Global Macroeconomic Outlook
March 2016

Global Economic Outlook[1]

Projections for global growth continue to be lowered, as the economic recovery in many countries remains weak.

- The IMF reduced their 2016 global growth forecast by 0.2%, to 3.2%, and lowered its 2017 forecast by 0.1%, to 3.5%.
- The IMF outlook for advanced economies was downgraded from 2.1% to 1.9% for 2016, and from 2.1% to 2.0% for 2017. In the U.S., weak manufacturing and the impact of the dollar's strength on exports should be balanced by the improving labor and housing markets. In Europe and Japan, growth is forecasted to be lower than in the U.S., as unemployment remains high in Europe and consumption weak in Japan.
- Growth projections in emerging economies were lowered, but are still projected to be higher than those for developed economies in 2016 and 2017. Economic environments within emerging market countries remain uneven. Lower commodity prices, slowing growth in China, and higher U.S. interest rates all remain key concerns, with varied impact among countries.

	Real GDP (%)			Inflation (%)		
	IMF 2016 Forecast	IMF 2017 Forecast	Actual 10 Year Average	IMF 2016 Forecast	IMF 2017 Forecast	Actual 10 Year Average
World	3.2	3.5	3.7	2.8	3.0	4.0
U.S.	2.4	2.5	1.4	0.8	1.5	2.0
European Union	1.8	1.9	1.1	0.4	1.3	1.9
Japan	0.5	-0.1	0.5	-0.2	1.2	0.2
China	6.5	6.2	9.5	1.8	2.0	2.9
Emerging Markets (ex. China)	2.6	3.6	4.5	6.1	5.6	7.4

[1] Source: IMF. World Economic Outlook, update April 2016. "Actual 10 Year Average" represents data from 2006 to 2015. Data after 2014 is an estimate.

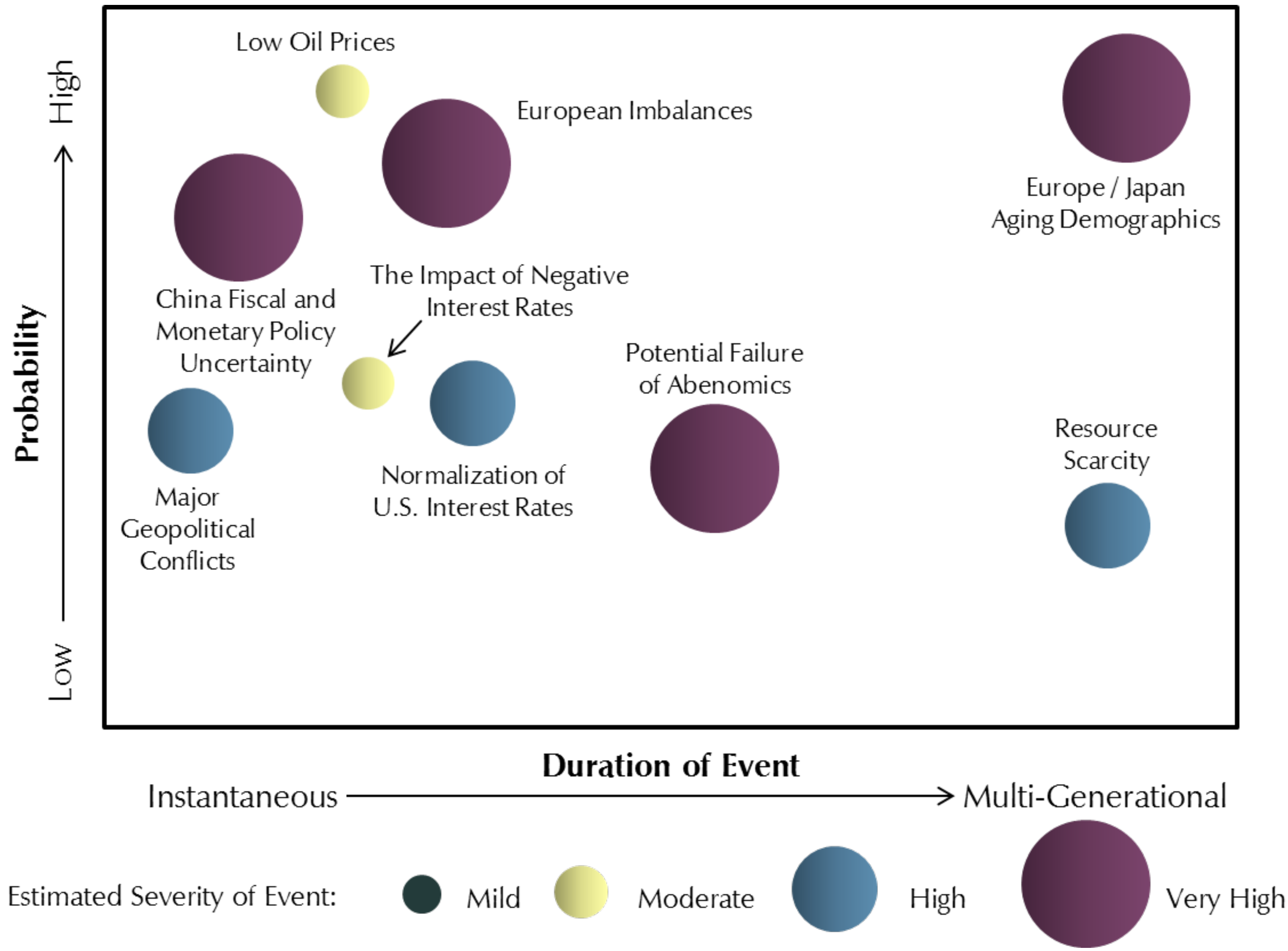
Global Economic Outlook, Continued

It appears that the pace of U.S. tightening will be slower than previously expected, while additional stimulus in Europe, Japan, and China is likely.

- Despite an improving labor market and rising prices, the Federal Reserve decided at their recent meeting to hold interest rates steady at 0.5% in the face of global uncertainties. Expectations are for the Fed to increase rates two times in 2016 by 0.25%, down from the four increases previously expected.
- In March, the European Central Bank (ECB) revealed a larger-than-anticipated increase in stimulus that included an expansion of its asset-purchase program, interest rate cuts, and cheap long-term loans to banks. The ECB's attempts to stimulate growth and prices was complicated by the recent appreciation of the euro versus the dollar.
- Earlier in the year, the Bank of Japan (BOJ) surprised markets by announcing that they would adopt negative interest rates for a portion of reserves held at the bank in an effort to stimulate growth. Given continued low inflation and weak growth, we expect that the BOJ will continue to expand its already aggressive monetary policy.
- China cut bank reserve requirements in February by 0.5% to 17%, representing the fifth cut since early last year. With China's economy growing at its slowest rate in a quarter century, we expect that further stimulus, including rate cuts, reductions in bank reserve requirements, and possibly infrastructure spending, will be announced.

Several issues are of primary concern: 1) declining growth in China, along with uncertain fiscal and monetary policies; 2) continued economic sluggishness and financial risk in Europe; 3) weakening economic activity in the U.S.; 4) divergent growth in emerging economies.

Macroeconomic Risk Matrix



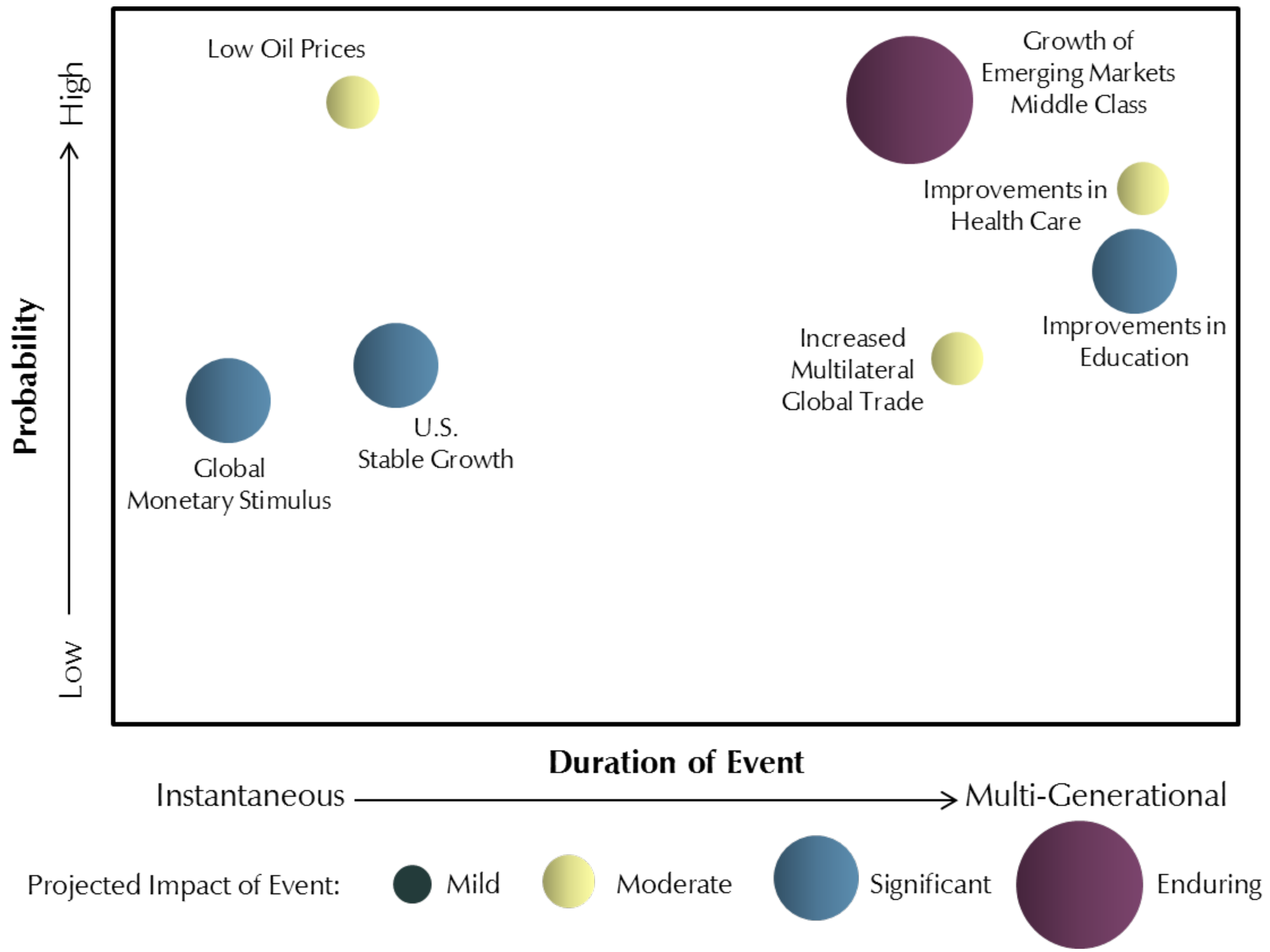
Macroeconomic Risk Overviews

Low Oil Prices	Although oil prices recently increased, they remain historically low. An extended period of low oil prices will hurt countries such as Iran, Russia, and Venezuela that depend heavily on oil export revenues. Low prices will continue to hurt oil exploration and production (E&P) companies, and companies that support the oil industry. Recently, the stress of low oil prices has particularly affected E&P companies, with bond defaults ticking up. The risk of increased geopolitical tensions also exists with depressed oil prices.
European Imbalances	The crisis is rooted in structural issues in the Eurozone related to the combination of a single currency combined with 17 fiscal authorities. The events in 2015 related to Greece's third bailout highlighted the continued European tensions. Allowing countries to leave the Eurozone could set a dangerous precedent, especially if they ultimately experience growth due to depressed currencies. Alternatively, providing debt forgiveness for some countries could lead to others looking for similar treatment. The massive influx of refugees into Europe from the Middle East and North Africa exacerbates economic stress. The impending referendum on whether the UK will stay in the European Union could also prove disruptive.
Potential Failure of Abenomics	Japan is engaged in a historic stimulus program, referred to as "Abenomics" to fight its decades of deflation. The plan includes monetary, fiscal, and structural components. If Japan overshoots with its policies, or dramatically changes them unexpectedly, it could prove disruptive to markets and growth.
Europe/Japan Aging Demographics	In Japan and Europe, birth rates have declined for decades, resulting in populations becoming older and smaller relative to the rest of the world. These demographic trends will have a negative long-term impact on GDP growth and fiscal budgets, amplifying debt problems.
Major Geopolitical Conflicts	The recent bombings in Brussels highlights the continued threat of ISIS. This complicates the refugee crisis within Europe, as countries try to balance maintaining open borders with preventing terrorists from entering their countries. Other unresolved geopolitical issues remain, including North Korea's nuclear aspirations, the civil war in Syria, and the ongoing tensions between Russia and Ukraine.

Macroeconomic Risk Overviews, Continued

China Fiscal and Monetary Policy Uncertainty	China's recent policies, first to support its equity markets and then to devalue its currency, created heightened volatility in global markets. The process of transitioning from a growth model based on fixed asset investment by the government, to a model of consumption-based growth will be difficult. Similar measures responding to slowing growth or to support stock prices could prove disruptive and decrease confidence in China's government. China's abandonment of its support of the yuan, and a resulting major devaluation of the currency, could prove particularly disruptive to global markets and trade.
Normalization of U.S. Interest Rates	After the Global Financial Crisis, the U.S., injected massive amounts of liquidity into the financial system in an effort to prevent depression-like declines in economic activity. Additionally, the central bank reduced short-term interest rates to record lows. Now that the Federal Reserve has begun to increase interest rates, albeit slowly, this could weigh on growth globally, particularly in emerging economies.
Resource Scarcity	The increasing world population, urbanization, and a growing middle class, particularly in emerging economies, could all lead to a scarcity of resources, including food, water, land, energy, and minerals. As demand continues to grow and supply declines, certain commodity prices may skyrocket, hurting the living standards of many and increasing the risk of geopolitical conflicts.
The Impact of Negative Interest Rates	Recently monetary policy amongst major central banks has diverged. The U.S. stopped its bond-buying program last year and plans to raise interest rates, while in Europe and Japan, rates are expected to remain low with deposit rates in negative territory. The hope of negative interest rates is to stimulate economic activity, but it is possible that they could have unintended consequences. If banks absorb the impact of negative interest rates, that could weigh on profit margins and lending, while charging customers to hold their cash may lead to funds being withdrawn from banks. Both results could lead to less lending, not more, and ultimately a decline in economic activity.

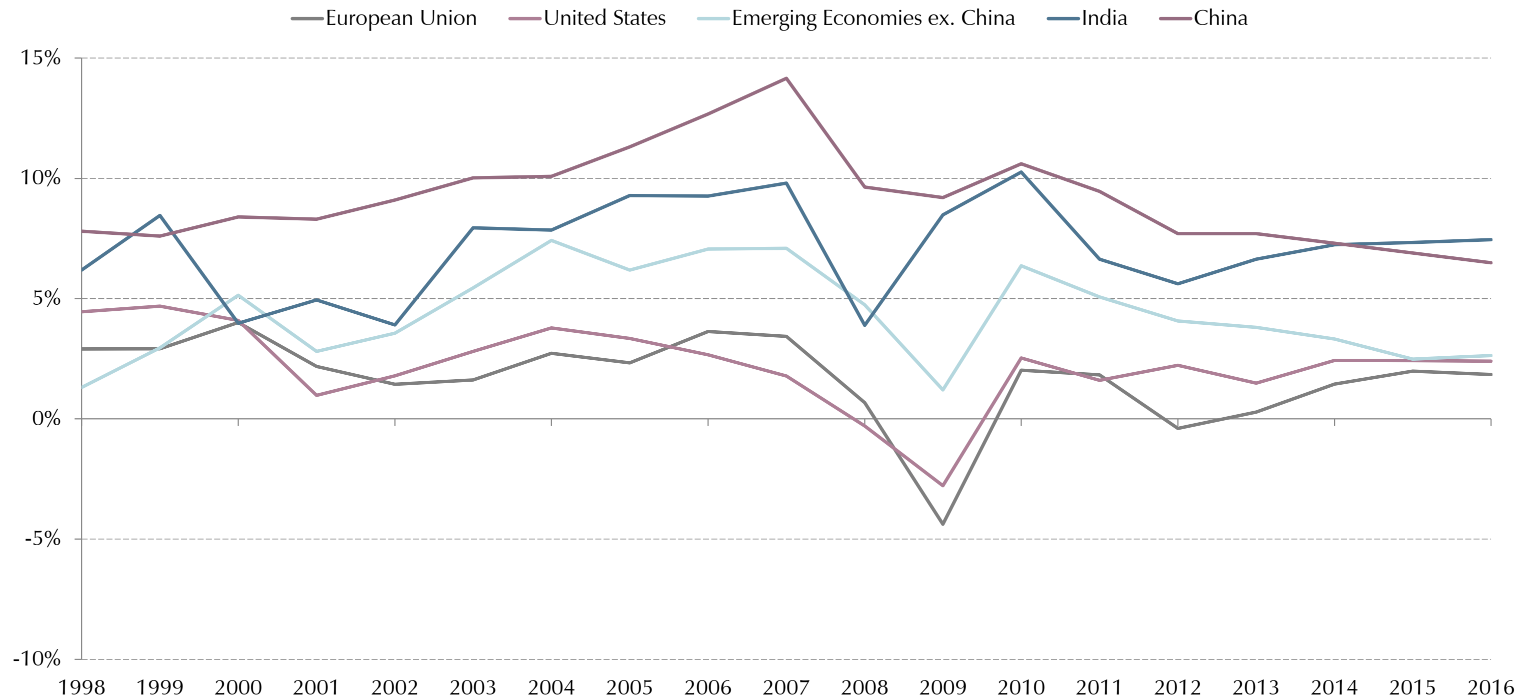
Positive Macroeconomic Trends Matrix



Positive Macroeconomic Trends Overviews

Low Oil Prices	Although oil prices have recently increased, they remain low from a historical perspective. Low oil prices will likely have a positive impact on global growth, particularly for energy importers like China, Japan, and India. Consumers should benefit from falling oil prices, in the form of lower prices for gasoline and heating oil.
U.S. Stable Growth	The U.S. economy has stabilized since the Global Financial Crisis, with GDP growth improving and unemployment declining. Continued stabilization in the world's largest economy should improve employment and growth domestically, and increase demand for goods and services from abroad.
Growth of Emerging Markets Middle Class	In emerging economies, the size of the middle class is projected to grow significantly over the next twenty years. This growing middle class should increase consumption globally, which in turn will drive GDP growth and create jobs.
Increased Multilateral Global Trade	The pace of globalization has accelerated, particularly in emerging economies. Increased trade and investment, and access to foreign capital and export markets for corporations, should lead to greater global growth.
Improvements in Education/Healthcare	Literacy rates and average life spans have increased globally, particularly in the emerging economies. Higher literacy rates will drive future growth, helping people learn new skills and improve existing skills. When people live longer, it increases incentives to make long-term investments in education and training, resulting in a more productive work force and ultimately more growth.
Global Monetary Stimulus	Developed market central banks embarked on a massive monetary stimulus campaign in the aftermath of the Global Financial Crisis. The U.S., European, and Japanese central banks continue to maintain interest rates at record lows. Japan has embarked on an unprecedented asset purchase program, while the European Central Bank recently began its own program. In contrast, the U.S. ended its bond buying last year and increased interest rates in December but has highlighted it plans to take a slow approach to increasing rates. Additionally, many emerging market central banks have reduced interest rates to stimulate slowing growth. If central banks continue to provide liquidity and keep interest rates low, this should stimulate growth.

Global Real Gross Domestic Product (GDP) Growth[1]



- Global growth remains weak, with the dynamic of emerging economies growing faster than developed economies remaining intact.
- Slowing growth in China, the world's second largest economy, will remain a key issue, particularly affecting commodity exporters. Growth in India, a bright spot within emerging economies, has surpassed China's growth, a trend that should continue.

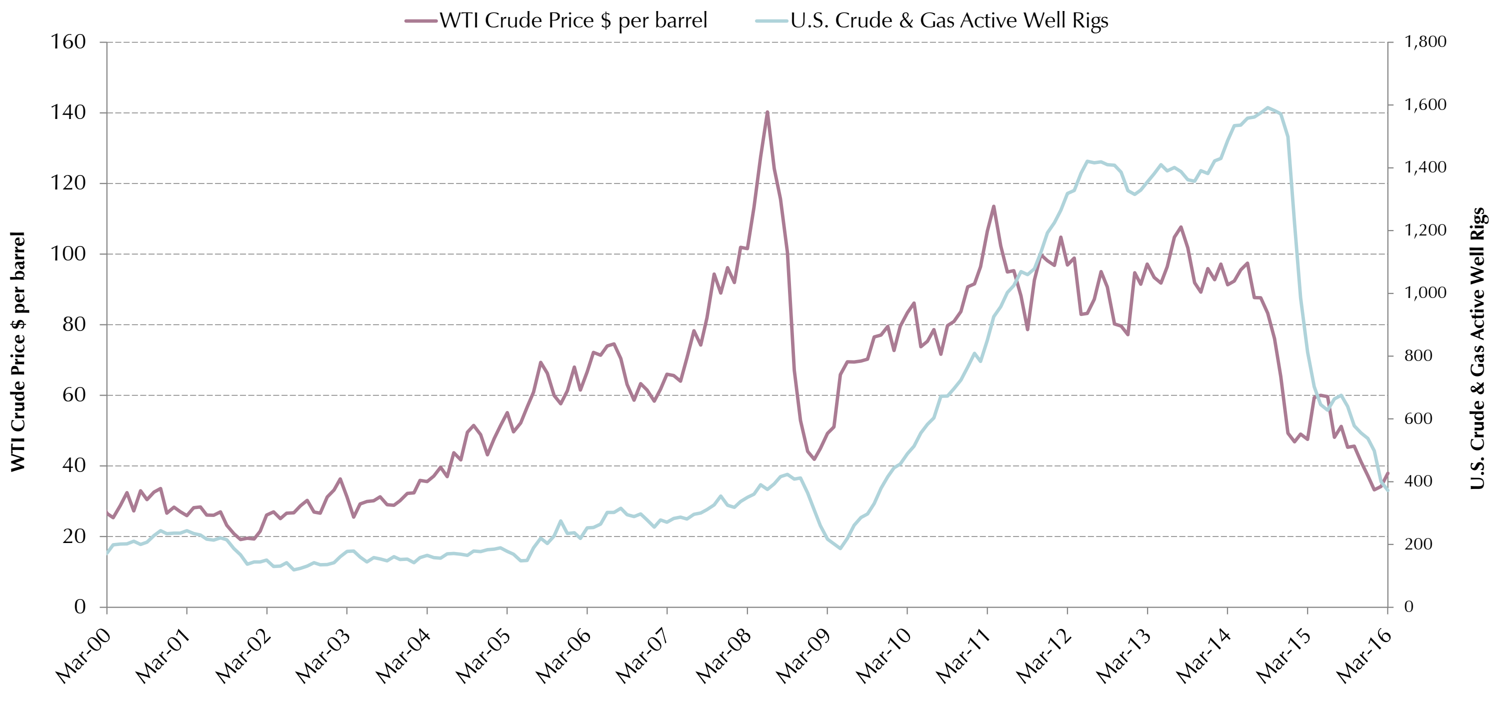
[1] Source: IMF. World Economic Outlook Update, April 2016. GDP data after 2014 are IMF estimates.

Major Currency Values versus the U.S. Dollar[1]

- In a reversal of the 2015 trend, the U.S. dollar weakened against most major currencies in 2016, particularly against emerging economies.
- The U.S. Federal Reserve emphasis that they will take a slow approach to raising interest rates led to the weakening dollar, benefiting non-dollar assets and commodities.

[1] Source: Thomson Reuters.

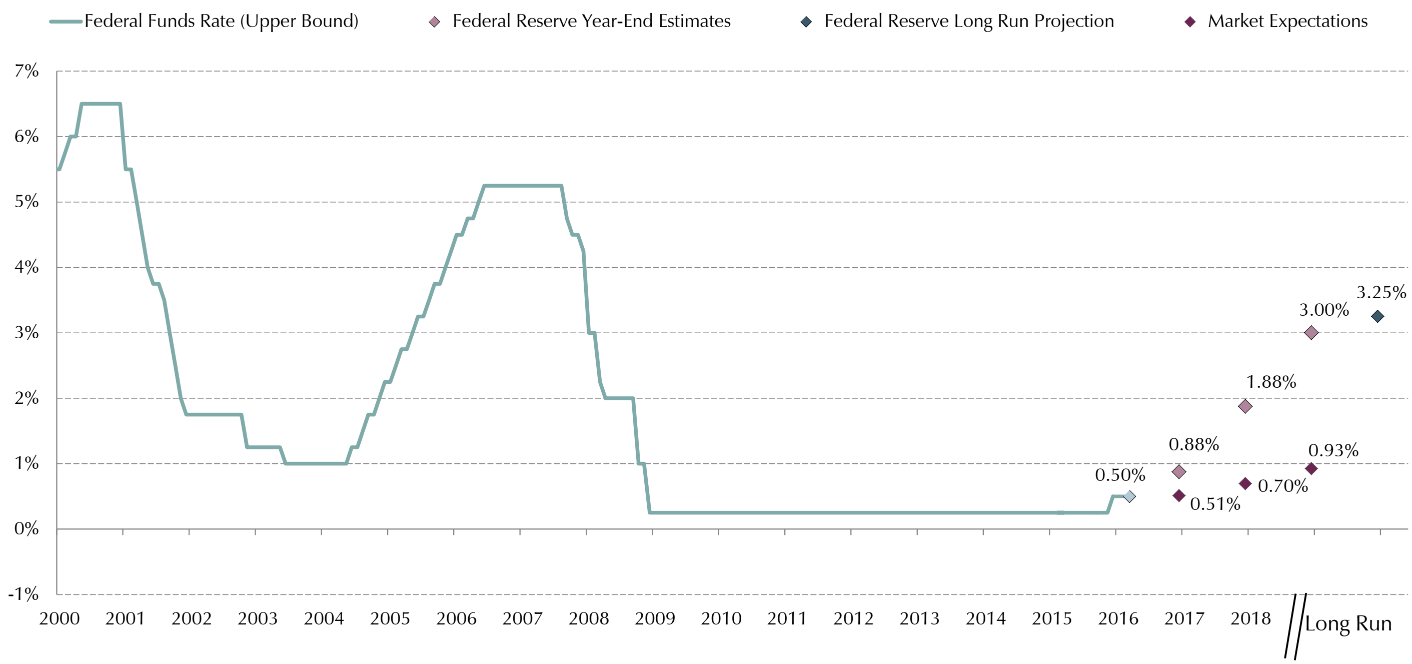
Oil Prices[1]



- Oil has recently been viewed as a barometer for global growth and has largely tracked the U.S. markets.
- Oil prices remain low, but have recently staged a recovery due to rumors of an OPEC production freeze, a weakening of the U.S. dollar, and a dramatic decline in rig counts.
- The net impact of lower oil prices is uncertain, with consumers and oil importers benefiting, and oil-related companies and oil-exporting countries being hurt.

[1] Sources: Bloomberg. Data is as of March 31, 2016.

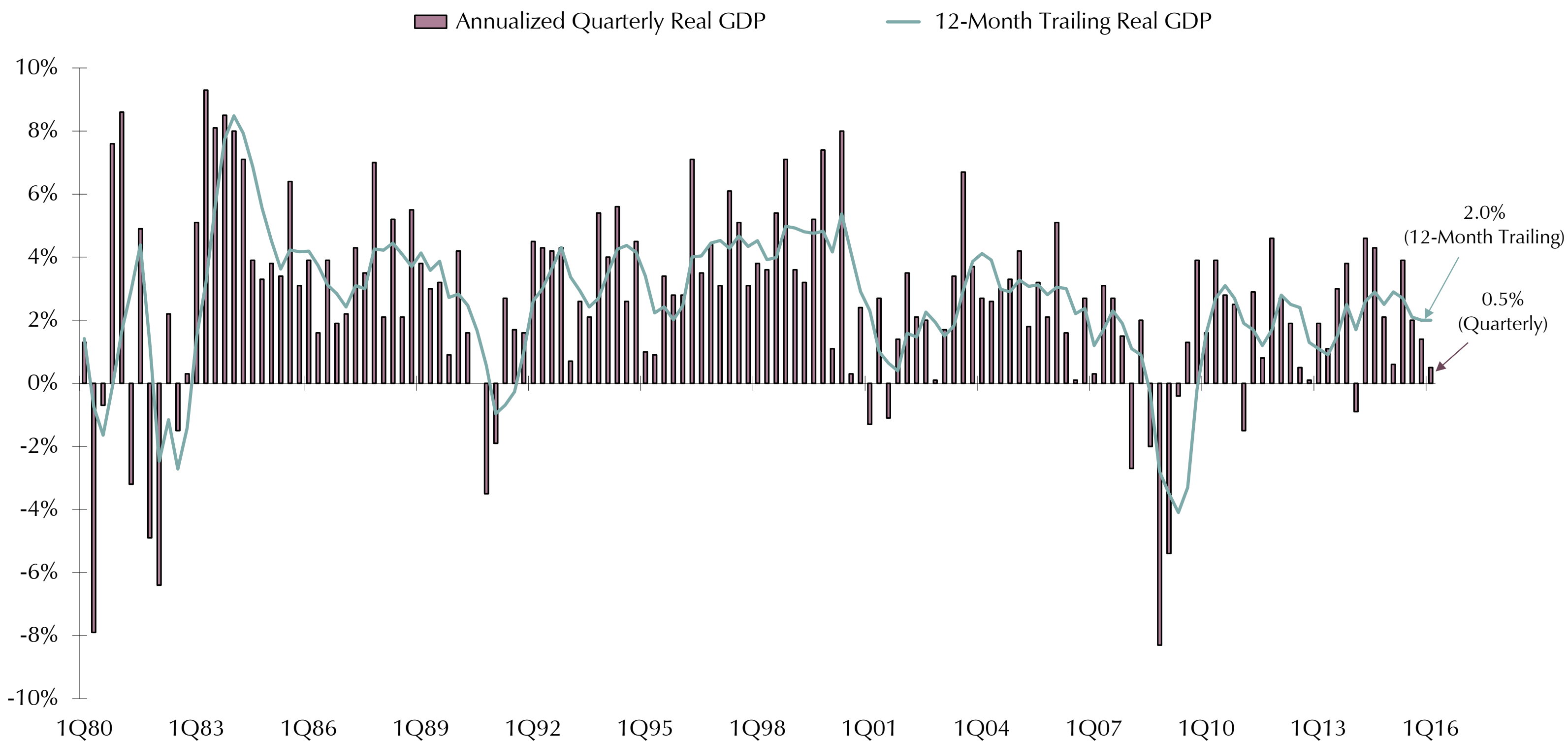
Federal Funds Rate[1]



- After raising rates in December of 2015 by 0.25%, the Federal Reserve has made no additional increases, citing slowing global growth, particularly in China.
- The expected pace of rate increases has decreased with the market continuing to expect a lower trajectory than the Fed.

[1] Source: Bloomberg and Federal Reserve March Economic Projections. The FOMC Year-End Estimates are the median estimates of the forecasts of the federal funds rate by the 17 FOMC participants at the end of the specified calendar year or over the long run. Data is as of March 31, 2016, for market expectations that represents the fed funds future rate at the end of the specified calendar year.

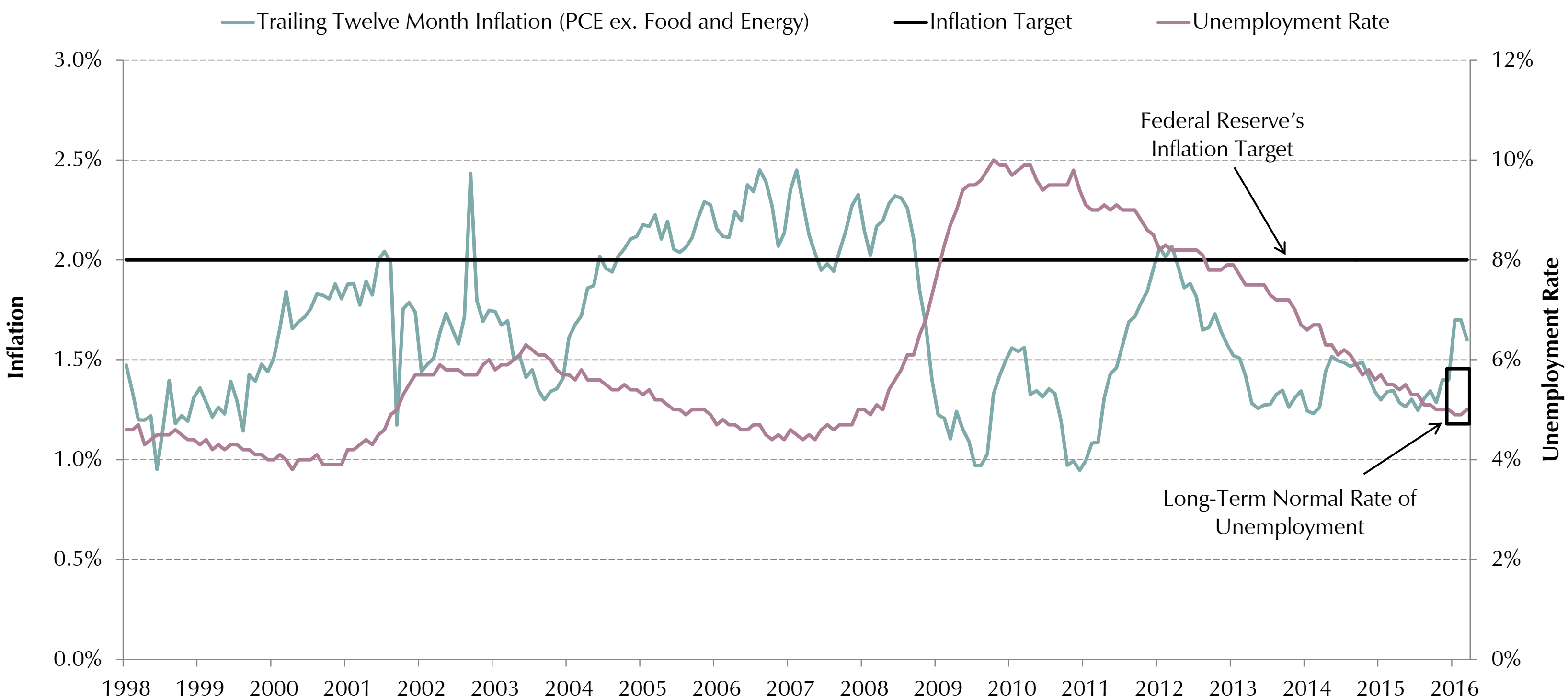
U.S. Real Gross Domestic Product (GDP) Growth[1]



- In the first quarter, U.S. GDP grew at an annual 0.5% rate, representing a third consecutive quarterly decline.
- Reductions in consumer spending and business investment, particularly in energy, contributed to the weakness.

[1] Source: U.S. Bureau of Economic Analysis. Data is as of the first quarter of 2016 and represents the first estimate.

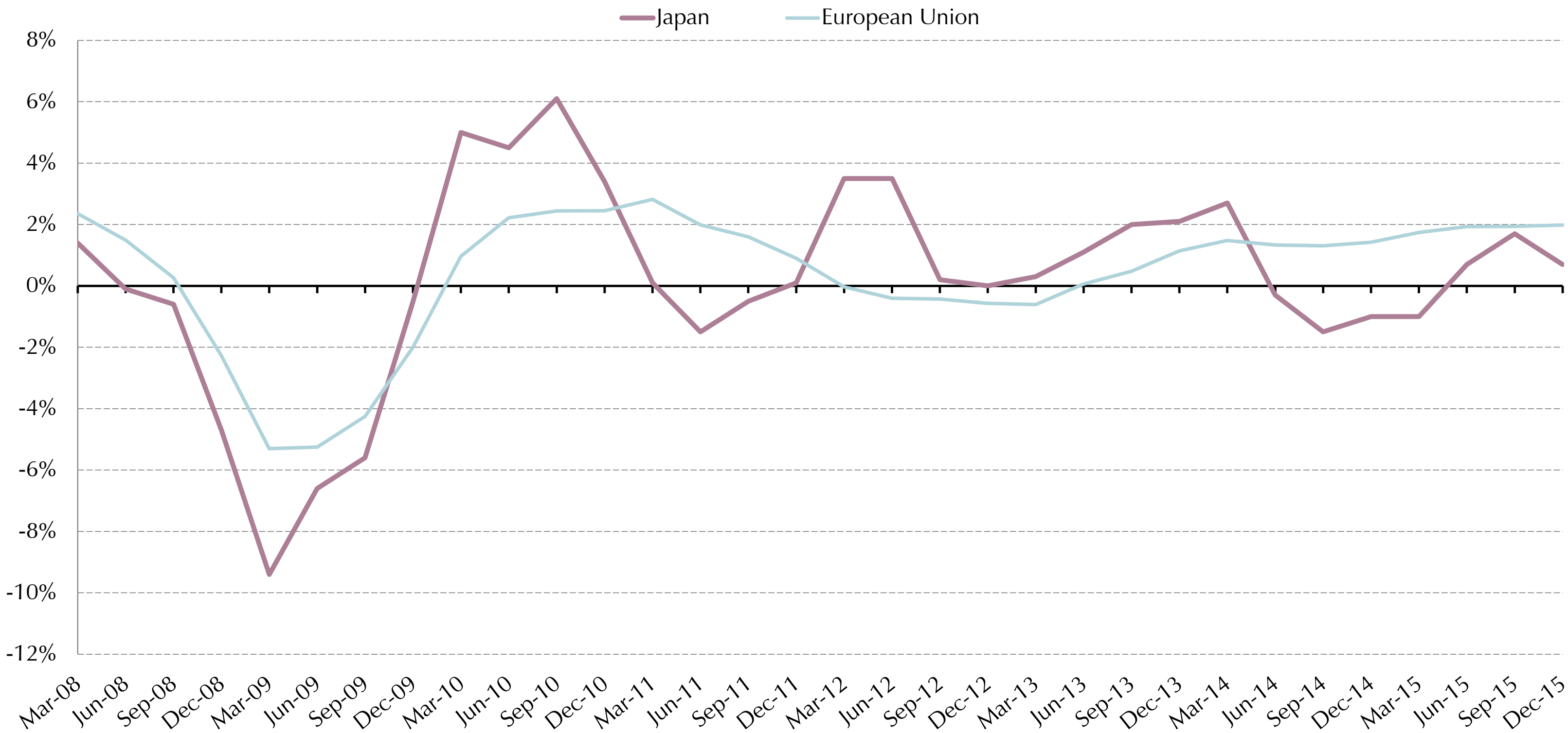
U.S. Inflation & Employment[1]



- The Fed remains cautious in the pace of rate increases despite declining unemployment and increasing prices.
- Unemployment is half the level of its peak, while the Federal Reserve's preferred measure of inflation recently increased, but remains below its 2.0% target. The Fed continues to monitor the durability of recent price increases.

[1] Source: Bureau of Labor Statistics. Unemployment and PCE data are as of March 31, 2016. Federal Open Market Committee (FOMC) participants' recent estimates of long-term normal unemployment had a median value of 4.9% and a range of 4.7% to 5.8%.

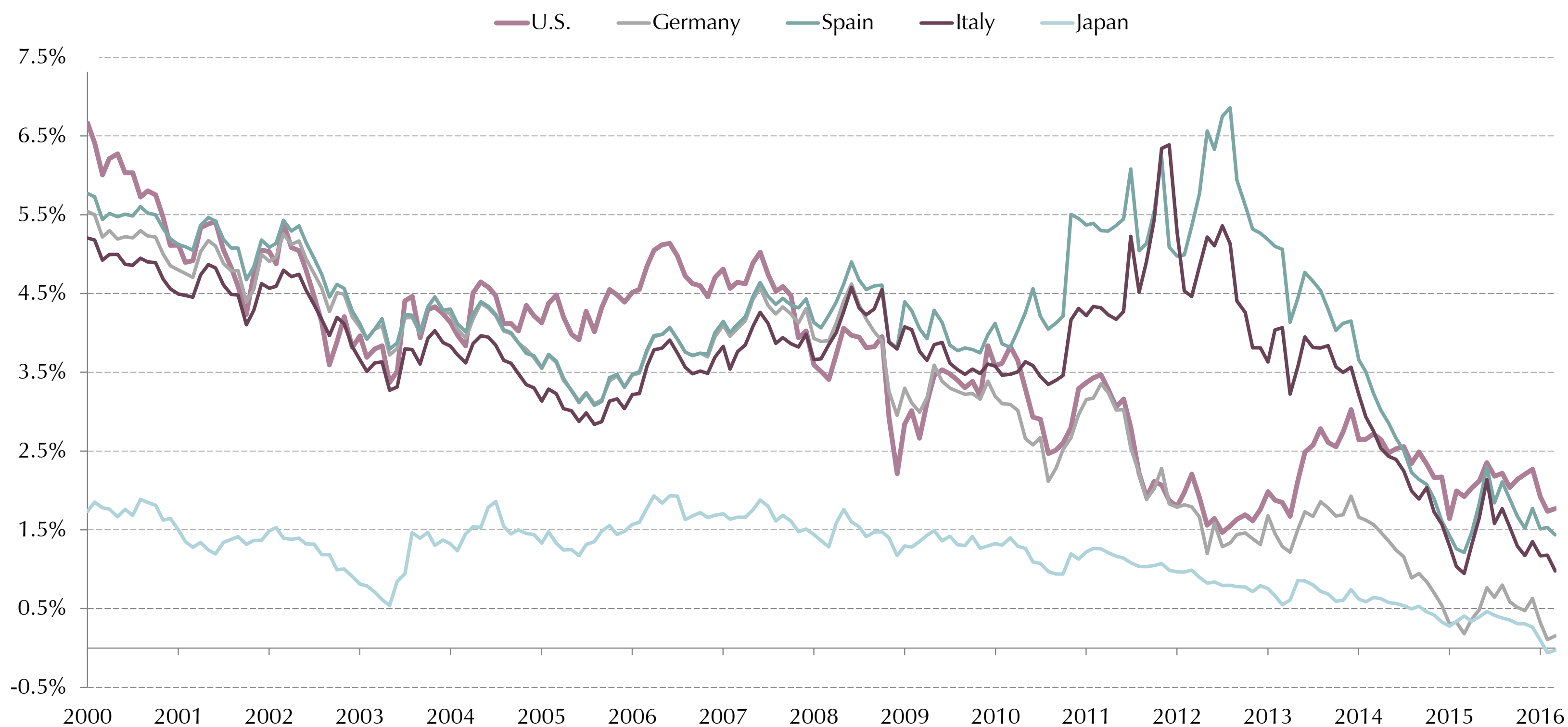
European Union & Japan Real Gross Domestic Product (GDP) Growth [1]



- Growth in Japan and Europe has been slow and lower relative to the U.S.
- Continued weakness in both economies should lead to extended, or expanded, monetary stimulus by the respective central banks.

[1] Source: Bloomberg. Data is as of the fourth quarter of 2015.

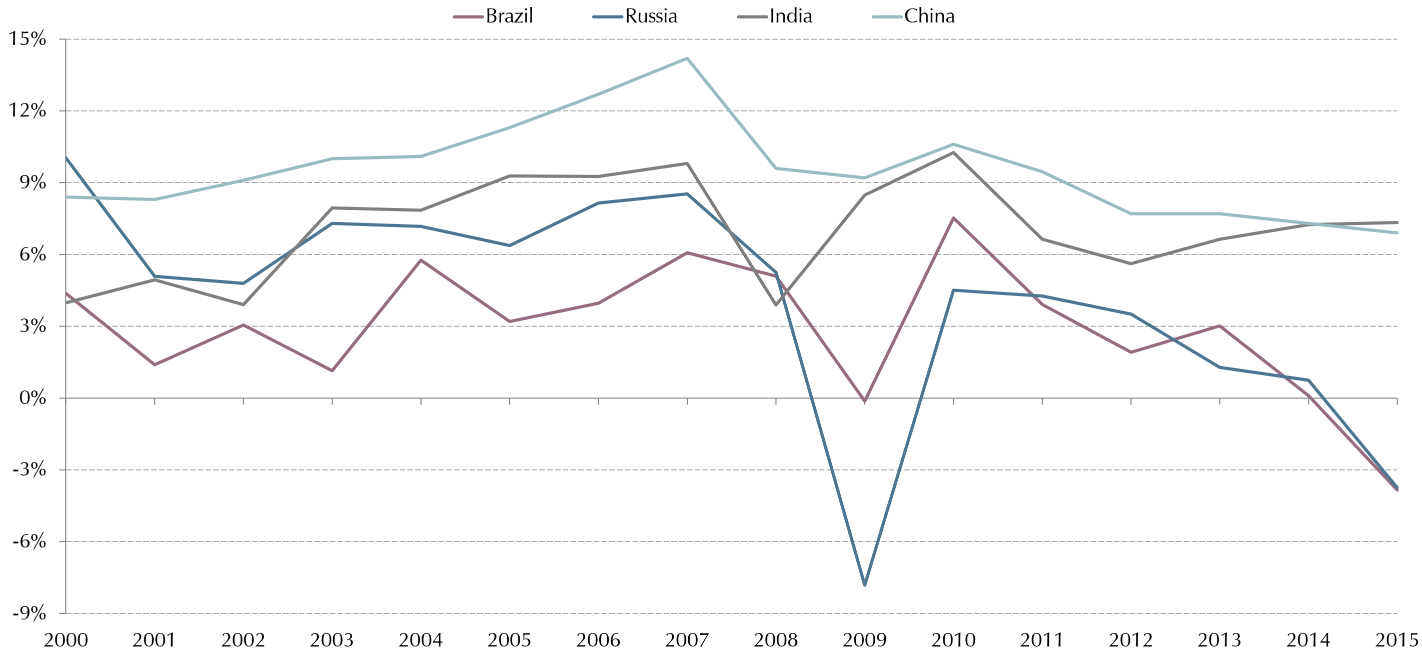
10-Year Government Bond Yields[1]



- In the first quarter, bond yields declined in many countries, as inflation remains low, central banks continue to ease, and the U.S. Federal Reserve highlighted its slow path of rate increases.
- In Japan, long-term bond yields turned negative, joining others in Europe. Large bond-buying programs by the Bank of Japan and European Central Bank, along with low inflation, have contributed to rates moving below 0%.

[1] Source: Bloomberg. Data is as of March 31, 2016.

Emerging Market GDP[1]

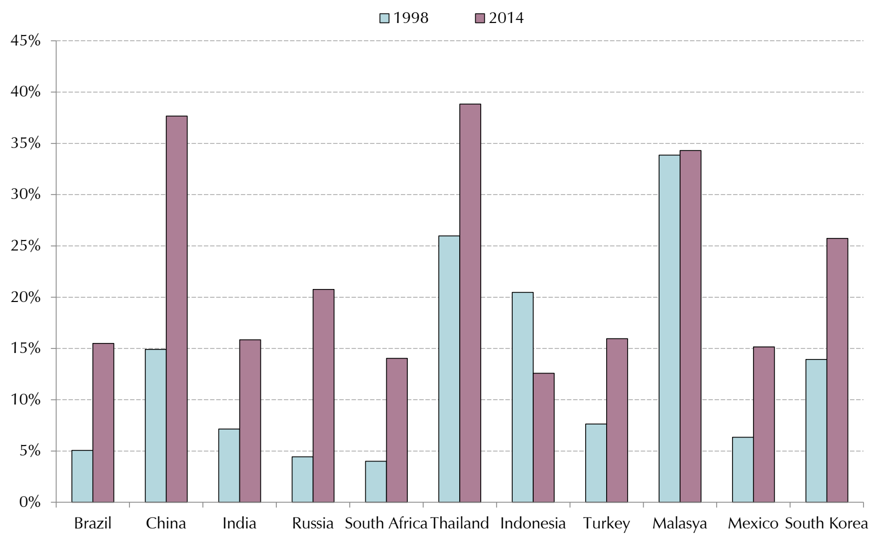


- Growth in emerging economies remains uneven and has been on a downtrend since 2010.
- China's economy has slowed as they transition from a growth model based on investment to one of consumption, while India remains a bright spot.
- Brazil and Russia remain in recession as the decline in commodity prices have weighed heavily on their economies.

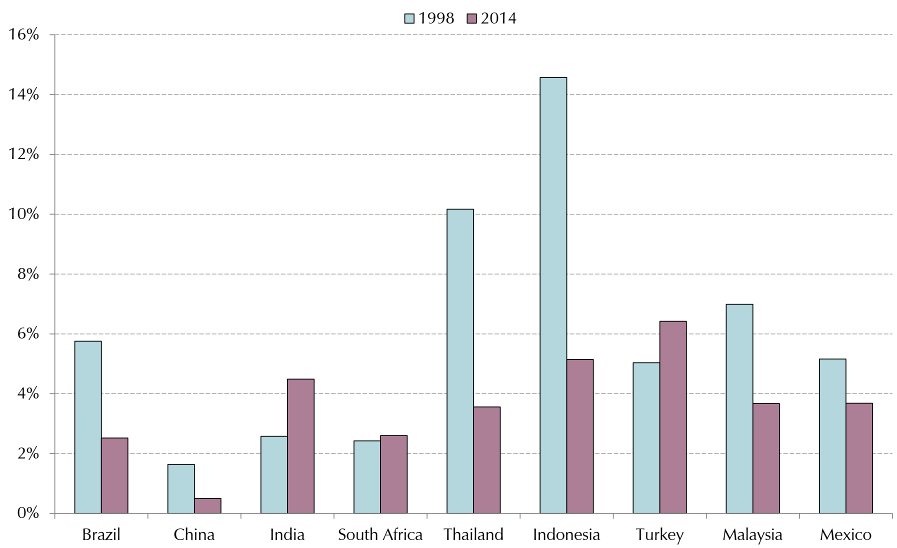
[1] Source: IMF. World Economic Outlook Update, April 2016. GDP data after 2014 are IMF estimates.

Emerging Market Conditions[1]

Central Bank Reserves as Percentage of GDP



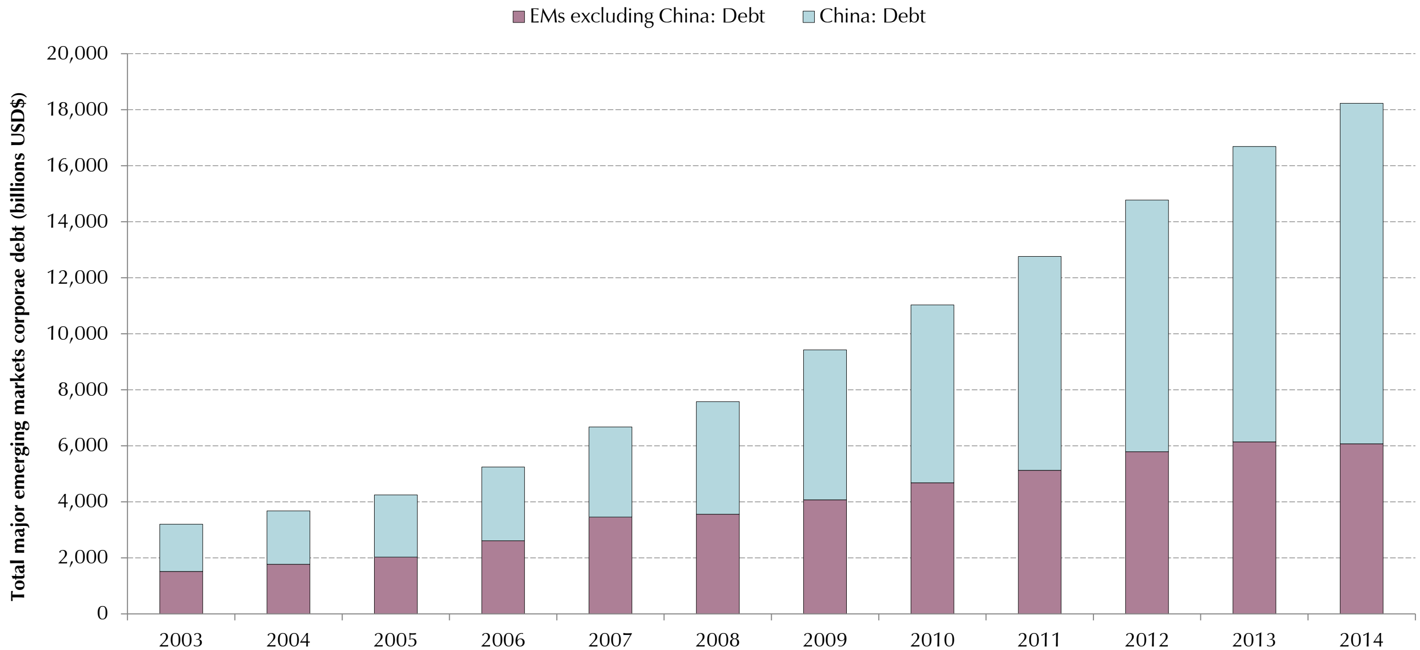
External Debt Service as Percentage of GDP



- After an extended period of underperformance, emerging markets recently showed strength, as the U.S. dollar declined and commodity prices, particularly oil, recovered.
- Contrasting current conditions with those during the Asian Financial Crisis in 1998, emerging economies generally have higher cash reserves and lower external debt service burdens making them better equipped to cope with currency fluctuations.

[1] Source: IMF, World Bank, and Research Affiliates. Data for 2014 are estimates.

Emerging Market Corporate Debt[1]



- Low interest rates in developed economies and an increased appetite for risk have led to a dramatic increase in corporate debt in emerging markets, driven by the more than 700% increase in China.
- Weaker commodity prices, rising rates, a stronger dollar, and overall risk aversion all create potential pressures increasing the risk for defaults.

[1] Source: IMF. Data represents nonfinancial firms.

Summary

Four primary concerns face the global economy in 2016: 1) declining growth in China along with uncertain fiscal and monetary policies; 2) continued economic sluggishness and financial risk in Europe; 3) weakening economic activity in the U.S.; 4) divergent growth in emerging economies.

- Given China's size and contribution to global growth, a slowing of its economy could have a meaningful impact, particularly on countries that depend on its trade. Another unexpected devaluation of the yuan could prove very disruptive to capital markets, weigh on domestic demand, and hurt countries with competing exports.
- Although there have been recent increases in European growth and prices, both remain weak. The strengthening of the euro versus the dollar complicates the ECB's efforts to increase inflation and creates headwinds for exporters and growth. Structural issues related to a single currency and multiple fiscal authorities also remains. A prolonged slowdown, or further issues with the solidarity of the euro, could be disruptive to markets and growth.
- Slowing growth globally, low oil prices, and impending interest rate increases could weigh on economic activity in the U.S. Corporate profits remain vulnerable after a period where companies increased margins by cost cutting. The dollar has recently weakened, but the potential for returned strength exists as the Fed further tightens. A strong dollar should particularly weigh on multinational companies, while low energy prices should pressure oil and related companies.
- Growth in emerging market economies will likely remain uneven, with commodity export-dependent economies particularly hurt by a sustained slowdown in global growth and prices. Higher interest rates in the U.S. could also attract capital away from emerging economies. Despite varied headwinds, there are bright spots within emerging markets, including India, where their growth has surpassed China's growth.