



Global Macroeconomic Outlook March 2018

Global Economic Outlook¹

The IMF continues to forecast a slight pick-up in growth over the next two years followed by a decline as output gaps close in advanced economies and the tailwinds of fiscal policy in the U.S. eventually wane. Risks are balanced over the short-term, but medium-term risks weigh to the downside, including antitrade sentiment, geopolitical tensions, and tightening financial conditions.

- The IMF's forecast for 2018 and 2019 global growth remained the same at 3.9%, a level slightly above the 3.8% level of 2017.
- In the IMF's April update, growth projections for advanced economies increased for 2018 (2.5% versus 2.2%) and remained the same for 2019 (2.2%) as global growth momentum continues, financial conditions remain supportive, and U.S. tax reforms take effect. The IMF projects further increases in U.S. (2.9% versus 2.7%) and European (2.4% versus 2.2%) growth in 2018 and U.S. growth in 2019 (2.7% versus 2.5%).
- Projections for emerging economy growth remained unchanged for 2018 (4.9%) and increased slightly for 2019 (5.1% versus 5.0%) with wide variations across countries. Growth in China is expected to moderate, with 2018 and 2019 growth rate projections unchanged at 6.6% and 6.4%, respectively. The IMF projects improved growth in India, Brazil, and Mexico. Slow growth is expected for Russia in 2018 (1.7%) and 2019 (1.5%).
- Overall, inflation is expected to decline slightly over the next two years, remaining below the long-term averages.

	Real GDP (%)			Inflation (%)		
	IMF 2018 Forecast	IMF 2019 Forecast	Actual 10 Year Average	IMF 2018 Forecast	IMF 2019 Forecast	Actual 10 Year Average
World	3.9	3.9	3.4	3.5	3.4	3.7
U.S.	2.9	2.7	1.4	2.5	2.4	1.7
European Union	2.4	2.0	0.8	1.9	1.8	1.6
Japan	1.2	0.9	0.5	1.1	1.1	0.3
China	6.6	6.4	8.2	2.5	2.6	2.6
Emerging Markets (ex. China)	4.2	4.5	3.9	6.1	5.5	7.0

¹ Source: IMF. World Economic Outlook. October 2017 edition with April 2018 update. "Actual 10 Year Average" represents data from 2007 to 2017.

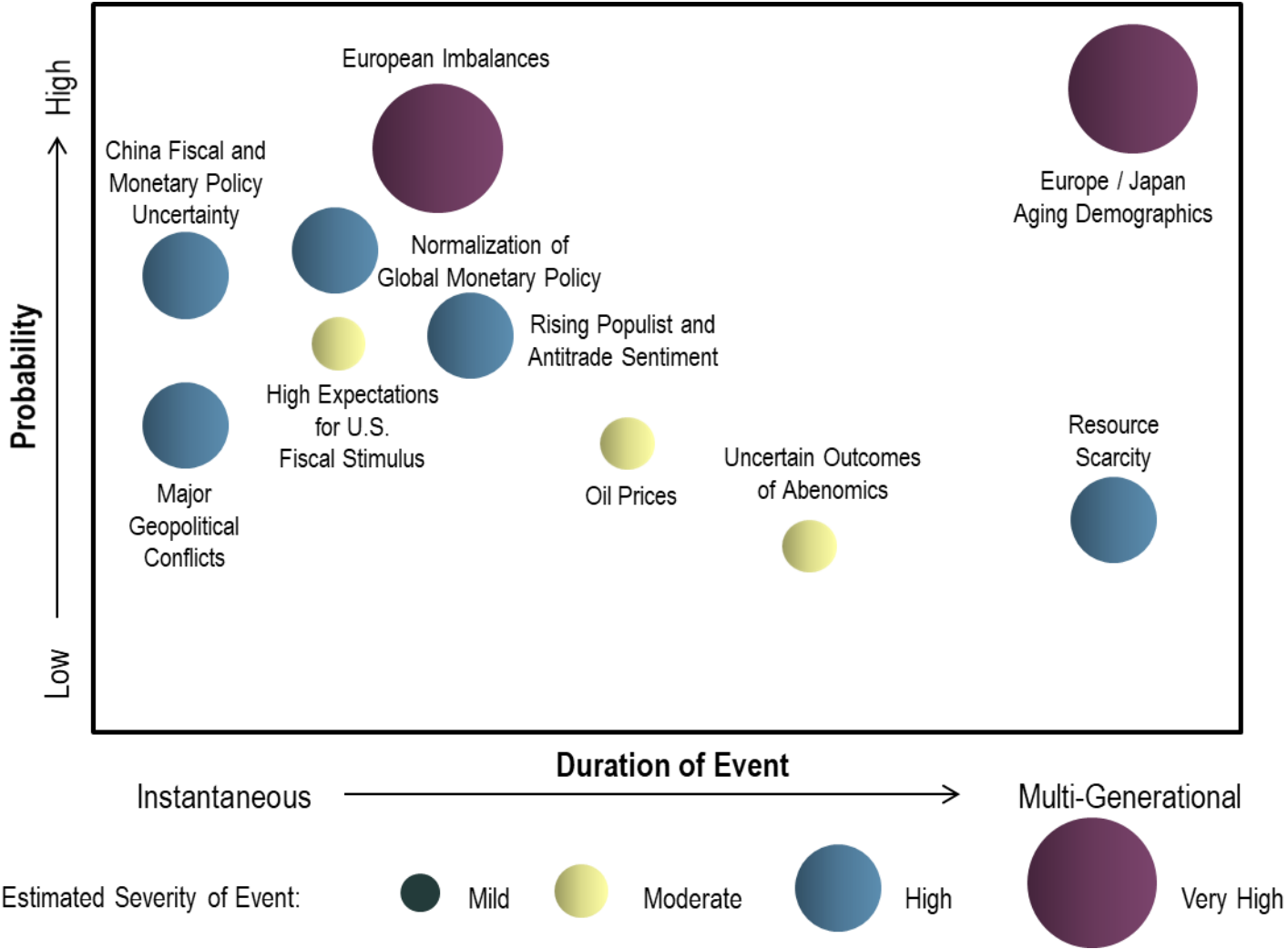
Global Economic Outlook (continued)

Tax cuts could provide a modest boost to growth, but it will likely be short lived. We could be moving into a period of coordinated monetary tightening across central banks. The balance of fiscal and monetary policy globally remains a key issue.

- Under new chair Jerome Powell, the Federal Reserve increased interest rates for the sixth time at their March meeting. Markets expect the Fed to increase rates two or three more times in 2018 and to continue to reduce its balance sheet. Tax cuts and the changing complexion of the Fed could lead to further tightening.
- Of all the major central banks, the Bank of Japan (BOJ) is showing no signs of pulling back from its unprecedented monetary stimulus, as inflation remains stubbornly low. At their March meeting the BOJ made no changes to their stimulative efforts, keeping bank deposit rates negative (-0.1%), and continuing to target a 0% yield on the 10-year government bond.
- At their meeting in March, the European Central Bank held rates steady and plans to continue asset purchases through September. They removed language in their statement that indicated they were ready to increase the level of bond purchases, signaling that its quantitative easing could be ending in the short-term. The strengthening euro is also a key consideration that could create a headwind to the bank's inflation target of close to 2%.
- China's central bank, the People's Bank of China (PBOC), continues to quietly tighten monetary policy. In March after the Federal Reserve's rate increase, the PBOC increased rates again, although by a smaller amount.

Several issues are of primary concern: 1) the potential for simultaneous monetary tightening globally; 2) uncertainty related to the U.S. economy and policies; 3) declining growth in China, along with uncertain fiscal and monetary policies; and 4) political uncertainty in Europe and risks related to the U.K.'s exit from the European Union.

Macroeconomic Risk Matrix



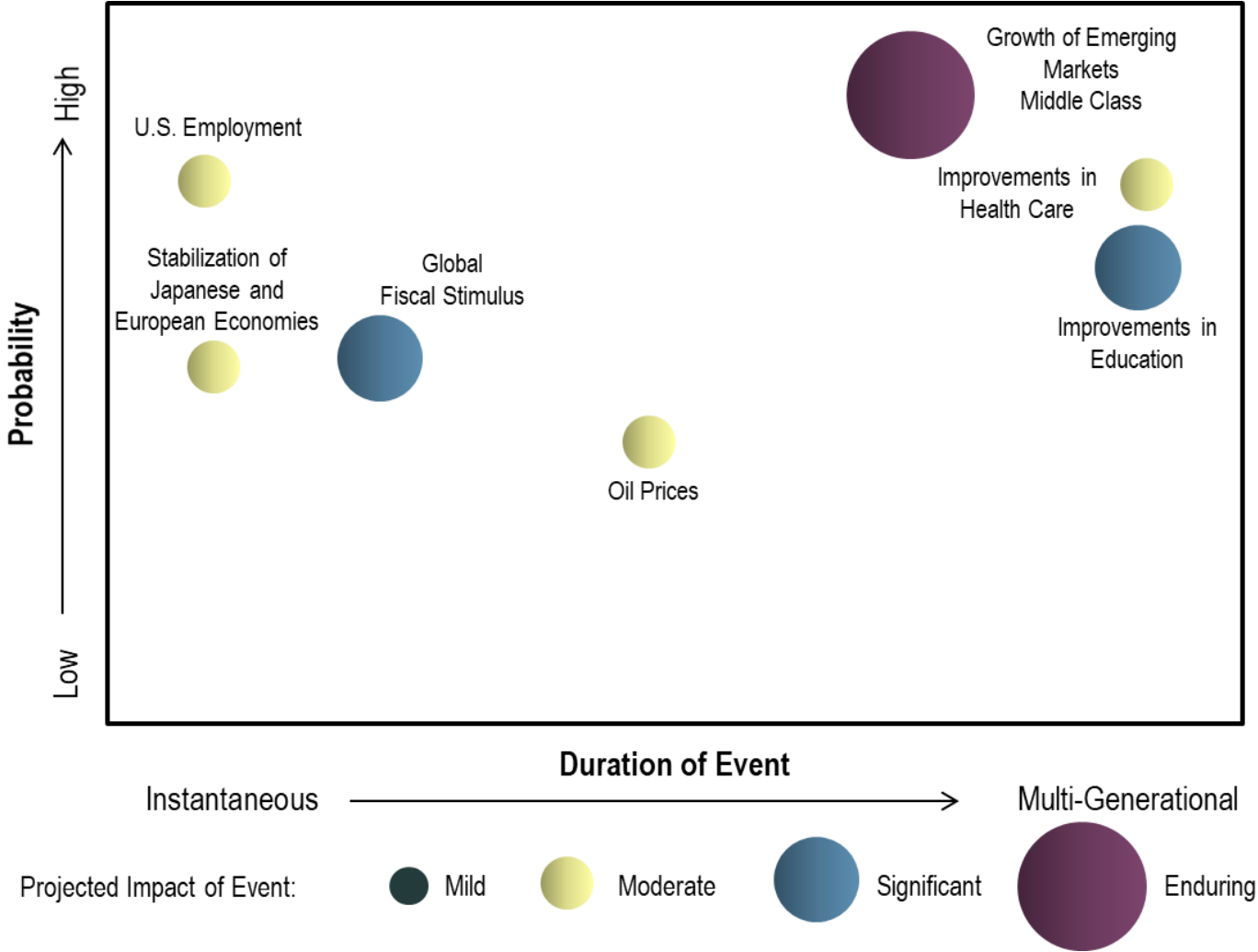
Macroeconomic Risk Overviews

China Fiscal and Monetary Policy Uncertainty	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. Given the significant turnover in positions related to elections at the communist party's congress, policy uncertainty exists going forward including the management of debt levels and the regulation of state-owned enterprises. The management of capital outflows is another key issue in China. They have made some efforts to tighten regulations to stem outflows, but higher rates and growth in the U.S., and elsewhere, could add to outflow pressures. Were China to abandon its support for the yuan, the resulting major devaluation of the currency could prove particularly disruptive to global markets and trade. The hot property market and the growing mountain of debt in the corporate sector remain other key risks.
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 negative long-term impacts on GDP growth and fiscal budgets, amplifying debt problems.
High Expectations for U.S. Fiscal Stimulus	Post U.S. presidential election, hopes have been high for new policies lowering taxes, increasing infrastructure spending, and reducing regulations. The recent reduction in taxes could lead to an increase in economic activity, but questions remain about how much has already been priced into markets and the late cycle timing of the cuts. The potential for disappointment remains as the stimulus could further fan inflation and the rate of the Fed's monetary tightening.
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. Within the European Union, tensions exist, as highlighted in the U.K. referendum, related to policies on immigration, laws, and budgetary contributions. The referendum late last year in Catalonia Spain and elections in Germany highlight the political uncertainties. Additional countries leaving either group, particularly the Eurozone, could set a dangerous precedent, especially if they ultimately experience growth.
Major Geopolitical Conflicts	Tensions with North Korea appear to have softened, while the ongoing conflict in Syria has flared-up. After heightened rhetoric from the U.S. and North Korea, progress has been made, with a meeting between North and South Korea, a visit by U.S. CIA director, Michael Pompeo, and plans for a meeting between President Trump and Kim Jong Un. In Syria, after a suspected chemical attack the U.S. and its allies launched strategic missile attacks increasing the tensions with Syria and its ally, Russia. Other outstanding issues include tensions between the U.S./Saudi Arabia and Iran along with ongoing conflicts in Yemen and Afghanistan.

Macroeconomic Risk Overviews (continued)

Normalization of Global Monetary Policy	<p>After the Global Financial Crisis, major central banks injected massive amounts of liquidity into the market by purchasing bonds from banks (i.e., quantitative easing). They also reduced short-term interest rates to record lows. The U.S. central bank has ended its bond-buying program, started to increase interest rates, and began reducing its balance sheet. Although other central banks, like Japan (BOJ) and Europe (ECB), continue to stimulate their economies, discussions have started about reducing stimulus. If major central banks start to tighten their policies at the same time it could lead to higher rates, less liquidity, and overall lower economic activity.</p>
Oil Prices	<p>Oil prices rallied significantly from their bottom, but they remain off their peaks. An extended period of relatively lower oil prices would hurt countries that depend on higher prices. Although OPEC has extended their production cuts into 2018 to help prices, increased production from the U.S. shale industry acts as a counter force. The risk of increased geopolitical tensions also exists with depressed oil prices.</p>
Resource Scarcity	<p>The growing 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.</p>
Rising Populist and Antitrade Sentiment	<p>Recent tariffs imposed by the U.S. and China, along with the last U.S. presidential election and the U.K. vote to leave the European Union (“Brexit”) and other votes in Europe, highlight the growing populist/antitrade sentiment. Stagnant wages, growing inequality, and the perception of jobs being lost abroad are key contributors. Reducing trade and imposing tariffs will likely lead to inflation, reduced efficiencies, and heightened tensions between countries.</p>
Uncertain Outcomes of Abenomics	<p>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. Recently Japan has experienced economic improvements, but the risk remains of overshooting with its policies, which could prove disruptive to markets and growth.</p>

Positive Macroeconomic Trends Matrix



Positive Macroeconomic Trends Overviews

Global Fiscal Stimulus	Given the slow growth globally, and the likely tightening of monetary stimulus, there could be a shift to fiscal stimulus. Recent U.S. tax cuts should help growth domestically and abroad, particularly for key trading partners like Mexico and Canada. With interest rates still low, borrowing for infrastructure investments is affordable. Increased fiscal stimulus could help growth while reducing the reliance on monetary policy.
Growth of Emerging Markets Middle Class	In emerging economies, 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.
Improvements in Education/Healthcare	Literacy rates and average life spans have increased globally, particularly in emerging economies. Higher literacy rates will drive future growth, helping people learn new skills and improve existing skills. Longer lives increase incentives for long-term investments in education and training, resulting in a more productive work force and ultimately more growth.
Oil Prices	Although oil prices recently increased, they remain below their prior peak. Lower oil prices will likely have a positive impact on global growth, particularly for energy importers like China, Japan, and India. Consumers should benefit from lower oil prices, in the form of lower prices for gasoline and heating oil.
Stabilization of Japanese and European Economies	Despite some recent talks of tightening monetary policy, the Japanese and European central banks continue their respective asset purchase programs and maintain interest rates at historic lows. Unemployment has come down in both areas and Japan has moved from deflation to inflation. Continued improvements in economic conditions in Europe and Japan could also be beneficial for global trade. U.S. investors could particularly benefit from these conditions if the dollar remains weak.
U.S. Employment	The U.S. unemployment rate has steadily declined since its post Global Financial Crisis peak. Hourly earnings growth has not reached levels that it has in prior recoveries, but has increased from its lows. Improvements in the U.S. labor market, along with the recent tax cuts, should stimulate consumption and growth for both U.S. and foreign goods. A lower unemployment rate and higher consumption will also lead to higher tax revenue that should partly offset the deficit pressures from the recent tax reforms.

Global Nominal Gross Domestic Product (GDP) Growth¹

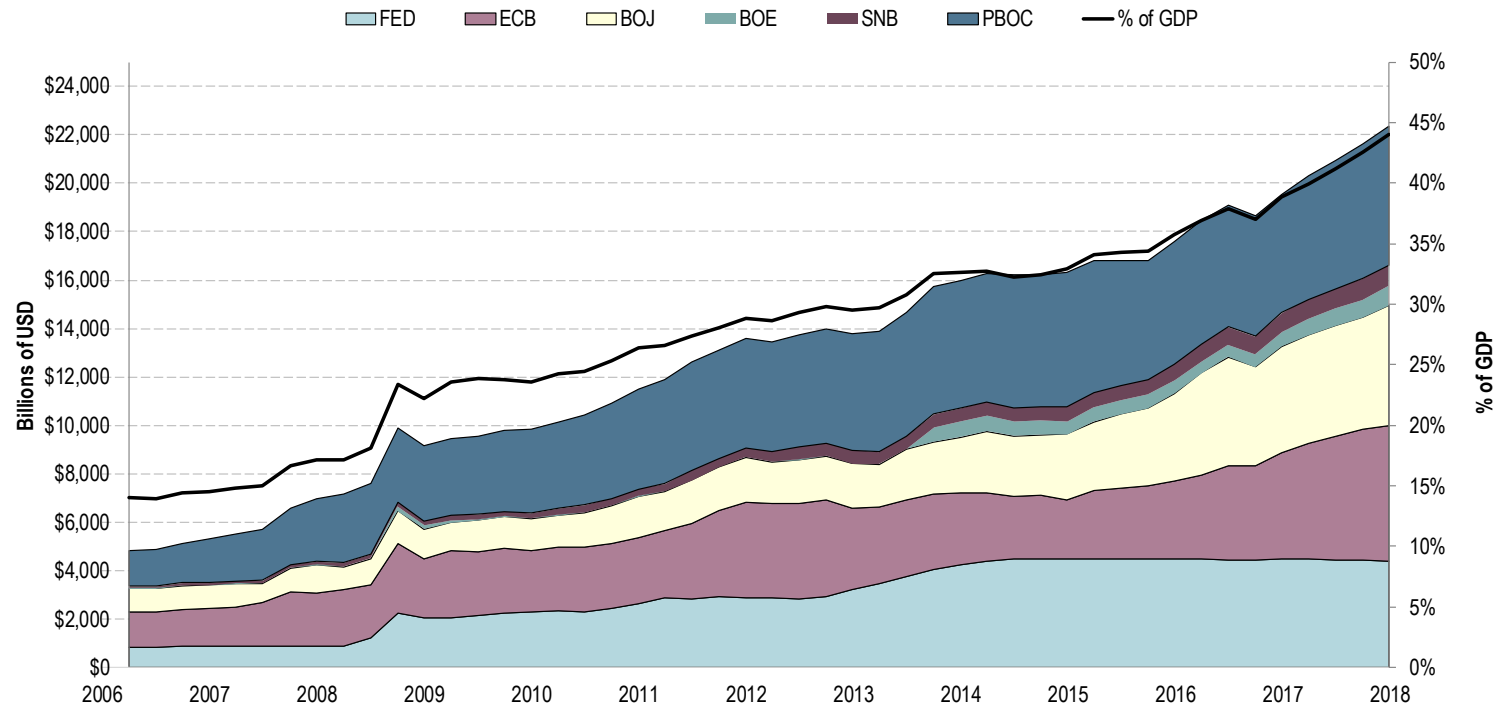


- Higher global growth is expected in 2018, driven by robust trade, the fiscal stimulus in the U.S., and continued growth in Europe.
- Going forward, the potential for trade wars, higher inflation, and policy tightening remain headwinds to the global economy.

¹ Source: Oxford Economics. Updated March 2018. GDP data after 2017 are estimates.

U.S. and China Tariffs

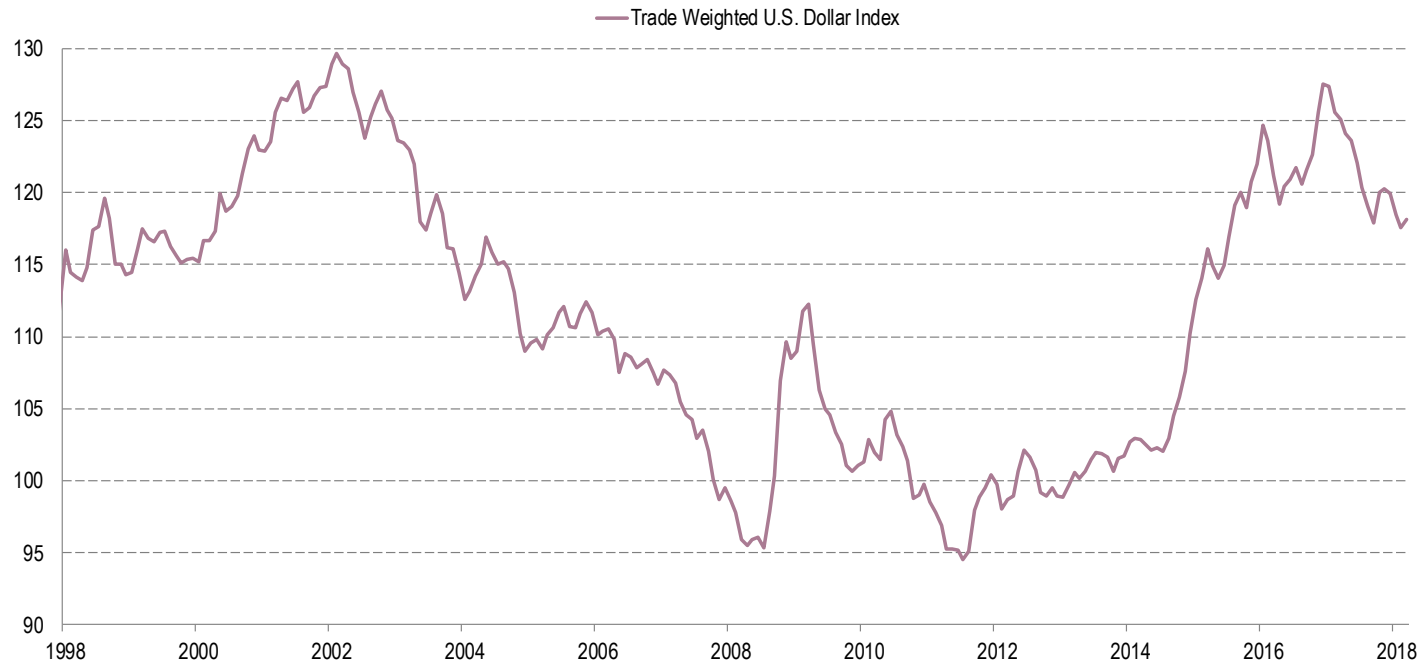
- The U.S. and China, the world's two largest economies, are locked in a back-and-forth of trade tariff threats totaling over \$100 billion in goods.
- The tension started as the U.S. administration looked to make good on its promise to bring jobs back to the U.S., particularly in the manufacturing sector.
- Thus far, the U.S. has announced tariffs on solar panels (30%), steel (25%), and aluminum (10%) imports, as well as proposed \$50 billion in tariffs on other Chinese goods with China responding with similar tariffs across U.S. goods.
- Tariffs typically result in higher prices (inflation) and ultimately weigh on growth. This could particularly affect emerging economies. In addition, tariffs targeted to protect domestic producers will also hurt companies that use the items as an input (e.g., steel) weighing on margins and potentially leading to higher prices.

Global Monetary Policy¹

- Since the Global Financial Crisis, major central banks have dramatically increased their balance sheets to levels close to 45% of their aggregate GDP.
- The U.S. already started reducing its balance sheet and it is likely that the ECB will end its asset purchases by the end of 2018.
- Less demand from central banks for bonds could weigh on overall economic activity and risk assets as interest rates rise, demand for credit falls, and liquidity declines.

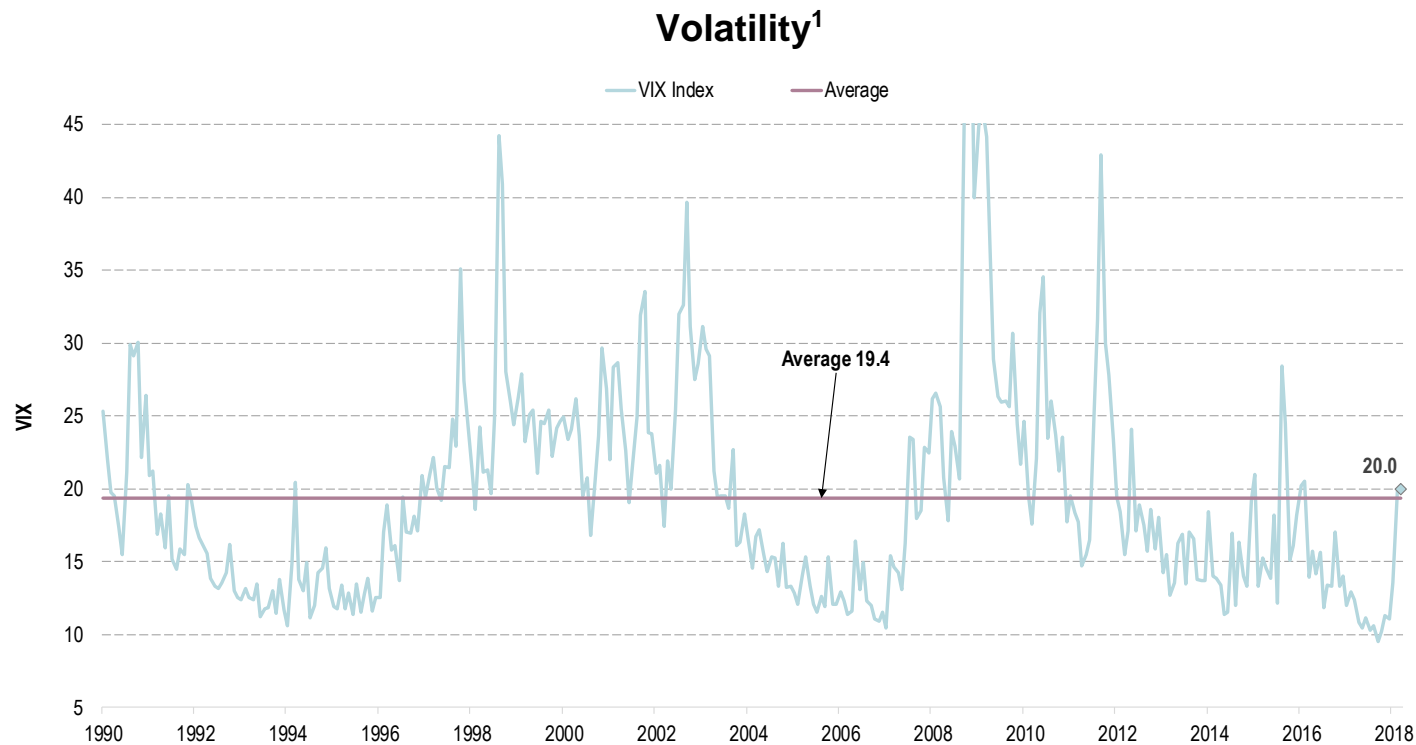
¹ Bloomberg. Data is as of March 31, 2018.

Major Currency Values versus the U.S. Dollar¹



- The U.S. dollar continued its slide in the first quarter falling 1.5% versus a basket of its peers.
- Fears of a trade war, inflationary pressures, and anticipation of a higher deficit from the recent tax cuts have depressed the dollar despite higher rates in the U.S. and fiscal stimulus.
- The weakening dollar lessened the burden for countries with dollar-denominated debt and boosted international equity returns for U.S. investors.

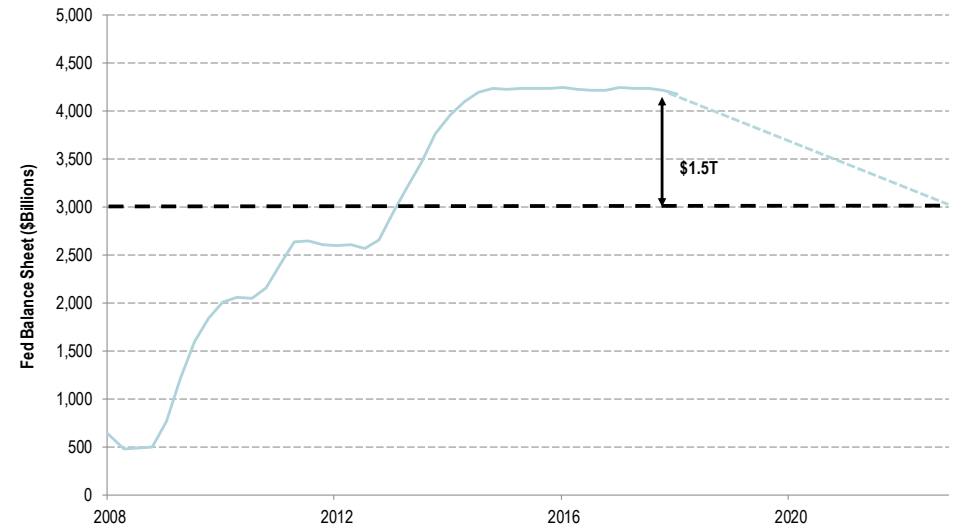
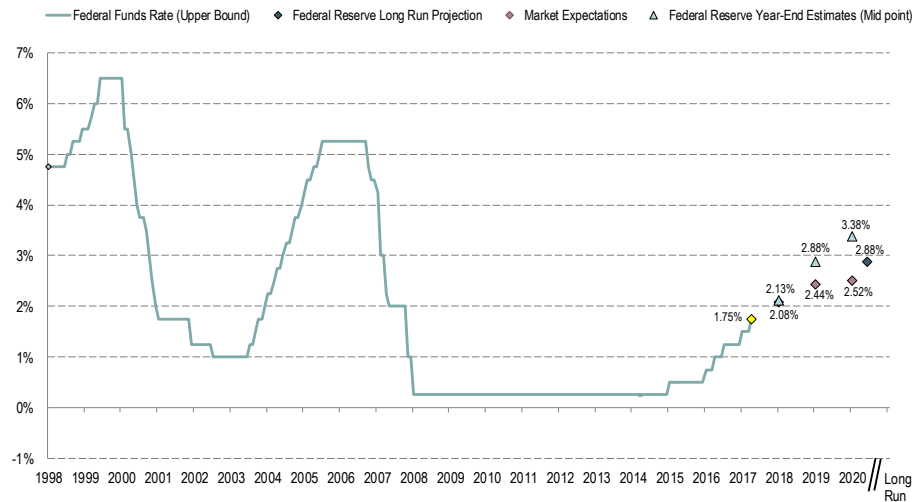
¹ Source: Federal Reserve Bank of St. Louis. Data is as of March 31, 2018.



- Supportive monetary policy, positive economic growth globally, and strategies that bet against volatility all contributed to the low levels of volatility in 2017.
- In February, volatility spiked driven by an unwinding of short volatility trades and investors coming to terms with the fact that inflation and rates could be rising.
- Although volatility spiked recently, the increase brought the VIX to only slightly above its long-term average at quarter-end.

¹ Bloomberg. Data is as of March 31, 2018.

U.S. Monetary Policy^{1, 2}

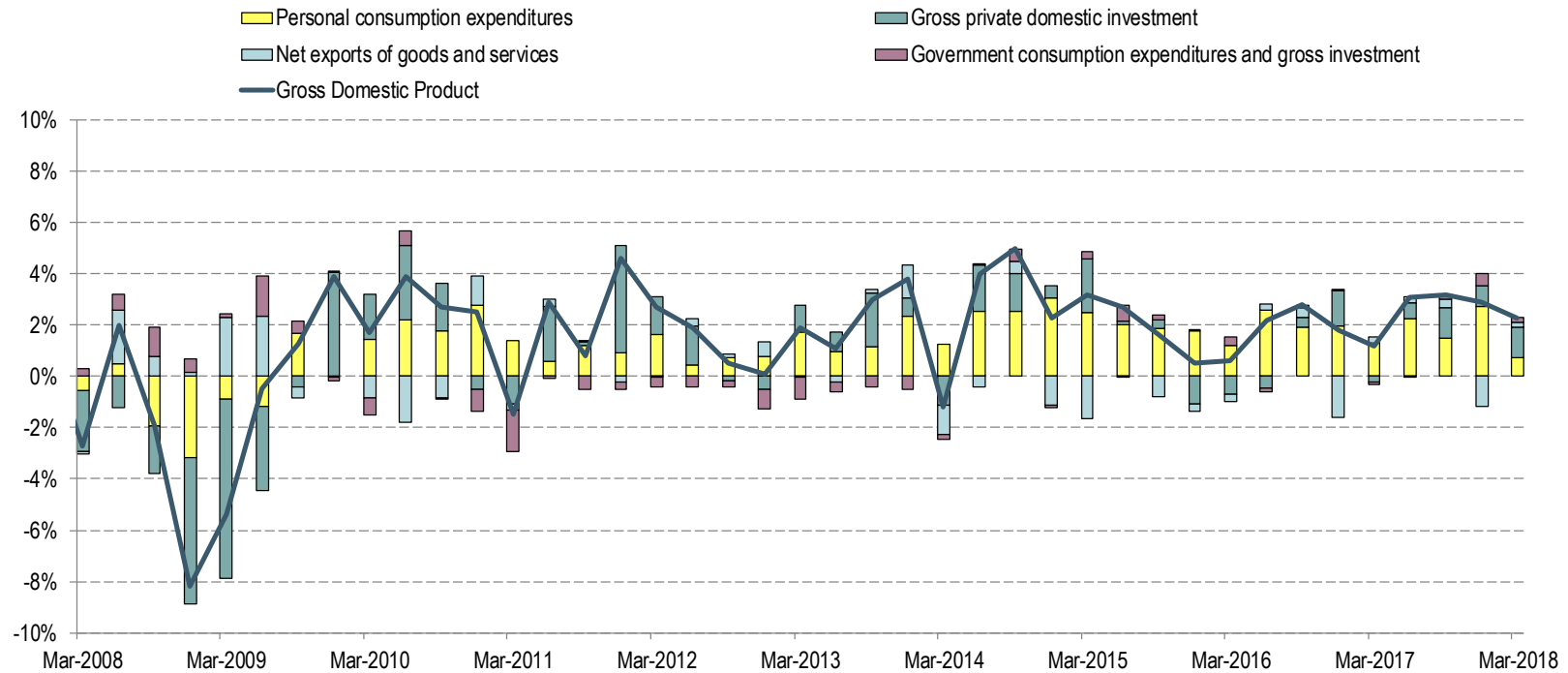


- In March, the U.S. Federal Reserve continued its pace of steadily increasing interest rates announcing its sixth increase, to a range of 1.50% to 1.75%. This represented the first rate hike under the new head of the Fed, Jerome Powell.
- Expectations are for several more rate hikes this year with the trend persisting of market expectations being lower than the central bank's estimates.
- The Fed recently began the process of reducing their over \$4 trillion balance sheet, with a target of reducing it by \$1.5 trillion by 2022.
- Less demand for bonds by the Fed could lead to further interest rate increases.

¹ Source for Monetary Policy: Bloomberg. Data is as of March 31, 2018.

² Source for Balance Sheet: Oxford Economics Data is as of March 31, 2018.

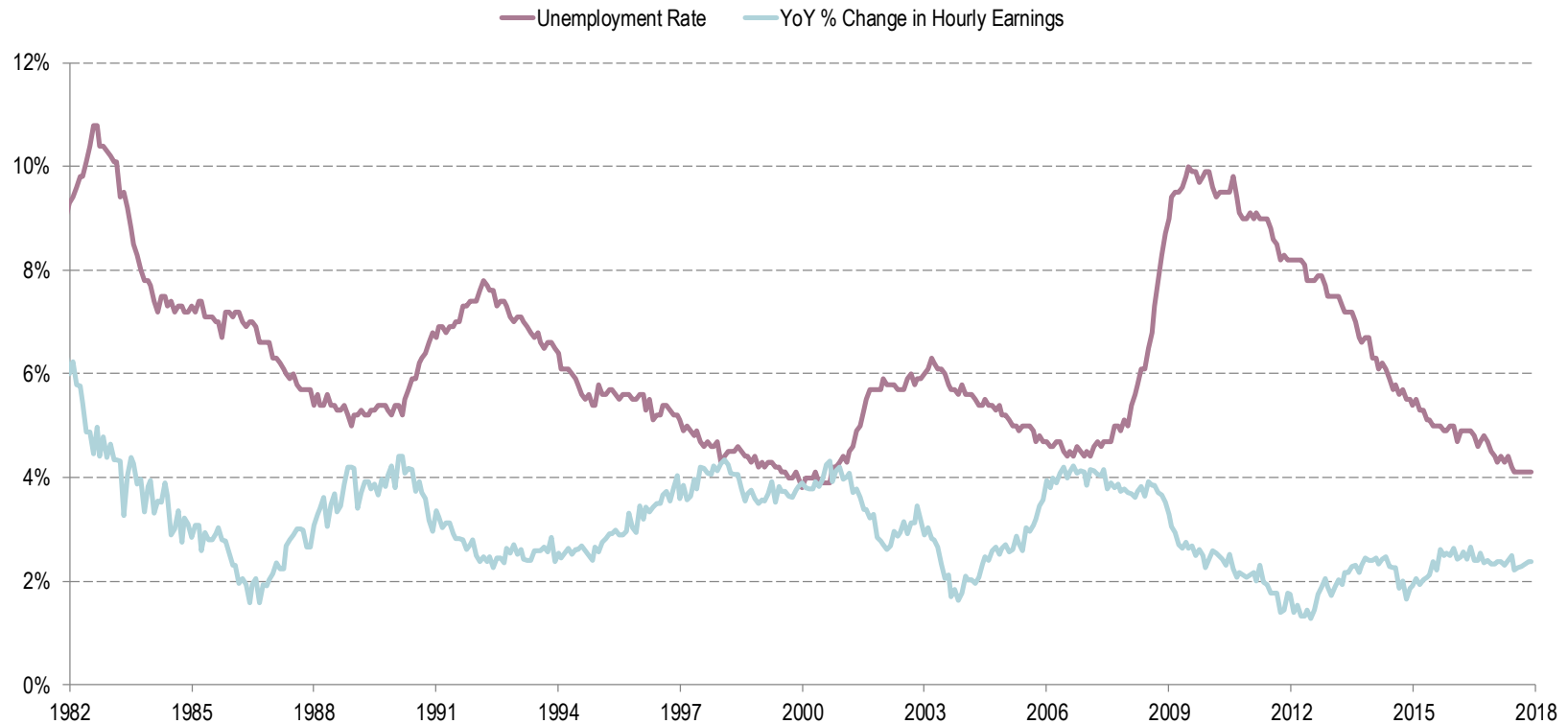
U.S. Real Gross Domestic Product (GDP) Growth¹



- The initial estimate of first quarter U.S. GDP growth came in at 2.3%, below the prior reading of 2.9%, but above the 2.0% expected by economists. For the trailing year, GDP grew at a 2.9% rate.
- Consumer spending slowed in the first quarter contributing to the decline from the prior quarter, but this could change going forward as the impact of the recent tax reductions are felt.

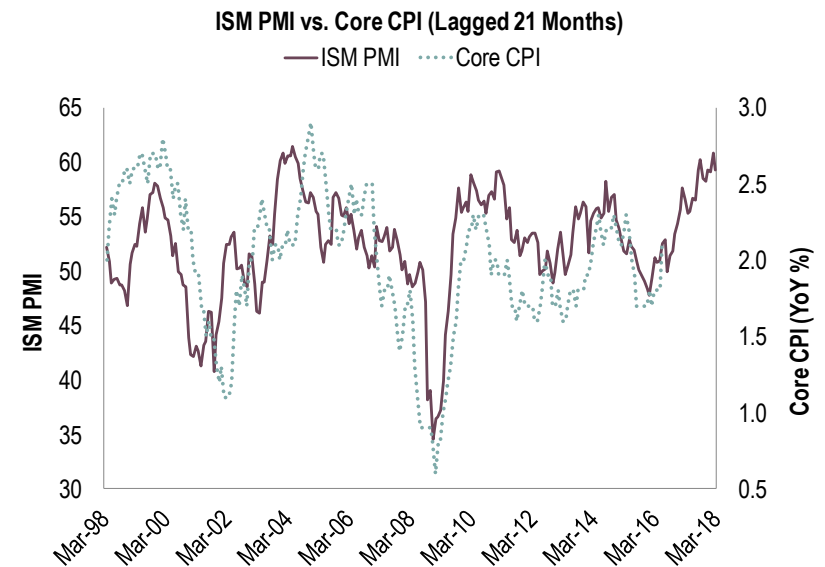
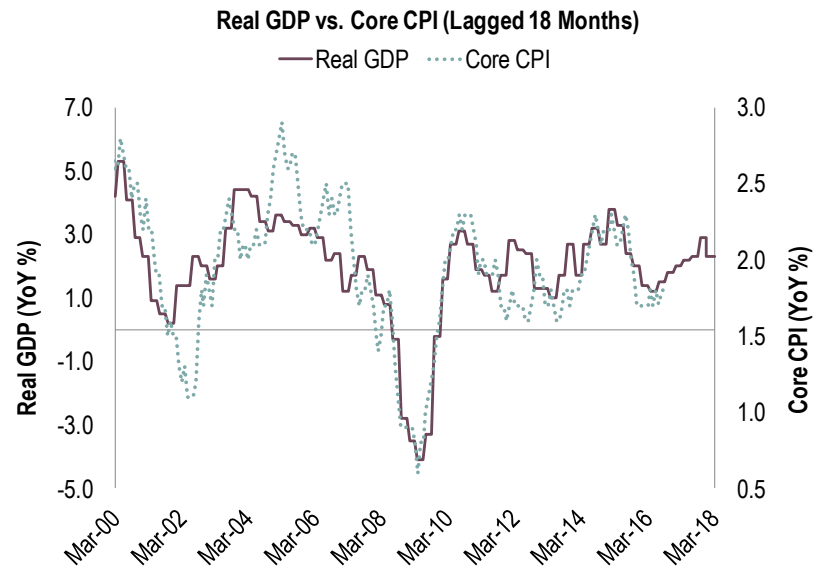
¹ Source: U.S. Bureau of Economic Analysis. Data is as of the first quarter of 2018 and represents the first estimate.

U.S. Employment & Wages¹



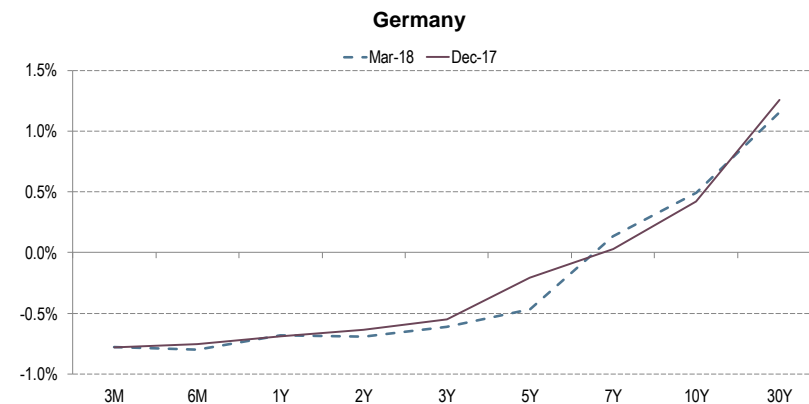
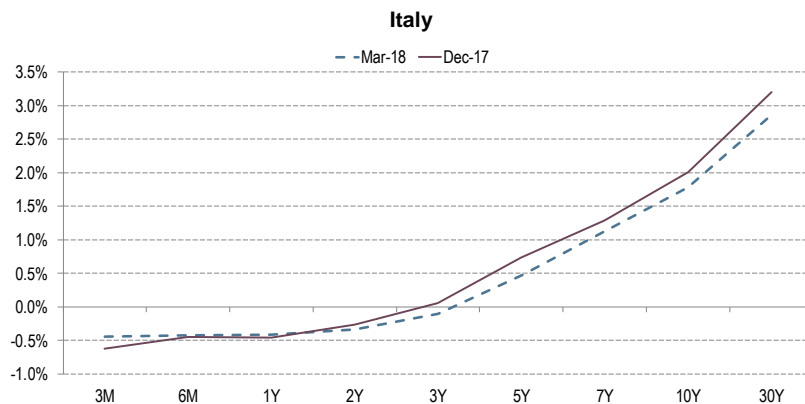
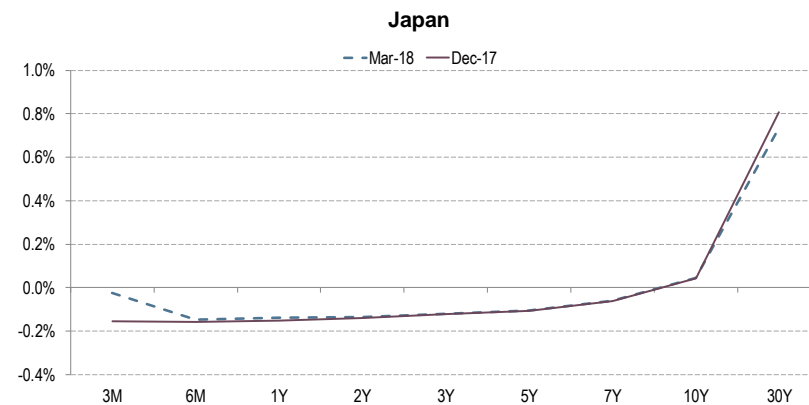
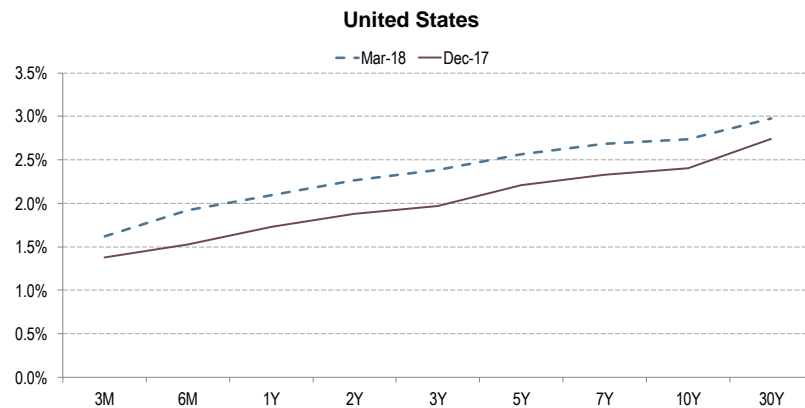
- In the first quarter, the unemployment rate was unchanged at 4.1%, a level well below the 10.0% peak.
- Although the unemployment rate has substantially declined, labor force participation remains low and broader measures of unemployment that include discouraged and underemployed workers are high.
- Wage growth has plateaued at a level well below prior cycles, partly due to declining productivity, low labor force participation, and globalization.

¹ Source: Bureau of Labor Statistics. Data is as of March 31, 2018.

U.S. Inflation¹

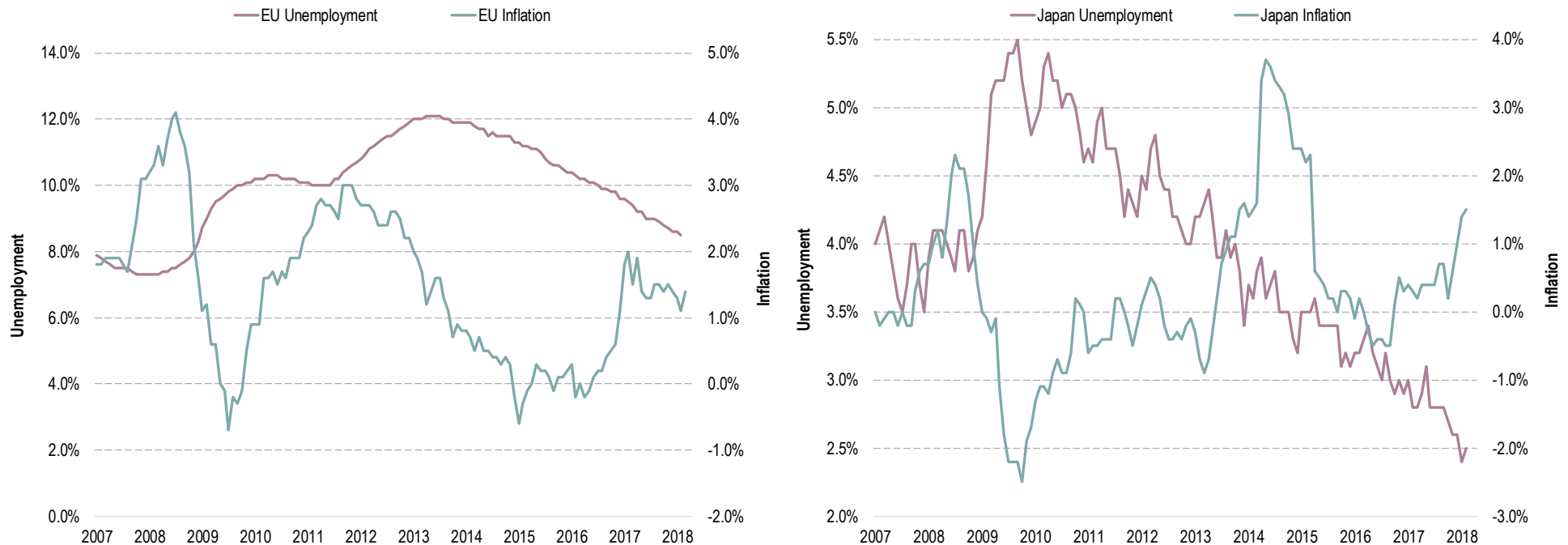
- Inflation is considered a lagging indicator representing the economic conditions of the past.
- This leads to economic conditions today being a means of forecasting future inflations levels.
- Real GDP and manufacturing indicators, like the ISM Purchasing Managers Index, have historically been reasonable indicators of future inflation and are both pointing to increasing inflationary pressures.

¹ Source: Bloomberg. Data is as of March 31, 2018.

Government Bond Yield Curves¹

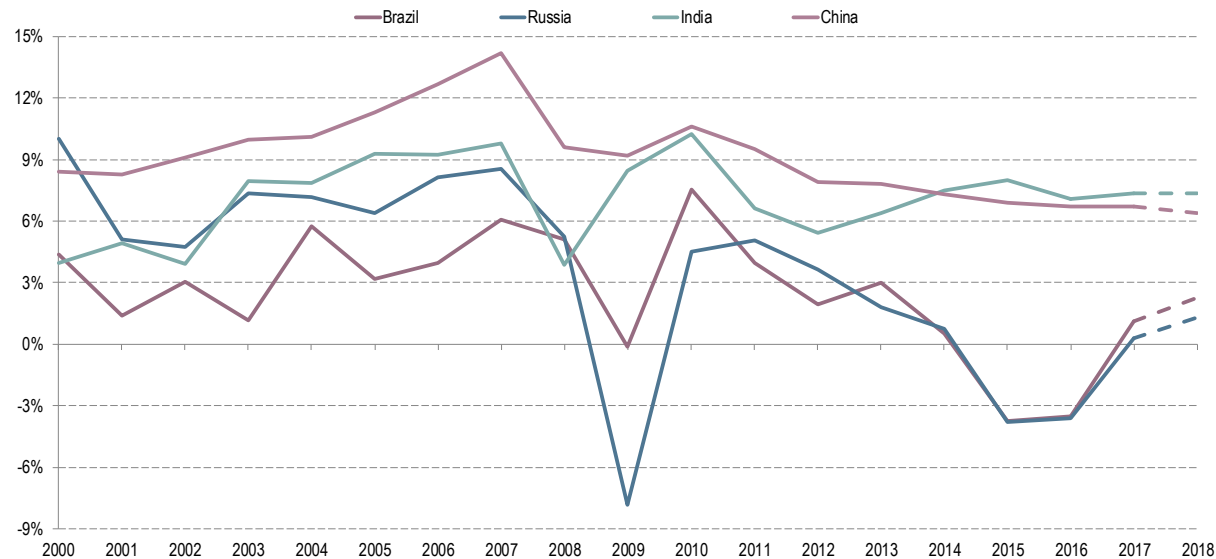
- The entire yield curve in the U.S. increased in the first quarter and continued to flatten due to fears that a pick-up in inflation could lead to the Federal Reserve increasing the pace of its rate hikes.
- In Europe and Japan, large portions of the yield curves remain negative. Rates largely declined in Italy with the exception of short-term rates. In Japan, rates were similar to the end of 2017 with slight changes in short- and long-term rates, while results in Germany were mixed.

¹ Source: Bloomberg. Data is as of March 31, 2018.

Japan and Europe Economic Conditions¹

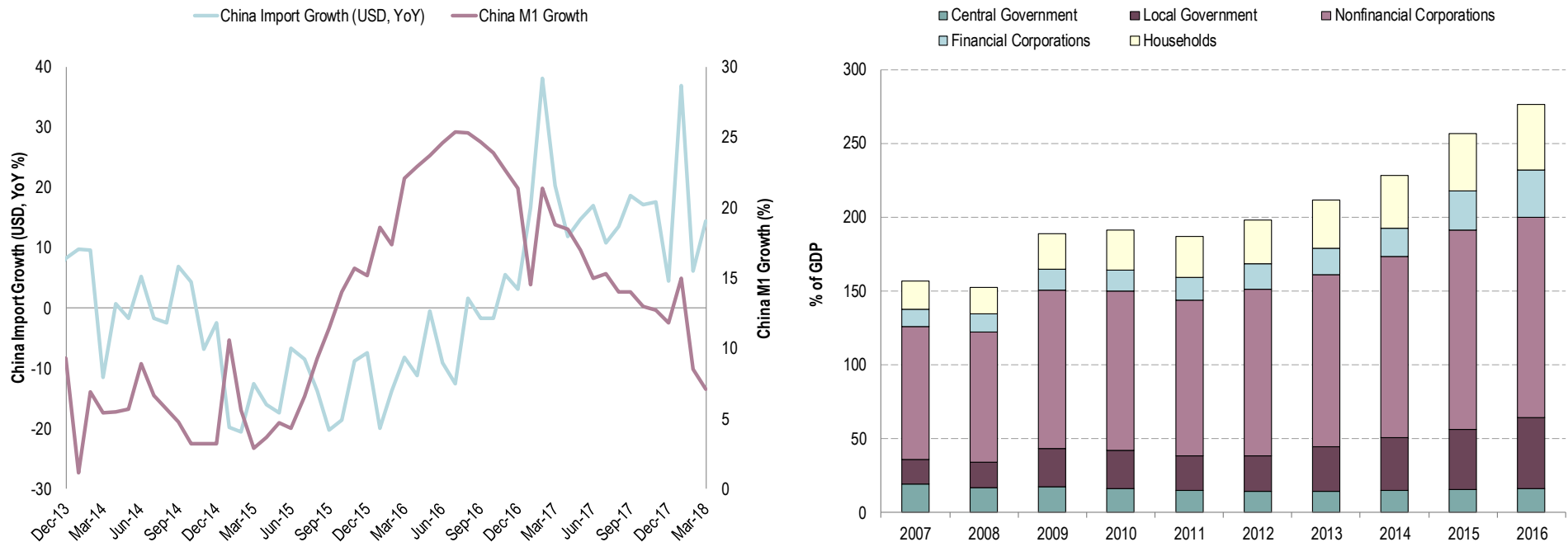
- In Europe, employment growth remained strong, and inflation picked up, as lending and investment increased.
- Rising demand abroad and sustained monetary policy support have helped the Japanese economy with unemployment falling and inflation picking up.
- Improving economic conditions could continue to attract capital, but also lead to reduced monetary support.

¹ Source: Bloomberg. Inflation Data is as of March 31, 2018 and unemployment data is as of February 28, 2018.

Emerging Market GDP¹

- Growth in emerging economies continues strong but uneven, with debt levels remaining a key risk.
- China's stimulus, along with stable growth in developed economies, has helped export-focused countries.
- China's economy is forecasted to slow as they reposition the economy and deal with lingering debt issues. India remains a bright spot, with higher growth forecasted. The IMF projects growth from Russia and Brazil.
- Going forward, higher rates in the U.S., antitrade policies, and heightened geopolitical tensions could reverse the flow of the recent "hot money" into emerging markets and hurt returns.

¹ Source: IMF. World Economic Outlook. October edition with April 2018 update. Estimates start after 2016.

China Stimulus¹²

- After a difficult 2015, China launched a stimulus program similar to that during the Global Financial Crisis, in an effort to stabilize the economy. They have since pulled back from this stimulus.
- Demand from China for imports has been a key driver in emerging market growth. A decrease in demand from China or an overall reduction in global trade driven by tariffs could hurt emerging economies.
- In the coming years, China will need to manage the process of transitioning to an economy based on consumption and not investment, while reducing debt levels and dealing with financial risks.

¹ Source for China Import Growth and M1 Growth: Bloomberg. Data is as of March 31, 2018.

² Source for China Debt: Oxford Economics/Haver Analytics.

Summary

Four primary concerns face the global economy: 1) the potential for simultaneous monetary tightening globally; 2) uncertainty related to U.S. policies; 3) declining growth in China, along with uncertain fiscal and monetary policies; and 4) political uncertainty in Europe and risks related to the U.K.'s exit from the European Union.

- Since the Global Financial Crisis, central banks worldwide have attempted to support markets and the economy through low interest rates and bond-purchasing programs (i.e., quantitative easing). Balance sheets have close to doubled since the GFC and equal around 45% of aggregate GDP. The U.S. has been increasing rates and reducing its balance sheet, with other central banks likely to follow shortly. Simultaneous tightening across central banks could lead to higher interest rates, less liquidity, and slower economic activity.
- The U.S. has experienced largely stable growth since the end of the financial crisis, but at levels below prior recoveries. Inflation and wage growth remain low despite the declining unemployment rate. Inflationary pressures could be building given where we are in the economic cycle, the recent tax legislation, and heightened rhetoric about tariffs. An acceleration in prices could lead the Fed to increase its pace of tightening. Political gridlock and uncertainty related to the new administration's policies remain other key issues.
- Over the coming years, China will likely continue to manage a repositioning and slowing of its economy, which could have a meaningful impact on countries that depend on its trade. Uncertainties related to the policies of the recently elected officials at the Communist Party's congress, growing debt, particularly in the corporate sector, and recent tariffs between China and the U.S. remain key issues. Another devaluation of the yuan could disrupt capital markets, weigh on domestic demand, and hurt countries with competing exports.
- The referendum in Catalonia Spain and the elections in Germany showed that political uncertainties remain in Europe. The on-going negotiations of the U.K. to leave the EU is another key issue. Uncertainty related to the negotiations should affect foreign investment and consumption. Moves by other countries to leave the EU, or the Eurozone, would be disruptive to markets and growth.