The reasons behind the extremely low real rate of return on safe assets have been widely debated, Bullard noted, adding, "Real rates of return on safe assets have been declining relative to the real return on capital in the U.S. for several decades." In addition, he cited two factors that are putting downward pressure on real safe rates of return. One is that the U.S. is in a lowproductivity-growth regime. The other is that the U.S. is also in a highliquidity-premium regime, in which investors are willing to pay premium prices for safe assets like government debt.

"Real safe rates of return are exceptionally low at present and are not expected to rise soon," Bullard said. "This means, in turn, that the policy rate should be expected to remain exceptionally low over the forecast horizon," he concluded.

1For more discussion of the St. Louis Fed's new approach, see Bullard's webpage at www.stlouisfed.org/from-the-president/key-policy-topics.

Contact Us

- Laura Girresch 314-444-6166
- Anthony Kiekow 314-949-9739
- Shera Dalin 314-444-3911
- Tim Lloyd 314-444-6829
- October 13, 2016. Article. <u>"Higher GDP Growth in the Long Run Requires</u> <u>Higher Productivity Growth,"</u> Federal Reserve Bank of St. Louis *The Regional Economist*, October 2016. This article also appeared in the *St. Louis Fed On the Economy* blog, October 17, 2016.

Higher GDP Growth in the Long Run Requires Higher Productivity Growth

Real gross domestic product (GDP) growth in the U.S. has been relatively slow since the recession ended in June 2009. It has averaged about 2 percent over the past seven years, compared with roughly 3 percent to 4 percent in the three previous expansions. At this point, the slower growth during the current recovery can no longer be attributed to cyclical factors that resulted from the recession—rather, it likely reflects a trend.

A common topic of discussion among observers of the U.S. economy is how to return to a higher growth rate for the U.S. economy. The pace of growth is important because it has implications for the nation's standard of living. For instance, at an annual growth rate of 1 percent, a country's standard of living would double roughly every 70 years; at 2 percent it would double every 35 years; at 7 percent it would double every 10 years.

While some might want to turn to monetary policy as the tool for increasing the GDP growth trend, monetary policy cannot permanently alter the longrun growth rate. Leading theories say that monetary policy can have only temporary effects on economic growth and that, ultimately, it would have no effect on economic growth because money is neutral in the medium term and the long term. Monetary policy can only pull some growth forward (e.g., when the economy is in recession) in exchange for less growth in the future. This process allows for a smoother growth rate across time—so-called "stabilization policy"—but there would be no additional output produced overall.

One of the most important drivers of increased real GDP growth in the long run is growth in productivity. In recent years, average labor productivity growth in the U.S. has been very slow. For the total economy, it grew only 0.4 percent on average from the second quarter of 2013 to the first quarter of 2016, whereas it grew 2.3 percent on average from the first quarter of 1995 to the fourth quarter of 2005.

What influences productivity over time? The literature on the fundamentals of economic growth tends to focus on three factors. One is the pace of technological development. Productivity improves as new general purpose technologies are introduced and diffuse through the whole economy. Classic examples are the automobile and electricity. The second factor is human capital. The workforce receives better training and a higher level of knowledge over time, both of which help make workers more productive and improve growth over the medium and long run. The third factor is productive public capital. The idea is that government would provide certain types of public capital that would not otherwise be provided by the private sector, such as roads, bridges and airports. This type of public capital can improve private-sector productivity and, therefore, may lead to faster growth.

The U.S. experienced faster productivity growth in the not-too-distant past. If we could return to the productivity growth rates experienced in the late 1990s, the U.S. economy would likely see better outcomes overall. As a nation, we need to think about what kinds of public policies are needed to encourage higher productivity growth—and, in turn, higher real GDP growth—over the next five to 10 years. The above considerations suggest the following might help: encouraging investment in new technologies, improving the diffusion of technology, investing in human capital so that workers' skillsets match what the economy needs, and investing in public capital that has productive uses for the private sector. These are all beyond the scope of monetary policy.

The Regional Economist offers insights on regional, national and international issues. Views expressed are not necessarily those of the St. Louis Fed or Federal Reserve System.

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Higher GDP Growth in the Long Run Requires Higher Productivity Growth

The text below, written by Federal Reserve Bank of St. Louis President James Bullard , first appeared as the President's Message in the October issue of The Regional Economist.

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Additional Resources

• On the Economy: [The Speed of Filling Jobs Is Declining](https://www.stlouisfed.org/on-the-economy/2016/october/howlong-it-takes-fill-jobs)

• On the Economy: [Aging Populations May Mean Lower Economic Growth](https://www.stlouisfed.org/on-the-economy/2016/september/agingpopulations-lower-economic-growth)

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All other [blog-related questions](mailto:on-the-economy@stls.frb.org)

• October 13, 2016. Article. <u>"Q&A with President Bullard on New Approach to</u> <u>Projections,"</u> Federal Reserve Bank of St. Louis *The Regional Economist*, October 2016.

Q&A with President Bullard on New Approach to Projections