated inflation is likely to persist. Third, monetary policy has effectively loosened over the last year—particularly as evidenced by falling real interest rates. Any one of these three developments alone should warrant shifting to a less expansionary stance for monetary policy—even if inflation ends up slowing a lot in 2022—and collectively the case is even stronger.

Under this recalibration, monetary policy would still be very expansionary; it just would not be *increasingly* expansionary and would become somewhat less expansionary over time. Moreover, monetary policy would continue to depend on data and would change based on what actually happens in the economy.

The Federal Open Market Committee (FOMC) adopted a new framework in August 2020 that was an improvement over its previous framework in that it gave monetary policy more flexibility to support the economy when constrained by the zero lower bound for interest rates as it was in the last two recessions. The Fed does not need to change its framework, but it does need to implement it based on the data we have seen to date and a more realistic outlook going forward.

I make four specific recommendations for monetary policy:

1. Express a more realistic understanding and outlook for inflation that is more symmetric in the enunciation of risks.
2. Shift the FOMC statement to emphasize that magnitudes of the shortfall from maximum employment and the deviation from the flexible average inflation target.

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3. Taper asset purchases more aggressively.
4. Set the default expectation that rates will be on an upward path starting in the first half of 2022 but that the increases will be delayed or called off if inflation and/or employment growth are meaningfully lower than expected.

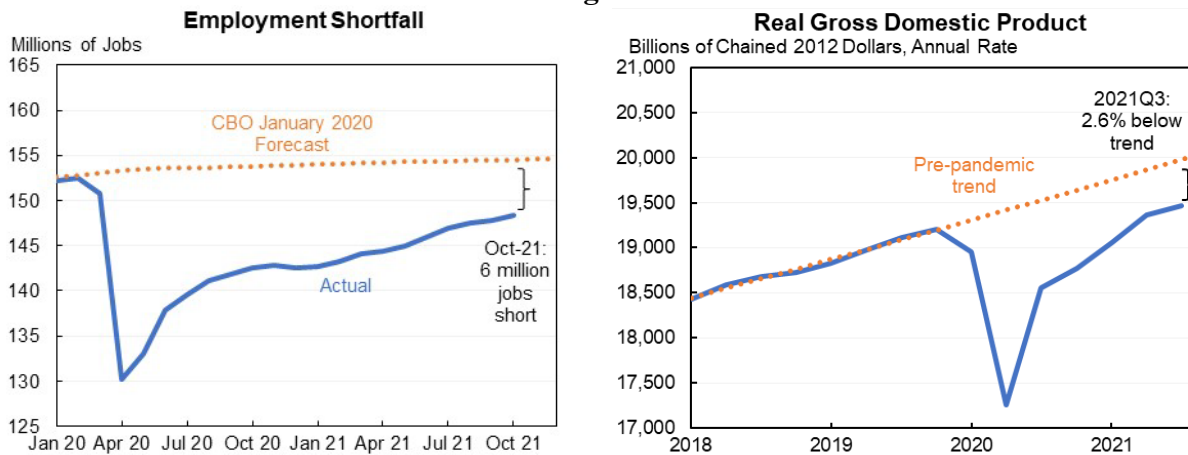
In addition to these four recommendations, the Fed should begin considering whether to raise its inflation target as part of its next framework review.

This discussion provides further motivation for these recommendations and expands on the recommendations themselves.

The Economy Has Not Fully Recovered, and Monetary Policy Should Continue to Be Expansionary

The economy is about [6 million jobs short](#) of where it was expected to be absent the pandemic, and real GDP is [more than 2 percent short](#) of its previous trend (figure 1). (The shortfall from potential may be smaller because growth likely would have slowed absent the pandemic and the effects of the pandemic likely reduced the economy’s potential.)

Figure 1



CBO = Congressional Budget Office

Note: Employment is nonfarm payroll employment, which excludes proprietors, self-employed, unpaid family or volunteer workers, farm workers, and domestic workers. Pre-pandemic trend for real GDP based on log-linear regression for 2018Q1 to 2019Q4.

Sources: Bureau of Labor Statistics and Bureau of Economic Analysis via Macrobond; Congressional Budget Office; author’s calculations.

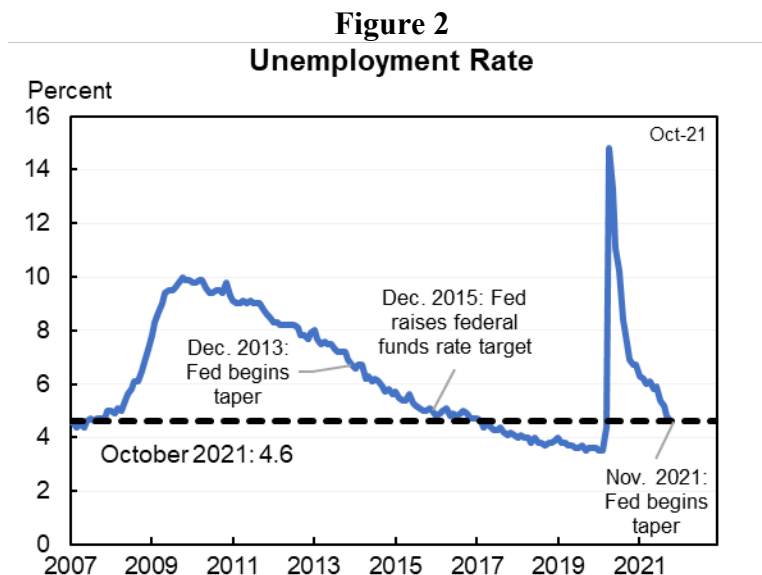
Most of the shortfall in the economy appears to be due to supply constraints associated with the time it takes to match people to jobs, the reduction in labor supply, microchip shortages, shipping bottlenecks at ports, reduced immigration, and other constraints on the level of production consumers would like. Some of the supply constraints reflect worsening supply chains associated with higher prices and lower quantities. But most of the supply chain problems are the result of increased demand coming up against supply that has increased, just not as

rapidly as demand has. At the root of these problems is the high and rising number of COVID-19 cases, which makes vaccinations the most important [economic policy](#). Monetary policy cannot do anything to address these root causes of our economic problems.

Nevertheless, monetary policy should not shift to anything resembling a neutral or even contractionary stance. Demand is strong in part due to an accommodative monetary policy; if it were removed it would be far from certain that demand could continue to stand on its own. Large abrupt changes could also dramatically increase volatility in domestic and international financial markets. Finally, it is plausible that at least some of the continued economic weakness is due to inadequate demand and continuing to support it would be welcome. In general inertial rules make sense for monetary policy in order to avoid large, abrupt shifts, and this is even more true given the tremendous uncertainty in the economy as a result of the virus, rapidly changing fiscal policy, and other developments.

The Economy Is Not at Maximum Employment, but It Is Less Far Away Than It Was

The magnitude of the employment shortfall should be relevant for policy. In October 2021 the unemployment rate was 4.6 percent, well below the 6.7 percent rate when the Fed started tapering in December 2013 or the 5.0 percent rate when it raised interest rates above zero in December 2015 (figure 2).



Source: Bureau of Labor Statistics via Macrobond.

Many have argued that the Fed lifted off prematurely in the last cycle and set expectations of further rate hikes too strongly. This view may have some merit, at least in retrospect, given how much more room the economy had before it got to maximum employment, the low inflationary pressures, and the large decline in the neutral interest rate. But one should not overstate the argument: The combination of low and falling unemployment, inflation very close to the Fed's target, strong real wage gains, and declining wage inequality from 2015 through early 2020 make it a period where the macroeconomy performed quite well. (Note,

productivity growth was weak, but that is largely outside the control of monetary policy. Relative to productivity growth, wage growth, especially for lower-paid workers, was especially strong.)

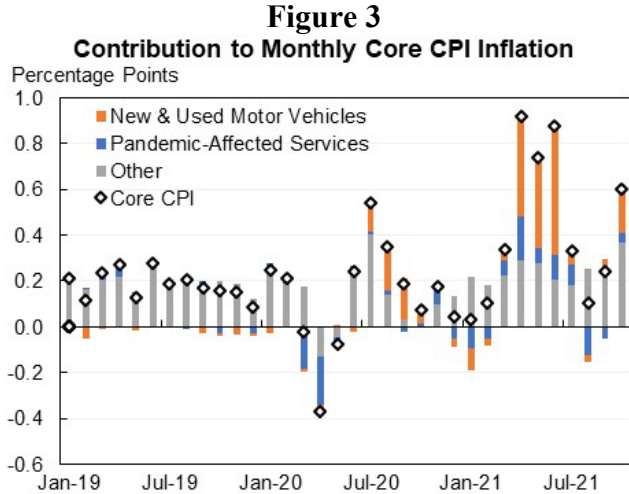
Regardless, even if the Fed was somewhat too early in lifting off in the last cycle, my recommendation is that the Fed set the default of lifting off in the first half of 2022 when the unemployment rate is likely to be even lower than the 4.6 percent it is today, likely closer to what it was in 2017 or 2018. So this set of rate hikes would be two to three years behind their timing in the last cycle.

If anything, there are a number of reasons to believe the Fed should hike sooner or larger in nominal terms this time around, including that expected inflation is higher than it was in 2015 so larger nominal increases are needed to get to the same real rate, the unemployment rate is improving much more quickly, job openings are very high so more of the unemployment is due to labor supply than to labor demand, and fiscal policy is more expansionary now than it was then. All of these reasons are before taking into account another big difference: the other part of the Fed's mandate, the much larger deviation of inflation from the Fed's target.

Inflation Has Been Very High and Is Likely to Remain Elevated for Some Time—but With Substantial Uncertainty

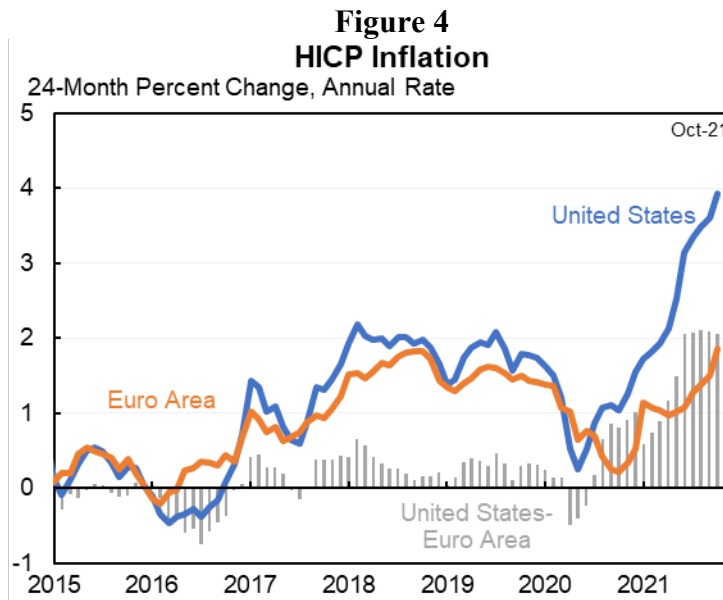
The core consumer price index (CPI), which excludes the volatile food and energy components, rose 4.6 percent over the last 12 months, the fastest pace in 30 years. Moreover, the pace has picked up over the course of the year, with prices up at a 5.9 percent annual rate over the last six months and a 7.4 percent annual rate in October. The increases in overall CPI (including food and energy) are even larger.

Inflation is likely to fall from this pace for several reasons, including the likelihood that global energy prices will eventually level off and fall, the continued handoff of consumption from goods to services, the unclogging of supply chains, and a reduction in the magnitude of expansionary fiscal policy. Auto prices, in particular, temporarily elevated inflation rates in April, May, June, and October (figure 3). But even taking out more volatile elements of inflation, the underlying remaining trend is consistent with an overall inflation rate of about 3 percent or higher and has not diminished over the course of the year.



Note: Pandemic-affected services include admissions, airfare, and hotels.
 Source: Bureau of Labor Statistics via Macrobond; author's calculations.

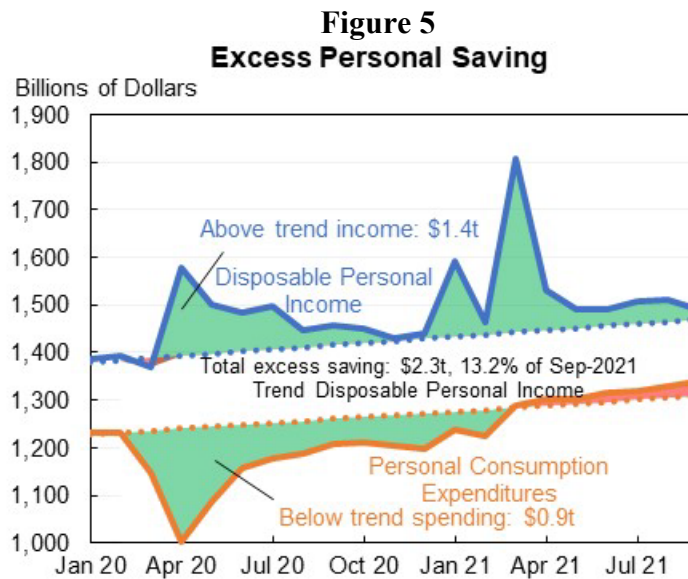
More importantly, microeconomic analysis of individual markets is better able to explain relative price changes over short periods of time than to explain sustained changes in average prices. Without sufficient demand, when prices went up in one market (e.g., for cars) it would put downward pressure on demand and prices in other markets and not necessarily change inflation very much. Overall, both the euro area and the United States have had roughly similar pandemic experiences, both have had highly expansionary macro policies as well, but the United States has undertaken a much larger fiscal expansion and has also seen 24-month inflation rates about 2 percentage points above those in the euro area at an annual rate (figure 4).



HICP = Harmonized Index of Consumer Prices
 Note: Latest value for the United States is estimate based on change in CPI for October.
 Source: Eurostat and Bureau of Labor Statistics via Macrobond; author's calculations.

Macroeconomic analysis, plus some additional microeconomic markets, provides several reasons to expect this inflation to persist at a pace well above the Federal Reserve’s 2 percent average inflation target. Specifically, the reasons to expect inflation to remain high include:

- Demand will likely remain high. The combination of \$2.3 trillion of excess saving from increased disposable income and reduced consumption (figure 5), high bank balances, the rapid appreciation of financial assets, the spendout of roughly \$500 billion in stimulus from the American Rescue Plan in the current fiscal year, extremely accommodative monetary policy, and rapidly rising total labor earnings should all contribute to continued high levels of demand in the coming year.

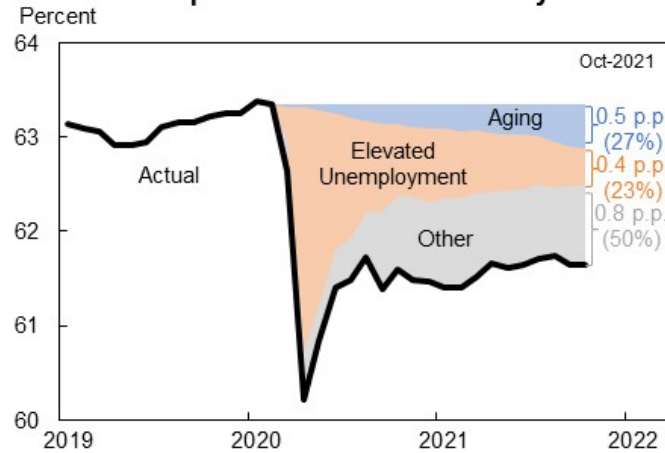


Note: Pre-pandemic trends based on log-linear regression for January 2018 to December 2019.

Source: Bureau of Economic Analysis via Macrobond; author’s calculations.

- Supply will likely remain constrained for some time. The biggest constraint on supply is low labor supply. The labor force participation rate remains 1.2 percentage point below where it would have been expected given the aging of the population (figure 6). There is substantial debate about whether this is a temporary or permanent withdrawal. I lean towards the temporary side with suggestive evidence that lingering social and psychological effects of COVID-19 are playing a big role—but regardless, it will still take some time for the workers to come back. In addition, shortages of microchips and other supply chain issues could take well into 2022 to resolve.

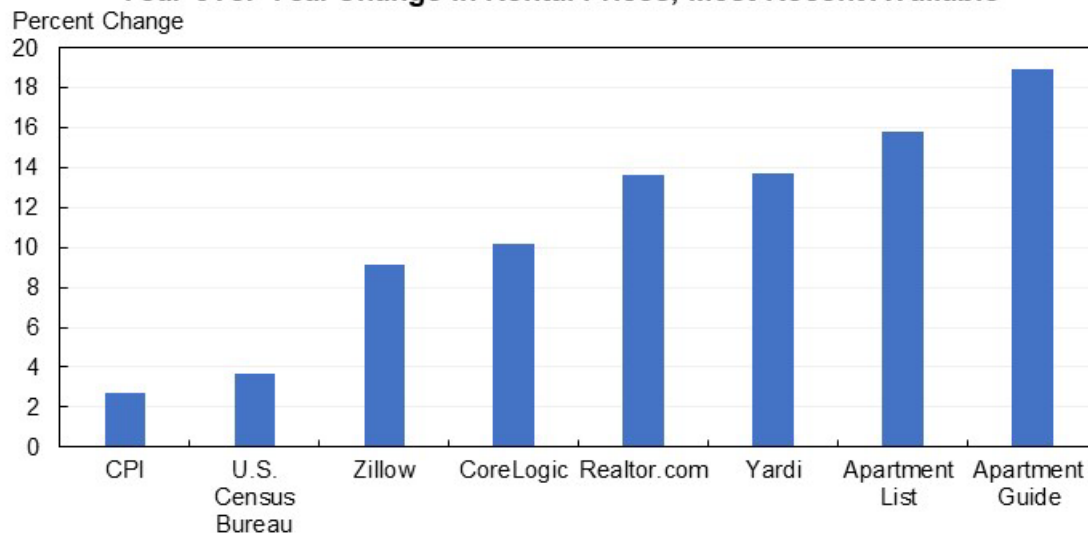
Figure 6
Decomposition of the Decline of the U.S. Labor Force Participation Rate Since February 2020



Source: Bureau of Labor Statistics via Macrobond; author's calculations.

- Prices of shelter and some other services are likely to accelerate. Shelter prices have started to pick up, rising 3.5 percent in the last 12 months, now above the 3.3 percent pace in the years leading up to the pandemic. Private indicators of both home and rental prices, which are effectively registered only with a lag in the consumer price index, suggest a big pickup in shelter prices could be coming (figure 7). Note that shelter has a much larger weight in the CPI than in the personal consumption expenditures (PCE) price index targeted by the Fed, but it plays a big role in both. Other services prices have more room to grow, especially in the short run, as Delta-wave-depressed prices for airfares increase.

Figure 7
Year-over-Year Change in Rental Prices, Most Recent Available

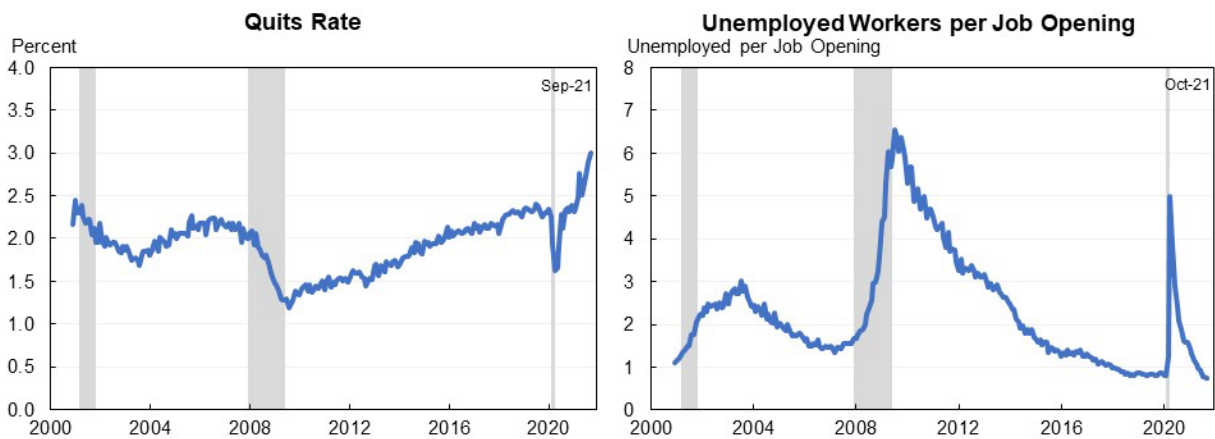


Note: Data for October 2021, except for CoreLogic, Realtor.com, and Zillow (September 2021) and US Census Bureau (2021Q3).

Sources: Apartment List National Rent Report, Bureau of Labor Statistics (CPI, Rent of Primary Residence), US Census Bureau (Median Asking Rent), Zillow Observed Rent Index via Macrobond; Apartment Guide Rent Report (2-bedroom); CoreLogic Single-Family Rent Index; Realtor.com Median Rent; Yardi Multifamily Average Asking Rents; author's calculations.

- Labor markets are very tight. Although the unemployment rate remains elevated and labor force participation remains restrained, the labor market is still very tight. The quits rate is at a record high, job openings are near a record high, and the ratio of unemployment to job openings is the lowest on record (figure 8). In the 18 years before the COVID-19 crisis the ratio of unemployment to job openings was a better predictor of the core CPI than either unemployment or prime-age (25-54) employment rates.

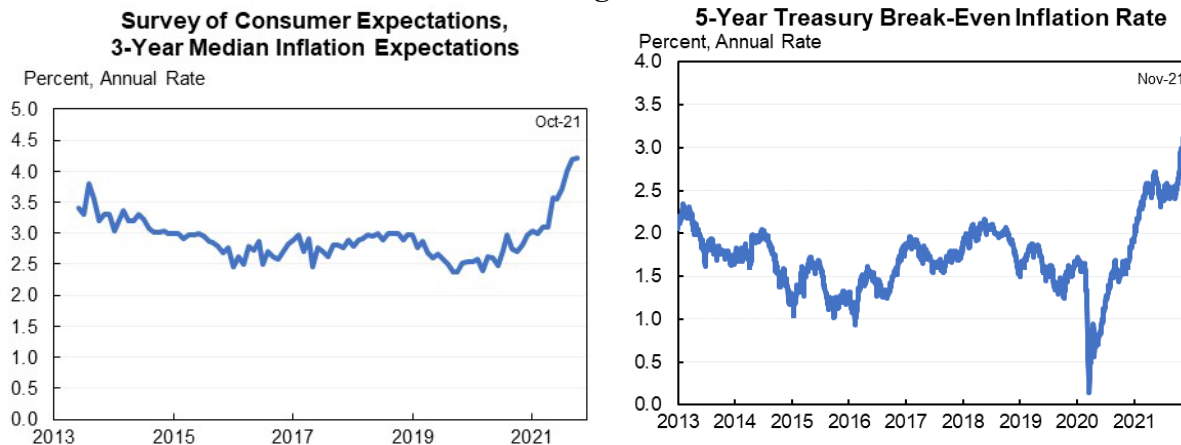
Figure 8



Sources: Bureau of Labor Statistics via Macrobond; Indeed Hiring Lab; author's calculations.

- Nominal wage growth and inflation expectations have shifted up. Normally, when the labor market is operating well below maximum employment, nominal wage growth is muted. Instead nominal wage growth today is running even [faster than its pre-pandemic trend](#). This is consistent with indicators like the very low level of unemployment relative to job openings. At the same time, a wide range of indicators of inflation expectations, at least for the next three to five years, have shifted up somewhat (figure 9). This suggests the possibility that wages may pass through to prices, and vice versa, to a greater degree than had been the case in recent decades.

Figure 9



Source: Federal Reserve Bank of New York and Board of Governors of the Federal Reserve System via Macrobond.

Inflation will likely not follow a smooth process. There could be months or multiple months when at least headline and possibly core inflation are unusually low because, for example, auto prices or oil prices are falling instead of rising. To some degree, the Fed will need to look through this transitory low inflation in the same way it never seriously considered the 10 percent annual rate of inflation in the months when auto prices were spiking. Continuing to focus at least in part on the “other” components of CPI excluding autos and pandemic-affected services is one way to avoid being misled by temporarily low or temporarily high inflation.

Substantial humility is in order. Virtually no one predicted the magnitude of inflation we have seen this year. For example, as recently as May 2021, the Survey of Professional Forecasters put a 0.5 percent chance on core PCE inflation above 4 percent this year; in August it raised the probability to a still unlikely 21 percent. Now their latest forecast predicts 4.1 percent core PCE inflation for the year. My own best guess is that core PCE inflation will be between 3 and 4 percent next year but I would not rule out 1 percent or 6 percent inflation either. I come back to this uncertainty below when I expand on my recommendations for monetary policy.

Monetary Policy Is More Accommodative than It Was a Year Ago When the Economy Was in Much Worse Shape

Monetary policy is a continuum, not simply a dichotomous setting of “tight” vs. “loose.” Moreover, monetary policy in 2020 was not at its most expansionary setting. Policymakers could have further loosened monetary policy with a faster pace of asset purchases, more aggressive forward guidance, or more radical measures—like yield curve control.

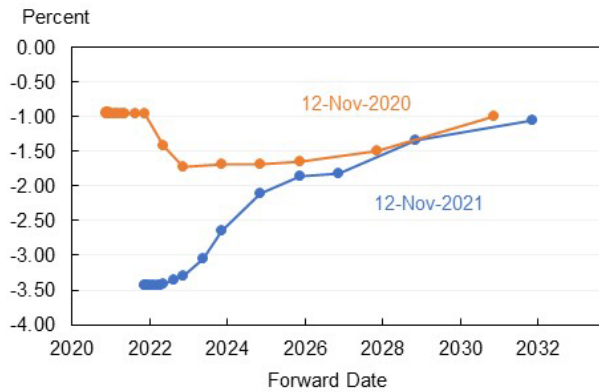
In addition, monetary policy is constantly *de facto* adjusting. Christina Romer and David Romer [argued](#), “[T]he expected (or ex ante) real interest rate...is arguably the most fundamental indicator of the stance of monetary policy.” Currently the real interest rate is considerably lower than it was at any earlier point in the COVID-19 crisis with a lot of the reduction in the real interest rate happening in the last few months. As a result, monetary policy has moved along the continuum to a considerably looser setting—the equivalent of more than a 1 percentage point reduction in the federal funds rate—even while the unemployment rate has continued to fall and the inflation rate has continued to rise.

There is no unambiguous way to measure “tightness” or “looseness” of monetary policy but here are some reasons why I would argue it is looser today than it was a year ago:

- Higher inflation and expected inflation mean the real federal funds rate is considerably lower. The Fed controls the short-run nominal interest rate but what matters in economic models is the real interest rate, which is the cost of borrowing after taking into account inflation that reduces the value of any future repayment. While the nominal federal funds rate has been unchanged over the last year, the real federal funds rate is much lower because inflation has been and is expected to be higher. Over the last year, market expectations for the nominal federal funds rate have moved up by about 50 basis points. However, this is smaller than the increase in breakeven inflation rates over this period so the real federal funds rate is forecast to be lower at nearly every horizon for the next decade (figure 10). (Note, there are considerable uncertainties in translating market prices into expectations including the pricing of risk and the choice of securities, so the forward-looking projections of policy should be taken with a large grain of salt.)

Figure 10

Expected Path of "Real" Federal Funds Rate as of November 2020 and November 2021

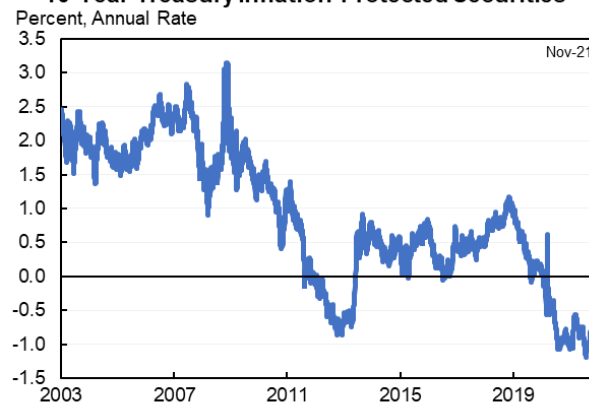


Source: Bloomberg Professional Service; author's calculations.

- Real long-term interest rates have fallen. Long-term interest rates are more closely tied to what matters for the economy, like mortgages and much business borrowing, than short-term rates. Nominal long-term interest rates are slightly higher than they were a year ago but generally lower than they were about six months ago even though the economy has continued to strengthen. More importantly, expected inflation has risen considerably so real rates are much lower. For example, the ten-year Treasury Inflation-Protected Securities (TIPS) rate, a good measure of the real cost of borrowing, has recently reached the lowest rate since its inception in 1997 (figure 11).

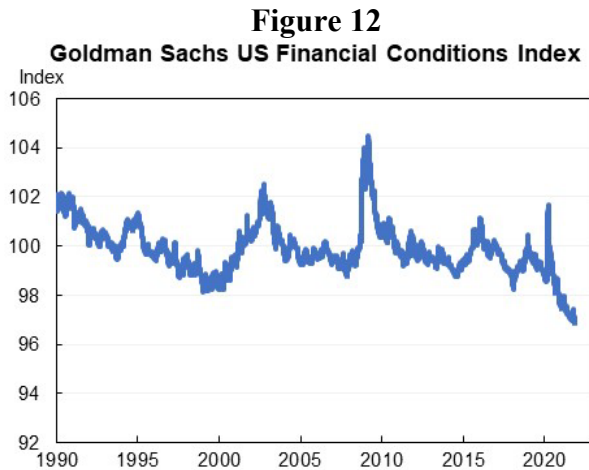
Figure 11

10-Year Treasury Inflation-Protected Securities



Source: Board of Governors of the Federal Reserve System via Macrobond.

- Indices of overall financial conditions are increasingly accommodative. Goldman Sachs produces the widely cited Financial Conditions Index, which combines information on riskless interest rates, the exchange rate, equity valuations, and credit spreads. It has fallen by about 1 index point over the last 12 months, which is the equivalent of more than a 1 percentage point reduction in the federal funds rate (figure 12).



Source: Goldman Sachs Investment Research.

Four Steps the Federal Reserve Should Take Now

The Federal Reserve should take four steps that together would keep monetary policy very expansionary but not as expansionary as it has been recently. All four of these steps are consistent with the framework the FOMC announced in August 2020. In some cases I would argue they are more consistent with that framework than recent FOMC policy pronouncements. All of these steps should be implemented with great humility about the tremendous degree of uncertainty about the economic outlook.

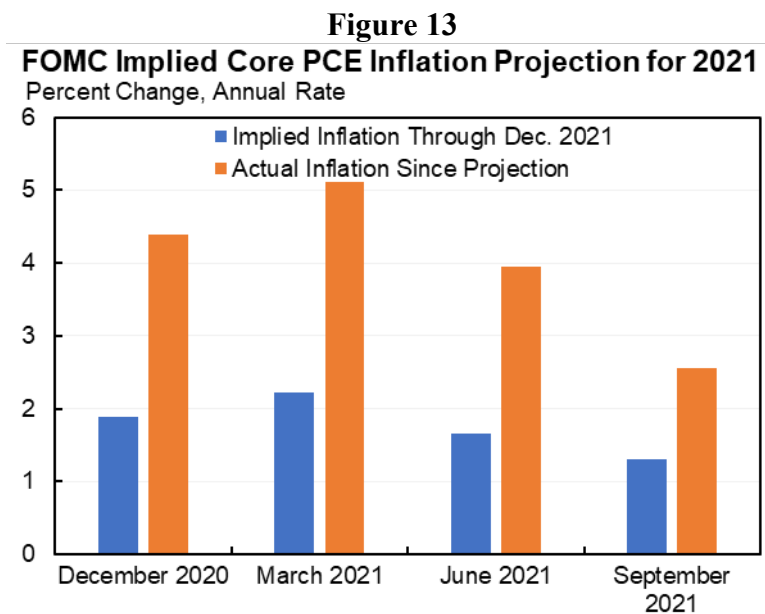
Part of the reason to take these steps now is that monetary policy operates with long and variable lags. The increasing accommodation of monetary policy over the last year will continue to place upward pressure on inflation over the next year or two. Acting sooner would undo some of that upward pressure but the effect would mostly take hold slowly. The unemployment rate is already 4.6 percent and falling; by the time these measures start to affect the macroeconomy the unemployment rate is likely to be even lower—and the underlying macroeconomic inflationary pressures even higher.

1. Shift its messaging and forecasts for inflation towards a more neutral or concerned tone

US monetary policy is set by a committee, and the different members of that committee each have their own expectations for the future of the economy and their own ways of communicating those expectations. The most important public voice, of course, is the Chair. In August, Chair Jerome Powell gave a [speech](#) that was a case for inflation being transitory. Many of the arguments and data points he cited have since shifted against the argument he made at that time.

At the time, however, Chair Powell’s views were consistent with the views of the median member of the FOMC. In its September Summary of Economic Projections, the median FOMC member implicitly forecast an average 0.1 percent monthly rate (or 1.3 percent annualized rate) for the core PCE price index for the remainder of the year. This continues a pattern of the median FOMC forecast expecting inflation for the remainder of 2021 to be at or below a 2 percent

annualized rate while it has persistently been above that rate (figure 13)—forecast errors that were consistent with the best judgments of economic forecasters over the course of the year.



FOMC = Federal Open Market Committee; PCE = personal consumption expenditures
Note: Actual inflation since projection through September 2021. Assumes that actual values were known through month prior to forecast.

Sources: Bureau of Economic Analysis via Macrobond and via Federal Reserve Bank of St. Louis, ALFRED; Board of Governors of the Federal Reserve System; author's calculations.

In some cases, this is because of developments that would have been difficult to anticipate, but in many cases, it was a failure to appreciate the overall macroeconomic interpretation of inflation and an associated wishful thinking that all of the factors temporarily driving inflation up would go away while no new ones would emerge.

Recently the tone of Chair Powell and other Fed speakers has begun to express a greater degree of agnosticism about the pace with which inflation will return to normal. The Fed does not need to convey that inflation will definitely persist for a substantial period—even if that is my own best guess, it is enormously uncertain and the Fed staff understands inflation far better than I do. But at a minimum, Fed speakers should continue to shift towards a more balanced set of worries instead of continuing to make the case that inflation will be transitory.

The Fed's new [framework](#) was intended to move policy away from relying on forecasts and instead basing it on actual data. This was motivated by the many times in the past decade its models predicted inflation increases that never materialized. Ironically, the Fed is now once again relying on forecasts as a basis of policy—although this time their forecasts assume inflation will fall. Shifting towards a more symmetric outlook for inflation would move the Fed closer to the spirit of the new framework by placing less weight on what they think might happen and more weight on what actually has happened.

2. Provide more clarity about how it will handle conflicts in its mandates

The FOMC's August 2020 framework stated:

“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.”

Since September 2020, every FOMC post-meeting statement has included the same language operationalizing that broader approach:

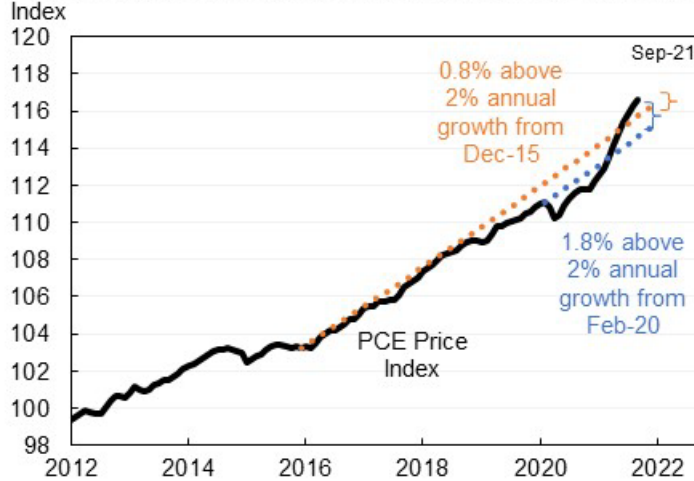
“The Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and expects it will be appropriate to maintain this target range until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time.”

Effectively, the FOMC's post-meeting statements are not based on a tradeoff between two continuous variables that measure how far employment and inflation are from their goals. Instead, these goals have been effectively treated dichotomously, employment is either “at maximum employment” or “not at maximum employment” and inflation has been viewed similarly.

As long as the inflation rate did not begin to pick up until after the economy achieved maximum employment (the “generally complementary” case), this would not have been an issue. But inflation has risen rapidly even before the economy is at what is plausibly maximum employment. As a result it has become critical to look at the magnitude of the employment shortfall and inflation deviation.

Specifically, the FOMC's two inflation conditions are currently being met and greatly exceeded. Inflation has risen well above 2 percent. On a going forward basis, most expectations are now for at least a moderate overshoot for at least the next five years. The backward-looking interpretation of Flexible Average Inflation Targeting (FAIT) has already been met as the annualized PCE inflation rate has been 3.1 percent since February 2020 (the period used to assess [Temporary Price Level Targeting](#)) and even exceeds 2 percent going back to earlier dates like the end of 2015 (figure 14).

Figure 14
Personal Consumption Expenditures Price Index



Source: Bureau of Economic Analysis via Macrobond; author's calculations.

The FOMC has not clearly defined what “maximum employment” means. Overall, the employment situation is better than it was at the beginning of 2017 with a slightly lower unemployment rate, slightly higher prime-age employment-population ratio and labor force participation, but much higher job openings. Moreover, these labor market indicators have been improving relatively rapidly. The economy was almost certainly not at maximum employment in the beginning of 2017, and it is likely not there now either—but it is much closer than it was last year.

The three-part test articulated in recent FOMC policy statements does not, however, provide any room to consider the magnitude of the differences from the Fed’s goals. The fact that the economy is not expected to be at maximum employment for the next year (a view I share) overrides any consideration about how far inflation is from its goal. Taken literally, the Fed’s statement implies that it would not liftoff in the face of a 10 percent inflation rate if the unemployment rate was even 0.2 percentage point above its full employment level.

The Federal Reserve Chair and others have failed to provide clarity about how the Fed would handle a situation in which the different indicators were sending different signals because they have essentially denied that such a situation was likely to happen. But it is happening, in a big way, and additional clarity is needed.

The issue of using essentially a dichotomous test for policy is compounded by the FOMC’s shift in the timing of its policy. Historically the Fed did not lower rates all the way to zero even when it was short of its objective and started raising rates as it got closer to its objective with the goal of something like neutral policy when it was at its objective. By starting liftoff after its goals are fully achieved, the Fed is effectively saying it will keep monetary policy expansionary for a year or two after its objective is achieved, assuming it takes that long to raise rates. While the Fed has raised rates too much too soon in the past, this alternative timing may result in the opposite error, especially when combined with the dichotomous tests it is using.

Going forward the FOMC should be clear that it considers not whether its three tests are met simultaneously but the comparative magnitude and likely duration of the deviations of the economy from its employment and inflation goals.

I would recommend the FOMC put much more weight on its employment goal than its inflation goal than would be called for in a traditional Taylor Rule, but its policy decisions should reflect, in some way, the difference of both variables from their goals. (In fact, even based on forecasts available as of early September, rates should have been positive in 2021Q3 on the basis of [virtually any Taylor Rule](#) or [nominal GDP targeting](#).)

3. Taper asset purchases more quickly

Asset purchases are likely expansionary monetary policy whether they are \$120 billion a month or \$60 billion a month. Policy should not be shifting to a more expansionary stance given the state of the economy. If the Fed reduces its asset purchases by \$15 billion a month, that would mean an additional \$420 billion in asset purchases—equivalent to a further roughly 25 basis point reduction of the federal funds rate under the rule of thumb developed by [Joseph Gagnon and Brian Sack](#).

At least in hindsight it would have been better to be halting asset purchases around now instead of just starting to taper them. Given the expectations that the Fed has set, however, an abrupt cessation of asset purchases would be too surprising to the market and risk unnecessary volatility. Given the updated inflation and employment data, the Fed should accelerate its taper starting around January 2022 with the aim of ending asset purchases by March. This would mean both that policy is not increasingly accommodative and it would create more space for earlier rate hikes.

4. Shift the default to a path of rate increases starting in the first half of 2022

Right now, the Fed appears to be saying that it expects inflation to be transitory, but it might lift off sooner if inflation proves more persistent. The market has increasingly discounted that assurance, pricing in two rate hikes in 2022. But there is a risk of extra volatility when market expectations are very disconnected from Fed pronouncements. Two rate hikes in 2022 also may not be enough to keep inflation in check. More may be needed given that employment is no longer as far from maximum as it was in 2020 and also that real interest rates have turned sharply negative.

The Fed would be better off by shifting its expectations for rate hikes in line with my first two recommendations that the Fed shift its framing of the inflation outlook and be explicit about how it would handle tradeoffs between its different objectives. Specifically, it should set the expectation that it will be raising rates multiple times in 2022 unless inflation slows markedly and/or the labor market starts deteriorating—both of which are possible given the potential for further disruption from COVID-19 or other unexpected developments. This should not be a predetermined path, the Fed's policy should be data dependent not time dependent. The virus could mutate leading to deteriorating employment or inflation could rapidly move down to a

much lower level. In either of those cases or many other contingencies the Fed should delay or cancel liftoff and further rate hikes.

Shifting the default would also be consistent with the FOMC's monetary policy framework. It would be based on the actual inflation seen to date, not a model predicting higher or lower future inflation. Moreover, while some of that inflation is due to supply shocks the Fed should not offset, like the rise in the global price of oil and gas and microchip shortages, much of the inflation is due to increased demand as evidenced by the combination of increased prices and quantities and the fact that many aspects of the supply chain, like shipping, are processing substantially higher volumes than they were two years ago. Just because part of the increase in inflation is due to reduced supply does not mean that the Fed should disregard it entirely. What are often called "supply shocks" are actually high demand, especially in sectors like housing.

The combination of these four steps would hopefully at least stop the loosening of financial conditions that has occurred over the last year and would start to make financial conditions even less loose going forward—but they would still be very loose.

The Federal Reserve Should Be Actively Considering a Higher Inflation Target for Its Next Framework Review

I have long favored raising the inflation target. The long-standing argument for a higher inflation target is that it would "grease the wheels" of the labor market by enabling more real wage reductions in recessions when nominal wages are constrained by downward wage rigidity. If combined with adequate support for demand from fiscal or monetary policy, this would enable [more rapid recoveries from recessions](#).

The argument for a higher inflation target has taken on increased urgency as the neutral real interest rate has fallen over time, leaving the Fed with much less space to cut rates during recessions before it hits the effective lower bound. Giving the Fed more room for a negative real rate would also help [speed recoveries](#).

A higher inflation target would be steady and predictable, built into expectations, and thus not affect real wages or other real variables over longer periods of time. As such, it is different from the unexpected, temporarily high inflation the United States has been experiencing. Even then, however, it would still entail some increased economic costs and could be politically unpopular if inflation became more salient.

In the Federal Reserve's next framework review, which it plans to do every five years, it should seriously consider raising its inflation target, to either a 2 to 3 percent range or a symmetric 3 percent target. Over time depending on how that worked and what other countries did, an even higher target could be warranted.

It is, however, tricky to change the goals for policy in the middle of an economic episode like today's. It would create confusing signals and risk making it seem like a new longer-term strategy was just a short-term exigency. As a result, the Fed should be contemplating this shift,

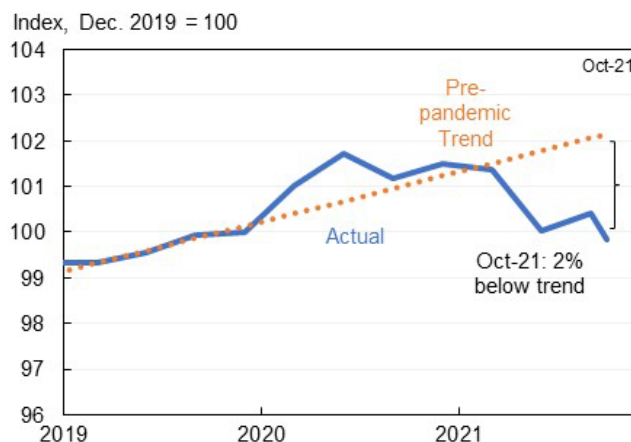
but carefully. Note, even with the monetary policy steps outlined above it is very plausible that inflation will remain in the 2 to 3 percent range for a number of years.

Why Bother Making Monetary Policy Less Loose?

I am and have always been much more concerned about employment than inflation. I am a strong supporter of a hot economy and have pushed specifically for achieving one through more [expansionary fiscal policy](#). There are, however, risks associated with heating the economy too much, too quickly, especially through monetary policy, and we appear to be seeing some of these risks now. These risks include:

1. More of the expansion may manifest itself as price increases than as improvements in output and employment. To the degree the economy is supply-constrained by COVID-19, trucking and ports that cannot expand as rapidly as desired, and deterioration in the supply chains for microchips and other critical inputs, then increased purchasing power and demand will manifest themselves more in the form of higher prices than higher quantities—making the policy tradeoff worse than it would be in a more demand-constrained economy.
2. Surprising inflation hurts real wages. Real wages have fallen since the onset of the recession as wage growth has been outstripped by price growth (figure 15). This is the result of the surprising increase in inflation. With consumer prices up more than 6 percent in the last year, how many workers will be getting a 7 percent raise from their bosses to compensate for inflation instead of their usual 3 percent raise? Note that while real wage declines can speed the return of employment when demand for labor is low, with record job openings, they are not playing that same critical role.

Figure 15
Real Employment Cost Index, Wages & Salaries for All Private Workers

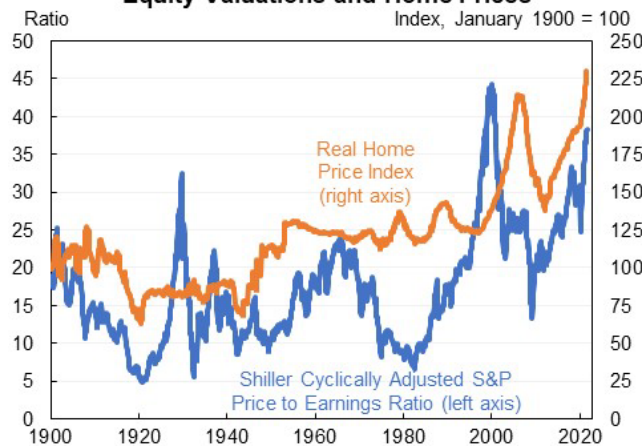


Note: Pre-pandemic trend based on log-linear regression for March 2018 to December 2019. Employment Cost Index after September 2021 extended using change in average hourly earnings for all private workers. Deflated by consumer price index.
 Source: Bureau of Labor Statistics via Macrobond; author's calculations.

3. If there was a hard landing it would hurt vulnerable workers the most. A hot economy helps vulnerable workers the most. But a recession hurts vulnerable workers the most and the pain of recessions is much larger and longer lasting than the gains from a marginally hotter economy. Slowing inflation a little now could help obviate the need for even more drastic and painful steps in the future—and reduce the chances of a future recession during which millions of jobs could be lost.

4. Low interest rates have risks. Low interest rates contribute to bubbles and instability in financial markets and banks. Currently both equity valuations and home prices are at or near record levels (figure 16). Absent vigorous fiscal policy and other sources of demand I have generally believed that the pros of expansionary monetary policy for demand outweighed the cons for financial stability. But one of the arguments for vigorous fiscal policy was precisely to obviate the need to make this painful tradeoff in the first place.

Figure 16
Equity Valuations and Home Prices



Note: Real Home Price Index is S&P Case-Shiller National Home Price Index deflated by Consumer Price Index.
Sources: S&P, Robert Shiller, and Bureau of Labor Statistics via Macrobond; author's calculations.

5. Disconnects between market expectations and likely FOMC actions cause unnecessary volatility. The Fed could always keep its current expectation of low rates and then change if inflation ended up higher than expected. The problem is that markets do not know what the Fed would actually do if inflation was higher but maximum employment had not been reached. Currently the market expects two rate hikes in 2022, but not because the Fed has telegraphed that they will happen. Although this is likely not a major problem, it is an unnecessary one. A more predictable reaction function and more accurate forecasts would help reduce some of the disconnect and the additional volatility they cause for the economy.

Conclusion

Monetary policy should continue to be expansionary. But monetary policy is not a dichotomous setting based on dichotomous variables. Policymakers must choose *how* expansionary policy should be along a continuum and that setting should depend on how far the economy is from its goals.

Even most of the economic policy commentators who emphasize (correctly) how the economy remains short of where it should be are not calling for an increase in asset purchases to \$200 billion a month. *Everyone* in the monetary policy debate implicitly supports setting monetary policy in one place along a continuum and has implicitly ruled out some policies as too expansionary and other policies as insufficiently expansionary.

Picking the right place on this continuum is challenging given the massive uncertainty about the economy. The many wrong forecasts this past year, and I have made many wrong ones myself, are forgivable given the normal difficulties of predicting the very complex mechanism of the economy. And these difficulties are vastly exacerbated by the unprecedented situation we are in right now. What is less forgivable is being too confident about what will happen by not being explicit about how large the confidence interval is on the range of future possibilities and the implications of this uncertainty for policy.

The employment situation today is better than it was in the beginning of 2017 and has been improving much more rapidly now than it was then. The inflation rate, however, is much higher than it was then. So, if anything, monetary policy should be tighter than what it *ought* to have been in the beginning of 2017.

At the beginning of 2017 the real federal funds rate was around -1.5 percent and the ten-year real rate was 0.4 percent. In retrospect, policy was too tight and the economy was further from maximum employment than many policymakers, myself included, appreciated. Today policy is *much* looser than it was in the beginning of 2017 with the real federal funds rate at -4.3 percent and the real ten-year Treasury bond rate at -1.0 percent. Assuming the unemployment rate continues to fall, this will prove to be a much larger correction for the error of 2017 than is likely warranted, especially given the higher inflation rate.

Based on what has actually happened to date the case is very strong that monetary policy should not be *more* expansionary than it was a year ago and should not continue to push in an even more expansionary direction over the next six months. The exact magnitude of a recalibration is, however, uncertain. That is why it makes sense for the Fed to proceed slowly and carefully, making only smaller adjustments that are dependent on the data.

To make this work, the Fed needs to make more realistic and accurate forecasts and also be clearer about how it will react to data like continued high inflation even while employment is short of its maximum.

At the same time, it is important to not forget that the structure of the economy has changed a lot in recent decades. The neutral interest rate is lower so there is not much scope or need to raise rates to high levels. The economy has suffered from a chronic shortage of demand and below target inflation. We should not go back to those circumstances. But fiscal policy is much more expansionary today than it has been, which has taken pressure off monetary policy and low interest rates to be the sole solution to inadequate demand. Monetary policy should take into account that change in fiscal policy—in doing so, this will produce a healthier balance that

supports investments in key priorities while minimizing the downsides and bad side-effects associated with low interest rates.

The Fed is the principal body to control both inflation and employment because it is nimble, able to reverse policy in response to new data, and is technocratic. Fiscal policy governed by Congress has none of these attributes, which is a big part of why it should remain focused on the medium- and longer-term chronic challenges facing the country while leaving the Fed to help continue to usher the economy towards maximum employment while reducing the pressures on inflation and helping to ensure a stable, durable recovery. With extremely high levels of uncertainty, it is impossible for the Fed to get everything right in retrospect. The key is to continue to adjust as necessary. At this point, an adjustment is clearly needed.