Bullard also addressed another long-standing issue in macroeconomics, which is how to think about parameter uncertainty, or more broadly, model uncertainty. The established view is that when model parameters are in doubt, policy should be more cautious than otherwise. In contrast, recent work suggested that in some cases of model uncertainty, policymakers may want to be more aggressive than otherwise. “This remains an important unresolved issue, but how to handle parameter uncertainty has been a concern for the FOMC for years,” he said.

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  Presentation (pdf) (bullard_real_return_xii_nyc_5_sept_2018pdf) | Press Release.

  How to Extend the U.S. Expansion: A Suggestion

  September 5, 2018

  [Presentation (pdf)](https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/files/pdfs/bullard/remarks/2018/bullard_real_return_xii_nyc_5_sept_2018.pdf)| [Press Release](https://www.stlouisfed.org/news-releases/2018/09/05/bullard-extend-us-expansion)

  In New York, St. Louis Fed President James Bullard laid out a possible strategy for extending the U.S. economic expansion. The strategy relies on placing more weight on financial market signals, such as the slope of the yield curve and market-based inflation expectations, than is customary. He noted that many current approaches to monetary policy strategy continue to

overemphasize the now-defunct empirics of the Phillips curve, whose inflation-unemployment relationship has largely broken down over the past two decades. “Handled properly, current financial market information can provide the basis for a better forward-looking monetary policy strategy,” he said. He also noted that these signals could help the FOMC better identify the neutral policy rate. “The flattening yield curve and subdued market-based inflation expectations suggest that the current monetary policy stance is already neutral or possibly somewhat restrictive,” he said.

St. Louis Fed's Bullard Suggests a Way to Extend the U.S. Expansion

NEW YORK – Federal Reserve Bank of St. Louis President James Bullard gave remarks Wednesday titled [“How to Extend the U.S. Expansion: A Suggestion”](https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/files/pdfs/bullard/remarks/2018/bullard_real_return_xii_nyc_5_sept_2018.pdf)at the Real Return XII: The Inflation-Linked Products Conference 2018.

In his talk, Bullard laid out a possible strategy for extending the U.S. economic expansion—one that relies on placing more weight on financial market signals, such as the slope of the yield curve and market-based inflation expectations, than has been customary in past U.S. monetary policy strategy. He explained that the empirical relationship between inflation and unemployment has largely broken down over the last two decades and that many current approaches to monetary policy strategy continue to overemphasize the now-defunct empirics of the Phillips curve.

“U.S. monetary policymakers should put more weight than usual on financial market signals in the current macroeconomic environment due to the breakdown of the empirical Phillips curve,” he said. “Handled properly, current financial market information can provide the basis for a better forward-looking monetary policy strategy.”

He also noted that these signals could help the Federal Open Market Committee (FOMC) better identify the neutral policy rate.

“The flattening yield curve and subdued market-based inflation expectations suggest that the current monetary policy stance is already neutral or possibly somewhat restrictive,” Bullard said.

The Disappearing Phillips Curve
Bullard began by noting the difference between inflation expectations in the pre-1995 and post-1995 time frames. Around 1995, the U.S. inflation rate reached 2 percent and U.S inflation expectations stabilized near that value, he said.

This coincided with a global movement among central banks toward inflation targeting. “Once inflation expectations began to stabilize around this international standard, the empirical relationship between inflation and unemployment—the so-called ‘Phillips curve’—began to disappear,” he noted.

While the conventional wisdom in current U.S. monetary policy suggests that the policy rate should continue to rise in order to contain any rise in inflationary pressures, Bullard explained that in the current era of inflation targeting, neither low unemployment nor faster real GDP growth gives a reliable signal of inflationary pressure. “Continuing to raise the policy rate in such an environment could cause the FOMC to go too far, raising recession risk unnecessarily,” he said.

Using Financial Market Signals
An alternative to taking signals from the level of unemployment or the pace of economic growth is to consider financial market information, Bullard said.

The yield curve is quite flat, he pointed out, and an inversion would suggest a very different outlook at the Fed versus in the market. “The yield curve information suggests that financial markets do not see excessive real growth or excessive inflationary pressure over the forecast horizon,” he said.

Meanwhile, market-based inflation expectations, adjusted to a personal consumption expenditures (PCE) basis, remain somewhat below the FOMC’s 2 percent target. The inflation compensation data derived from Treasury

inflation-protected securities (TIPS) “suggest that markets do not expect the FOMC to achieve the 2 percent inflation target on average on a PCE basis over the next decade,” he said.

Strengths and Weaknesses of Financial Market Information

“More directly considering financial market information naturally constitutes a forward-looking monetary policy strategy—arguably more than considering the current level of unemployment,” Bullard said.

“One of the great strengths of financial market information is that markets are forward-looking and have taken into account all available information when determining prices,” he explained. Thus, he added, markets have made a judgment on the effects of the fiscal package in the U.S., ongoing trade discussions and a myriad of other factors in determining current prices.

Financial markets are also pricing in future Fed policy, which creates some feedback to actual Fed policy if policymakers are taking signals from financial markets, he pointed out. He added that this has to be handled carefully: Ideally, Fed communications and market-based expectations of future Fed policy would be close to each other.

Generally speaking, markets have currently priced in a more dovish policy than indicated by the FOMC’s Summary of Economic Projections, Bullard said, noting markets expect the Fed to be more dovish than announced, but that is still not expected to be enough to maintain the inflation target.

“Financial market information is not infallible, and markets can only do so much in attempting to predict future macroeconomic performance,” Bullard added. Nevertheless, the empirical evidence on yield curve inversion in the U.S. “is relatively strong,” he noted, and TIPS-based inflation expectations “have generally been correct in predicting subdued inflationary pressures in recent years.”

Risks and Opportunities

Bullard noted that two traditional risks for monetary policy are increased probability of recession versus upward inflationary pressure. “Yield curve

inversion would likely increase the vulnerability of the economy to recession," he said. Also, an inflation outbreak "is possible but seems unlikely at this point," he said, adding "by closely monitoring market-based inflation expectations, the FOMC can keep inflationary pressure under close surveillance."

As for the opportunities, Bullard pointed out that the current economic expansion dating from the 2007-2009 recession has been long and subdued on average. "The slow pace of growth suggests the expansion could have much further to go," he said. In addition, he said, "the strong performance of current labor markets could entice marginally attached workers back to work, increasing skills and enhancing resiliency before the next downturn."

Bullard also addressed another long-standing issue in macroeconomics, which is how to think about parameter uncertainty, or more broadly, model uncertainty. The established view is that when model parameters are in doubt, policy should be more cautious than otherwise. In contrast, recent work suggested that in some cases of model uncertainty, policymakers may want to be more aggressive than otherwise. "This remains an important unresolved issue, but how to handle parameter uncertainty has been a concern for the FOMC for years," he said.

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  Optimal Monetary Policy for the Masses

  "Optimal Monetary Policy for the Masses," March 2019, with Riccardo DiCecio, Federal Reserve Bank of St. Louis Working Paper 2019-009.