THE MACRO REPORT | MAY 2018

The inflation conundrum

Our outlook contains some small but noteworthy shifts. Rising oil prices are expected to lift slightly the trajectory of inflation in the United States because of the pass-through to consumer prices. A stable economy and a tight labor market have also pushed prices toward the Federal Reserve's 2% target. Fed officials called attention to the "symmetric" nature of their target in a May statement, signaling they expect inflation to run at least a little above target this year. The growth outlook for the United States is also shifting. While we expect a late-cycle boost in growth driven by the fiscal stimulus, it will be a little less pronounced due to higher oil prices, lackluster corporate investment, and trade policies. Abroad, central banks are reacting to different dynamics. As the Fed gradually tightens monetary policy, the European Central Bank remains cautious in providing a clear timeline to remove stimulus. In the eurozone, inflation continues to remain below the ECB's target. In Asia, China's central bank unexpectedly reduced the cash that banks hold as reserves, a move that frees up lending for small firms and reduces funding costs. Meanwhile, higher U.S. rates, a stronger dollar, and political uncertainties have weighed on emerging markets.

THIS MONTH

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Shifting U.S. inflation outlook

The surge in oil prices will alter the trajectory of inflation this year; while lackluster investment and trade policies may weigh on the growth outlook

There's a shock to headline inflation working its way around the world, reflecting the sharp rise in oil prices. The United States will feel this more than anywhere else because of the level and structure of gasoline taxes. The surge in oil prices changes the inflation trajectory for this year. Core inflation looks slightly different across the major economies. In the United States, inflation is approaching the Federal Reserve's 2% target, and the Fed seems quite comfortable with the outlook for 2018.

Rising prices and lackluster investment

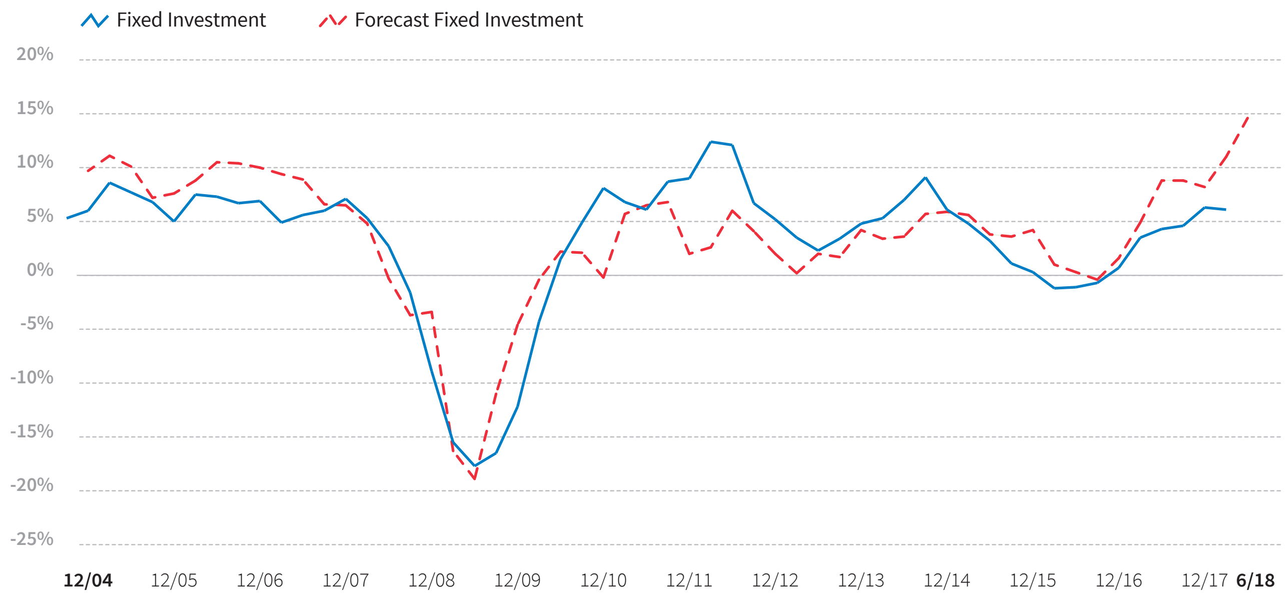
While the underlying story hasn't changed, we are less optimistic about the growth pace in 2018. The economy grew at an annual rate of 2.3% in the first quarter of 2018 due to lower private consumption and government spending. Growth is below the 2.9% annualized rate in the fourth quarter of 2017. Cyclically, the United States could enjoy a late-cycle boost in growth, driven by fiscal measures, including the 2017 tax changes and the spending deal Congress forged in 2018. While a pickup in growth is possible, it may be somewhat less pronounced because of higher oil prices, lackluster corporate investment, and trade policies.

The increase in oil prices could affect consumption and the economy. Oil prices rose to three-year highs in April, and gasoline prices have followed suit. As a result, we expect headline and core inflation to rise. American households will have to adapt to higher gasoline prices; either they will reduce spending on other items, or they will dip into their savings. The backdrop of rising fuel prices also threatens to offset the benefits of lower taxes on the bottom half of the income distribution. Since consumption growth relies more on spending by people in the upper half of the income distribution than the lower, this effect isn't large, but it is still present.

Early signs of corporate investment are not encouraging. Lower corporate taxes weren't going to significantly change GDP via the investment channel. While investment has edged up, non-residential investment accounts for only 12% of GDP. The tax changes may boost it to about 7% year-on-year from about 5%. This will support growth, but arithmetically it's not a big number. We are lowering our expectations for a different and stronger GDP trajectory. The corporate investment channel is simply not enough to do a whole lot for GDP.

U.S. fixed investment trails forecast

(% change year-over-year)



Sources: Putnam, Bloomberg. Data as of April 2018.

Trade policy risks loom

There are signs business confidence was affected by trade disruptions being imposed and contemplated by the Trump administration. The approach taken with the United States–Korea Free Trade Agreement (KORUS) and North American Free Trade Agreement (NAFTA) is not going to apply with China. Even if the eventual outcome ends up to be a modest change, which is possible, the rhetoric and threats will heat up. The Chinese also seem to be digging in on their side; they have stopped buying U.S. soybeans. So, overall demand has changed as China places orders with Brazil and other growers. Business surveys indicate concerns about the price effect of steel and aluminum restrictions, and more general concerns about the impact a trade conflict with China would have on global supply chains. These worries aren't likely to dissipate in the short term.

The Fed's outlook

How does the Fed decipher the outlook? The Fed's confidence in the economy is high. But, we expect only two more rate hikes this year. The recent Fed minutes removed a statement about the strengthening economic outlook and added in "symmetric" when referencing inflation. This indicates the Fed does not expect inflation to accelerate materially even if it rises above the 2% target in the near term. Therefore, four hikes in 2018 is a low probability.

However, the Fed is set to keep on hiking beyond 2019 due to a steadily growing economy and a tightening labor market. The risk is that they'll get the pace wrong. This risk is real given the additional tightening from the balance sheet contraction, and the stresses created by the Fed raising rates, while pretty much everyone else sits on their hands.

The ECB's policy dilemma

The European Central Bank continues to defy expectations for a clear timeline to exit its stimulus plan as inflation remains below target.

There is growing divergence among the monetary policies of the world's major central banks. While the Fed tightens monetary policy by shrinking its balance sheet and raising interest rates, the ECB is being determinedly quiet about its plans for the end of quantitative easing (QE) and the transition to the next phase in monetary policy. In the eurozone, inflation has disappointed and remains below the expectations of the central banks.

Central bank remains dovish

The ECB continues to sit on its hands, defying expectations that it would begin to make clearer its plan for an exit from QE. This does not mean the most likely course has changed; it just means that the doves on the Board hold the upper hand in arguing that there's no need to commit to a particular course just yet. After the most recent ECB meeting, President Mario Draghi said the moderation in economic activity has not led to any change in the bank's view. However, the overall tone of his remarks was a little dovish. We continue to think that the likely trajectory of the ECB will be very cautious.

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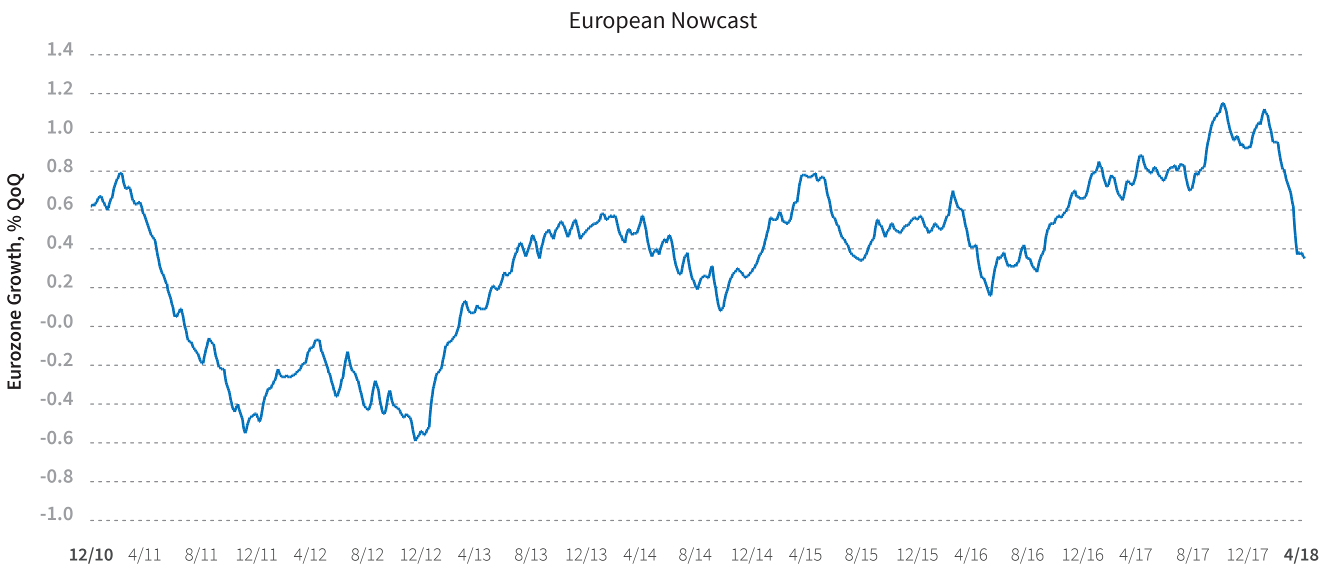
Pace of growth moderates

Growth among eurozone economies has eased quite considerably. Manufacturing appears to have peaked in November 2017 and has eased since then. It would be wrong to describe it as weak, but manufacturing isn't growing at the pace seen in the latter part of 2017. There are also some signs that the services sector is beginning to decelerate.

While the gap between surprise indicators in the United States and in the eurozone is extremely wide, we believe it is likely to narrow, and that this will happen through downward revisions in expectations for the

Euro area's growth slows

The Putnam European GDP Nowcast Index (quarter-on-quarter)



Source: Putnam. Data as of May 2018.

We base our proprietary European GDP Nowcast on a tailored methodology that captures quarterly data releases for Europe's most essential growth characteristics. The mix of factors used may change over time as new indicators become available from data sources or if certain factors become more, or less, predictive of economic growth.

eurozone rather than because the data is going to show evidence of renewed vigorous growth. The second quarter of 2018 is likely to be slightly stronger than the first quarter, but not as strong as the fourth quarter of 2017. Perhaps, the bigger issue is the persistent weakness in inflation.

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Economic data from Germany, in particular, turned surprisingly weak in April. Germany is growing, its labor market is tight, and wages are rising. And while there are some oddities in the German price data that can be explained by weather and the variations in the timing of Easter, the pace of inflation does seem to be a little lower than the ECB had been expecting. Harmonized inflation in Germany (HICP) was 1.4% in April. Remember that the only way the periphery countries, including Spain and Greece, can continue to gain competitiveness within the eurozone is by running inflation levels that are lower than in Germany. The job of rebalancing the region's economy would be a lot easier if inflation in Germany was above the overall target.

Cross currents in emerging markets

China appears vulnerable to private capital outflows, while other emerging markets have to contend with political upheaval, rising interest rates, and a strong dollar.

The economic data from China shows a slight slowdown. The most interesting piece of news out of China in the past month was the relaxation of the banking system's reserve requirement ratios (RRRs). The People's Bank of China (PBOC) in April unexpectedly said it will reduce the cash that banks hold as reserves, a move that frees up lending for small firms and reduces funding costs. The one percentage point reduction took effect on April 25, 2018.

This is a part of the government's balancing of its economic policy goals. It has placed some emphasis on de-leveraging the corporate sector, but there's a limit to how much of a growth slowdown it is willing to tolerate to achieve this de-leveraging. The modest RRR cut was designed to send a signal and nudge the economy on a slightly faster growth path, or at least to reduce the risk of a continued deceleration.

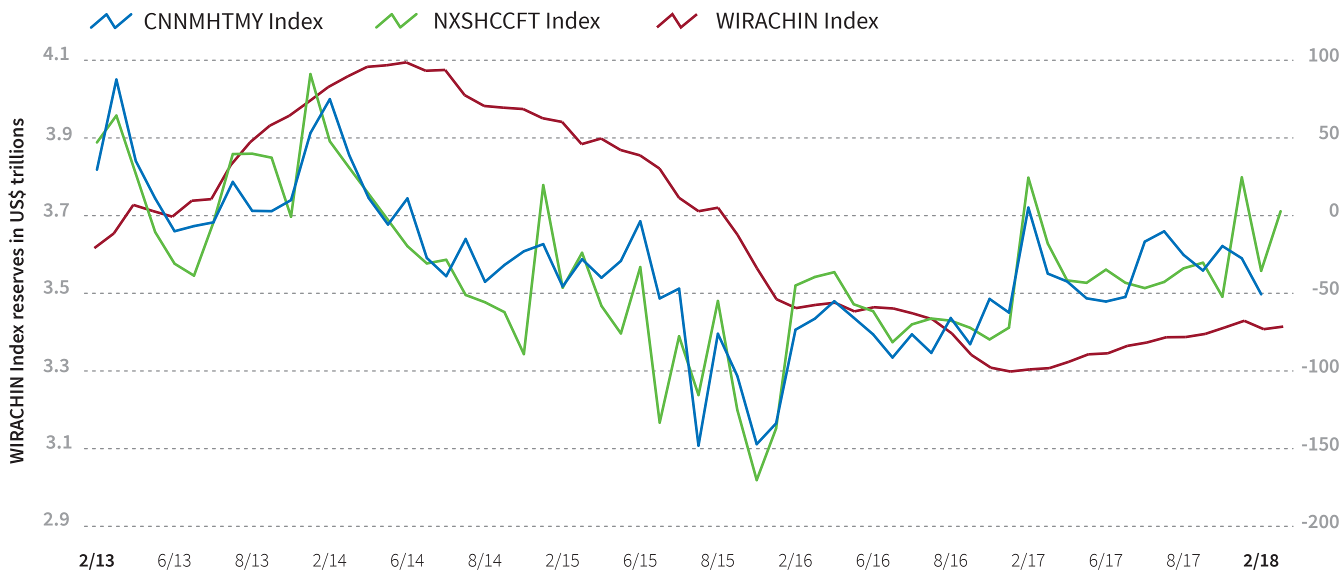
China vulnerable to outflows

As we wrote last month, the real vulnerability that China has is private capital flows. Interestingly, the latest balance of payments data shows a slight uptick in private capital outflows from the country. This will be worth watching closely in coming months. Of course, the government could easily introduce more restrictions on capital flows. While they may succeed in restricting the total demand for dollars, they would increase the pressure on the remaining legal and illegal channels. That could have an adverse effect on confidence.

Risks in emerging markets

There are interesting cross currents among other emerging-market economies. High commodity prices were expected to be supportive of developing countries, especially Latin America and Africa. Our business cycle indicators for emerging-market economies look pretty good. On the other hand, we have a series of worrying political developments. In Turkey, President Recep Tayyip Erdogan's Justice and Development Party (AKP) has called for early elections to further consolidate power. Similar to many other political leaders, he looks longingly and enviously at the Emperor of China, Xi Jinping. In Mexico, the upcoming election seems virtually certain to see Andrés Manuel López Obrador (AMLO), the leftist rabble rouser, elevated to the presidency. And as Brazil enters its election campaign, former President Luiz Inácio Lula da Silva has been thrown in jail. A collection of third-rate has-beens and also-rans are currently vying for support.

China's reserves and capital flow trajectory



Source: Bloomberg. Data as of May 2018.

Bloomberg WIRACHIN Index = Foreign exchange reserves in triillions of U.S. dollars.
Bloomberg CNNMHTMY Index = Estimated capital flows in billions of U.S. dollars.
NXSHCCFT Index = Natixis China Capital Flow Tracker in billions of U.S. dollars.

Sensitivity to Fed policy

The Fed's monetary policy tightening is also working its way around the world. The most noticeable effect over the past month has been on flows to emerging markets, which have fallen sharply, and this, in turn, has produced a lot of volatility among emerging-market assets. Higher U.S. interest rates and a stronger dollar have negatively affected several emerging-market economies, most notably Argentina.

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In Argentina, the pressure on the exchange rate forced Banco Central de la República Argentina — the central bank — into the kind of action on interest rates that can easily be counterproductive. The central bank raised rates several times to stabilize the peso. The third hike was coordinated with a government announcement of measures to reduce the fiscal deficit. It is striking that such an aggressive response was needed in the face of only modest increases in U.S. rates and the value of the dollar.

Some stability in the outlook for the G3 economies — the United States, Japan, and the European Union — is probably necessary before we see broader stability in emerging asset markets.

The Putnam Global Risk Appetite (RA) Index is a proprietary quantitative model that aims to measure investors' willingness to invest in risky assets, including equities, commodities, high-yield bonds, and other spread sectors. With a composite view of risk-appetite signals across a broad mix of asset types, Putnam's RA provides a framework for discussing investor preferences and can signal trend changes in broad market sentiment.

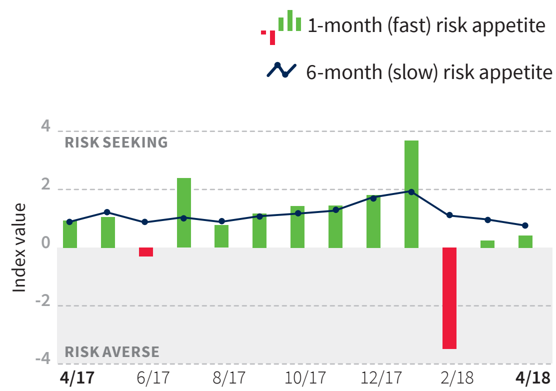
Risk appetite remains flat

SHORT-TERM TREND

April was a flat month in terms of appetite for riskier assets

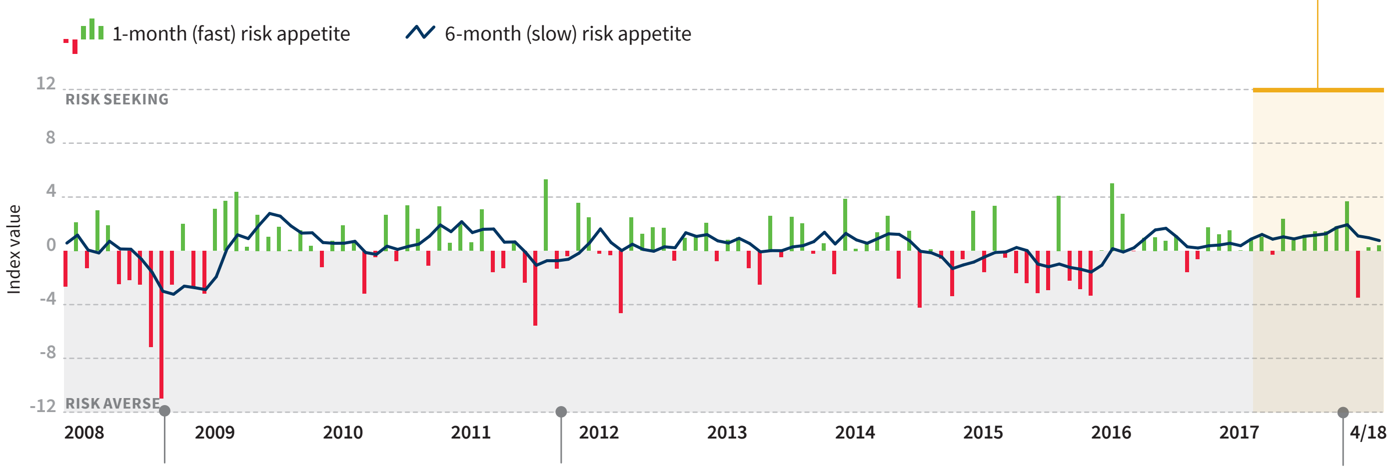
Risk ON OFF

- Overall, equities had positive returns, but emerging markets underperformed
- Fixed-income assets lost money as yields rose, and the dollar rebounded
- Agricultural and industrial commodities gained, precious metals fell, and energy rose



LONG-TERM CYCLE

This 10-year illustration captures the cyclicality of investors' appetite for risk.



Sept '08
With Lehman Brothers' bankruptcy and the onset of the global financial crisis, appetite for risk all but disappears.

Sept–Nov '11
Eruption and subsequent clearing of concerns over EU sovereign debt crisis, U.S. debt ceiling, and fear of China hard landing drive major risk selloff and rally.

March '16–Jan '18
Risk assets rally amid improving commodity prices, perceived stability in China's macro data, and expectations for gradualist Fed policy.

Source: Putnam. Data as of April 30, 2018. To create the Global Risk Appetite Index, we weigh the monthly excess returns of 30 different asset classes over 3-month T-bills relative to the trailing 2-year volatility of each asset class. The higher the excess return and the lower the volatility, the greater the risk appetite; conversely, the lower the excess return and the higher the volatility, the stronger the risk aversion.

The Putnam Global GDP Nowcast index is a proprietary GDP-weighted quantitative model that tracks key growth factors across 25 economies. This index and individual country indexes are used as key signals in Putnam's interest-rate and foreign-exchange strategies.

The growth trajectory decelerates

SHORT-TERM TREND

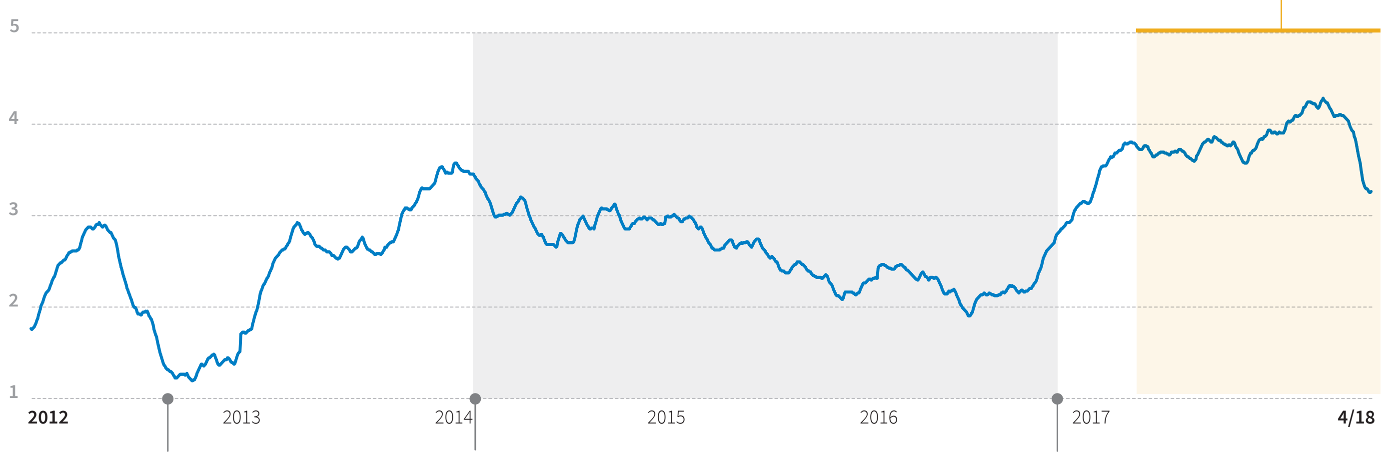
Global growth slowed in April

▲ 3.25%

Among G10 countries, growth in the eurozone, Switzerland, Australia, and New Zealand lost momentum. Industrial production slowed among eurozone economies, while Germany's business sentiment index declined. Turkey's economy also slowed, while growth in Latin America held stable. China's growth moderated, while Malaysia's economy slackened.

LONG-TERM CYCLE

This six-year illustration captures GDP gyrations since the financial crisis.



Sept '12–Dec '13
Global growth swings dramatically, under pressure from sovereign debt crises and darkening global growth prospects amid fitful recoveries.

Jan '14–Oct '16
Global growth settles into a more subdued pattern of modestly disappointing results.

Nov '16 to Dec'17
More synchronous performance across global markets emerges to lift the trajectory of global growth.

Source: Putnam. Data as of April 30, 2018. We base our Global GDP Nowcast on a tailored methodology that captures daily data releases for the most essential growth characteristics for each of 25 countries — including purchasing managers' index data, industrial production, retail sales data, labor market metrics, real estate price indexes, sentiment indicators, and numerous other factors. The mix of factors used for each market may change over time as new indicators become available from data sources or if certain factors become more, or less, predictive of economic growth.

The Macro Report is written by members of Putnam's Fixed Income team. With backgrounds in applied economics, currency and interest-rate analysis, and sovereign and local bond market dynamics, this group conducts macroeconomic research in support of Putnam's global fixed-income strategies.

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