Global Macro Matters

Monetary policy is (barely) carrying the world

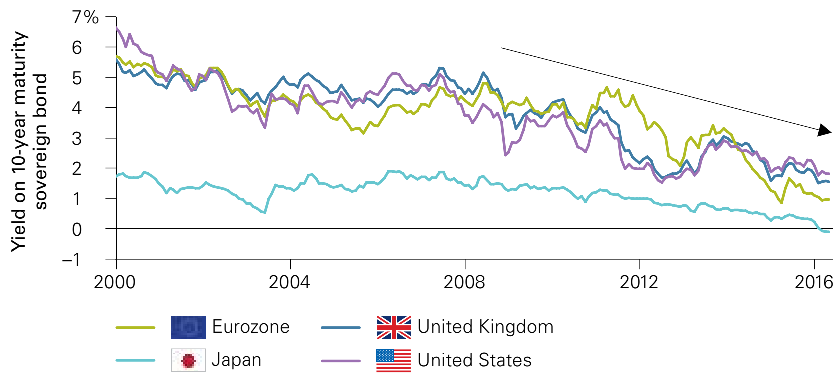
Vanguard Research | Joseph Davis, Ph.D. | July 2016

We view the low-yield environment as secular

Even though monetary policy remains incredibly easy, with negative rates in some countries, inflation expectations continue to drift lower. Global bond yields have been trending downward because of structural forces such as lower trend growth, demographics, and debt deleveraging rather than reactions to events such as "Brexit." Extraordinary global monetary actions have not been able to offset these deflationary pressures.

The perception is growing that monetary policy in several developed economies is reaching its limits. We believe extreme policy experiments such as negative rates will not meaningfully boost either inflation or growth. Instead, they have the potential to increase investors' risk aversion.

Downward pressure on rates is unlikely to subside



Sources: Bank of England, Ministry of Finance Japan, European Central Bank, Board of Governors of the Federal Reserve System, and Moody's Analytics.

Past performance is no guarantee of future returns.

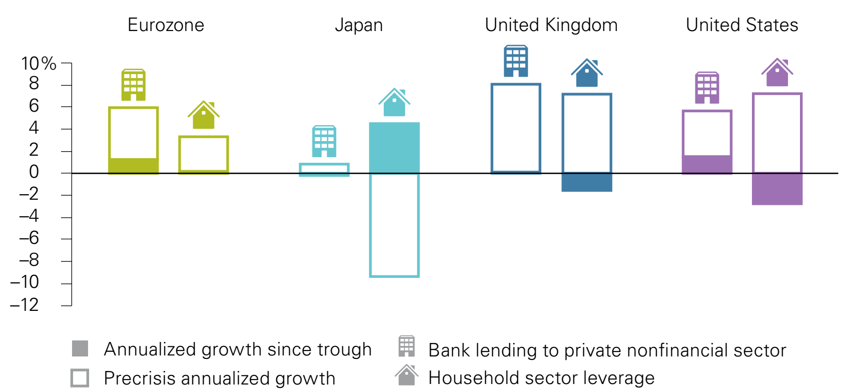
Central banks' strength is winding down

Our long-run outlook for lower, less levered growth implies diminished benefits for any monetary stimulus. Central banks played an unprecedented role in stabilizing economic growth and supporting asset prices after the global financial crisis. But their limited ability to bolster global growth at present is not surprising.

Credit growth and bank lending trail precrisis levels even in economies that have made considerable progress in private-sector deleveraging, such as the United States. While the growth of outstanding debt is lower, the stock of debt remains high, constraining future credit-fueled expansions.

Although extraordinary monetary easing should encourage more borrowing, ultra-low and negative rates have squeezed bank profitability and constrained loan supply.

Lower demand for additional private debt weakens the monetary-stimulus mechanism



Notes: Precrisis growth is calculated for the period 2000–2007; "since trough" growth is calculated for the period 2009Q3–2015. Household leverage is defined as the ratio of total household-sector loans divided by disposable income.

Sources: Vanguard calculations, using data from the Bank for International Settlements, Board of Governors of the Federal Reserve System, U.S. Bureau of Economic Analysis, U.K. Office for National Statistics, European Central Bank, Bank of Japan, Japan Economic and Social Research Institute of the Cabinet Office, and Moody's Analytics.

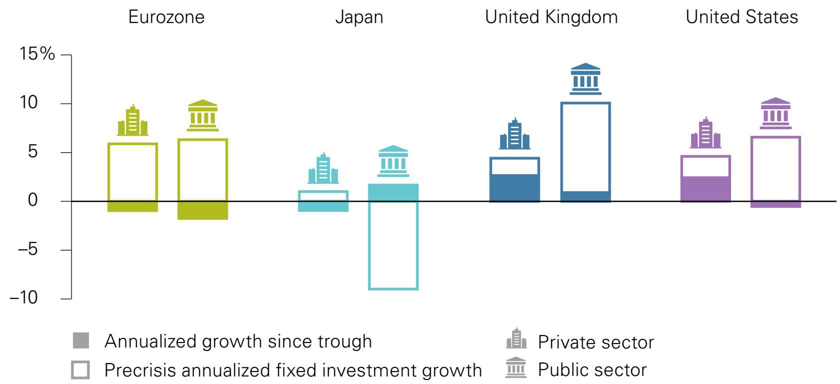
Structural reforms and fiscal policy are needed to boost longer-term growth

The rate of capital formation is low in both the public and private sectors. Notably, government investment has trailed that of the private sector, slowing economic growth in several markets.

At this point, central banks have earned the right to press policy-making peers on structural reforms and programs to boost growth. These policies could potentially enhance economic conditions and inflation expectations more than experimenting with negative rates or "helicopter money."

Helicopter money is not just monetary policy—central banks can't spend the money they create. Fiscal policy and congressional action would be required for it to work. Therefore, it may be more effective to start with fiscal policy instead.

Public- and private-sector investment has stalled



Note: Precrisis growth is calculated for the period 2000–2007; "since trough" growth is calculated for the period 2009–2015.

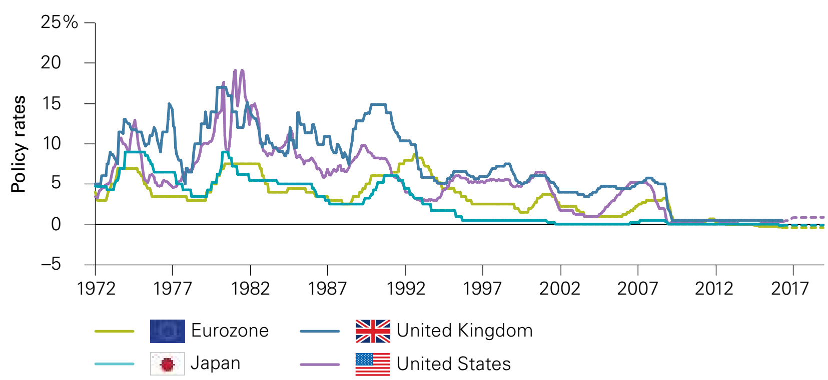
Sources: Vanguard calculations, using data from the European Commission's AMECO database.

Although policy is not converging, it's not diverging either

Some believe the four major central banks have diverged as the Federal Reserve raises rates while others contemplate more cuts. Today's "divergence," however, looks more like a convergence when compared to historical differences in rates of more than 300 basis points.

The situation is unlikely to change anytime soon. We have long believed U.S. short-term interest rates would be challenged to rise above 1% over the next several years. Other central banks are unlikely to raise rates this decade, making a material rise in government bond yields across the curve unlikely.

Policy is not diverging: A material rise in government bond yields is unlikely



Note: Dashed lines indicate future projected policy rates.

Sources: Vanguard calculations, using data from the Federal Reserve, Bank of England, European Central Bank, Bank of Japan, and Thomson Reuters Datastream.

Connect with Vanguard® > vanguard.com

Vanguard global economics team

Joseph Davis, Ph.D., Global Chief Economist

Europe
Peter Westaway, Ph.D., Chief Economist
Alexis Gray

Asia-Pacific
Qian Wang, Ph.D., Senior Economist
Jessica Wu

Americas
Roger A. Aliaga-Díaz, Ph.D., Principal and Senior Economist
Andrew Patterson, CFA
Ravi Tolani
David Pakula
Vytautas Maciulis, CFA
Matthew C. Tufano
Zoe B. Odenwalder
Christos Tasopoulos

All investing is subject to risk, including the possible loss of the money you invest.

Vanguard Research
P.O. Box 2600
Valley Forge, PA 19482-2600

ISGGMMMP 082016