year and in 2023, and the unemployment rate to drop below 3% this year. He also discussed rising housing prices and mortgage rates, and the economic impact of the war in Ukraine and its possible effect on global trade.

Having trouble with the video? [Watch it here.](https://www.cfr.org/event/c-peter-mccolough-series-international-economics-james-bullard)

- **April 7, 2022**. Presentation. "Is the Fed behind the Curve? Two Interpretations," University of Missouri, Columbia, Mo.
  Presentation (pdf) (bullard-mizzou-07-apr-2022pdf) | Press Release | Video (offsite) | Photos.

  Is the Fed behind the Curve? Two Interpretations

  April 7, 2022

  [Presentation (PDF)](https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/files/pdfs/bullard/remarks/2022/apr/bullard-mizzou-07-apr-2022.pdf)[Press Release](https://www.stlouisfed.org/news-releases/2022/04/07/bullard-discusses-is-the-fed-behind-the-curve)[Video (offsite)](https://umsystem.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=ac2202ca-aee9-44f9-8a64-ae7000edf550)[Photos](https://www.stlouisfed.org#photos)

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St. Louis Fed's Bullard Discusses "Is the Fed behind the Curve? Two Interpretations"

COLUMBIA, Mo. –[Is the Fed behind the Curve? Two Interpretations (PDF)](https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/files/pdfs/bullard/remarks/2022/apr/bullard-mizzou-07-apr-2022.pdf)

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"However, all is not lost. Modern central banks are more credible than their 1970s counterparts and use forward guidance," he said. "Credible forward guidance means market interest rates have increased substantially in advance of tangible Fed action. This provides another definition of 'behind the curve,' and the Fed is not as far behind based on this definition."

The U.S. Economy Is Still Booming

Bullard noted that U.S. real GDP grew at a 5.5% rate in 2021 and that the most recent forecasts in the Federal Open Market Committee's (FOMC) Summary of Economic Projections suggest real GDP will continue to grow at "a slower but still robust 2.8% pace in 2022," despite an anticipated relatively weak first-quarter reading due to omicron and the Russia-Ukraine war.

He also noted that labor markets are robust and are likely to improve further in 2022. The U.S. unemployment rate has fallen to 3.6% and will likely fall below 3% later this year, which has not occurred since the 1950s, he pointed out. "This would make the U.S. labor market one of the best in the entire post-World War II era," Bullard said.

"The expansion is not 'old' and can continue for a long time," he added.

Core Inflation Is Comparable to 1974 and 1983
One measure of inflation that the FOMC uses is core PCE (personal consumption expenditures price index) inflation, which is currently 5.4% measured from one year earlier, Bullard noted. He discussed two other times since 1960 when core PCE inflation was similar to today's level: 1974 and 1983.

The 1974 FOMC liked to talk about nonmonetary factors affecting inflation, Bullard said. At that time, the FOMC kept the policy rate relatively low in the face of rising inflation, and, he noted, the associated ex-post real interest rate was relatively low. The subsequent experience was that core PCE inflation was above 5.4% for nearly 10 years, he said, adding that the real economy was volatile and experienced multiple recessions.

By comparison, the 1983 FOMC had a different approach to monetary policy and spoke more about monetary factors affecting inflation, Bullard said. The FOMC kept the policy rate relatively high in the face of declining inflation, and the associated ex-post real interest rate was relatively high, he pointed out. In this case, the subsequent experience was that core PCE inflation was below 5.4% for the next 10 years, and the real economy also stabilized with no recession until 1990-91, Bullard noted.

“The contrast between the 1974 and 1983 experiences convinced many that it was important to avoid getting ‘behind the curve’ on inflation,” he said.

The First Interpretation of “Behind the Curve”

Bullard noted that the FOMC’s inflation target of 2% is stated in terms of headline PCE inflation (which was 6.4% in February) and that some argue the Fed should consider core PCE inflation (which was 5.4% for that period) instead, given particularly large movements in food and energy prices recently. Still others might argue that the truly persistent factors driving inflation are better captured by the Dallas Fed trimmed mean inflation rate, he said, which was 3.6% in February.

In Bullard’s calculations, he used the Dallas Fed trimmed mean value—along with other “generous assumptions”—to give a minimal recommended value for the policy rate under current macroeconomic conditions. Comparing that rate to the actual policy rate provides a measure of the degree to which U.S. monetary policy is “behind the curve,” he explained.

The recommended policy rate from Bullard’s simple Taylor-type policy rule calculation is 3.5%, while the current value of the policy rate is 37.5 basis points. “One concludes that the current policy rate is too low by about 300 basis points, according to this calculation,” Bullard said.

The Second Interpretation of “Behind the Curve”

Bullard reiterated that modern central banks have more credibility than they did in the 1970s and they also make more use of forward guidance. “As a result, indications of future policy rate increases are incorporated into current financial market pricing, before policy actions are taken,” he said.

In light of the Fed’s forward guidance since the fourth quarter of 2021, the 2-year Treasury yield may provide a better representation of where Fed policy is likely to be in the near future, Bullard said. The value of the 2-year Treasury yield on April 4 was 2.43%, about 100 basis points shy of the rate recommended in the simple Taylor-type rule calculation, he said. “This suggests the Fed is not as far ‘behind the curve,’ although it would still have to raise the policy rate to ratify the forward guidance,” Bullard said.

He emphasized that the recommended policy rate of 3.5% from the Taylor-type rule calculation involved some choices, and that a higher value for the real interest rate (“R-star”) or a broader definition of inflation would lead to the rule recommending a much higher value for the policy rate. “Therefore, the second interpretation probably still leaves the Fed behind the curve but by less than it appears based on the first interpretation,” he said.

Risks to Inflation and Growth
Bullard noted that inflation expectations are rising, according to TIPS (Treasury Inflation-Protected Securities) markets, with the 5-year inflation compensation measure at 3.31% on April 5. “The current divergence between actual inflation readings and TIPS-based expected inflation will have to be resolved, possibly resulting in still higher inflation expectations,” he said.

Regarding yield curve issues, Bullard noted that the nominal yield curve based on the 10-year Treasury yield minus 2-year Treasury yield has been inverted in some recent trading sessions. “This market-based signal has been an accurate predictor of recessions in the postwar data, and so it must be taken seriously,” he said. However, he added that the 10-year yield may currently be somewhat depressed due to several factors.

Finally, Bullard discussed risks to the growth forecast. He noted that developments in the Russia-Ukraine war will have to be monitored closely but will likely impact Europe more directly than the U.S. He also noted that global energy markets will be impacted over the short-to-medium term, which may lead to increased U.S. oil and natural gas production. In addition, he pointed out that the omicron wave of the pandemic appears to be fading, suggesting further reopening of the U.S. economy in the second and third quarters of 2022.

James Bullard

James Bullard served as president and CEO of the Federal Reserve Bank of St. Louis from April 1, 2008, to July 13, 2023. In this capacity, he oversaw the

activities of the Eighth Federal Reserve District and was a participant on the FOMC.

For media inquiries
1. Office: (314) 444-6166Cell: (314) 348-3639

Resources from Former President Jim Bullard

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- **March 29, 2022**. Article. "Why Removing Monetary Policy Accommodation Is Necessary," Federal Reserve Bank of St. Louis *Regional Economist*, March 2022.

  Why Removing Monetary Policy Accommodation Is Necessary

  During the COVID-19 recession, the Federal Open Market Committee (FOMC) reduced the target range for the federal funds rate to near zero and began large purchases of U.S. Treasury securities and agency mortgage-backed securities. Although the recession ended nearly two years ago, U.S. monetary policy settings remain set near peak accommodation—with the policy rate only 0.25 percentage points higher now and the size of the Fed's balance sheet at nearly $9 trillion.

  The Federal Reserve has a mandate to promote maximum employment and price stability. The labor market has fully recovered from the recession by nearly every measure, and it has gone beyond pre-recession levels by several measures. Moreover, inflation is running well above the 2% rate that the FOMC equates with price stability, and monetary policy has not been reset for these macroeconomic conditions. That is why it is necessary for the FOMC to remove monetary policy accommodation.See my related presentation on March 2, 2022, " [Removing Monetary Policy Accommodation](https://www.stlouisfed.org/from-the-president/speeches-and-presentations/2022/removing-monetary-policy-accommodation)

  U.S. Economy in Expansion Phase