



# Global Macroeconomic Outlook December 2018

## Global Economic Outlook

### The IMF continues to reduce their projections for the coming years as the global economic expansion slows.

- For 2018, the IMF's forecast remains at 3.7%, while for 2019 (3.5%) and 2020 (3.6%) they lowered their projections by 0.2% and 0.1%, respectively.
- In the IMF's January update, their growth projections for advanced economies in 2018 was 2.3%, 2.0% for 2019 (-0.1% from the last report), and 1.7% for 2020. Growth in the U.S. is projected to be the strongest, but will slow in the coming years due in part to the reduction in fiscal and monetary stimulus. Growth in the euro area is projected to decline slightly in the coming years due to higher borrowing costs in Italy, slowing growth in Germany, and social unrest in France.
- Projections for growth in the emerging and developing economies declined for 2018 (4.6% versus 4.7%) and 2019 (4.5% versus 4.7%), but is expected to pick up in 2020 (4.9%). Growth in China is expected to slow as the economy continues to transition away from an investment-based growth model. Fiscal stimulus is expected to offset only part of the impact of trade tensions with the U.S. The IMF projects improved growth in India and Brazil in 2019 and Mexico in 2020.
- Overall, inflation is expected to remain at the same level in 2019 compared to 2018 and around long-term averages.

	Real GDP (%) <sup>1</sup>				Inflation (%) <sup>1</sup>			
	IMF 2018 Forecast	IMF 2019 Forecast	IMF 2020 Forecast	Actual 10 Year Average	IMF 2018 Forecast	IMF 2019 Forecast	IMF 2020 Forecast	Actual 10 Year Average
World	3.7	3.5	3.6	3.3	3.8	3.8	3.6	3.7
U.S.	2.9	2.5	1.8	1.4	2.4	2.1	2.3	1.7
Euro Area	1.8	1.6	1.7	0.7	1.7	1.7	1.8	1.4
Japan	0.9	1.1	0.5	0.5	1.2	1.3	1.7	0.3
China	6.6	6.2	6.2	8.2	2.2	2.4	2.7	2.6
Emerging Markets (ex. China)	3.9	4.2	4.2	3.8	6.8	7.0	5.9	6.9

<sup>1</sup> Source: IMF. World Economic Outlook. January 2019 Update. "Actual 10 Year Average" represents data from 2008 to 2017.

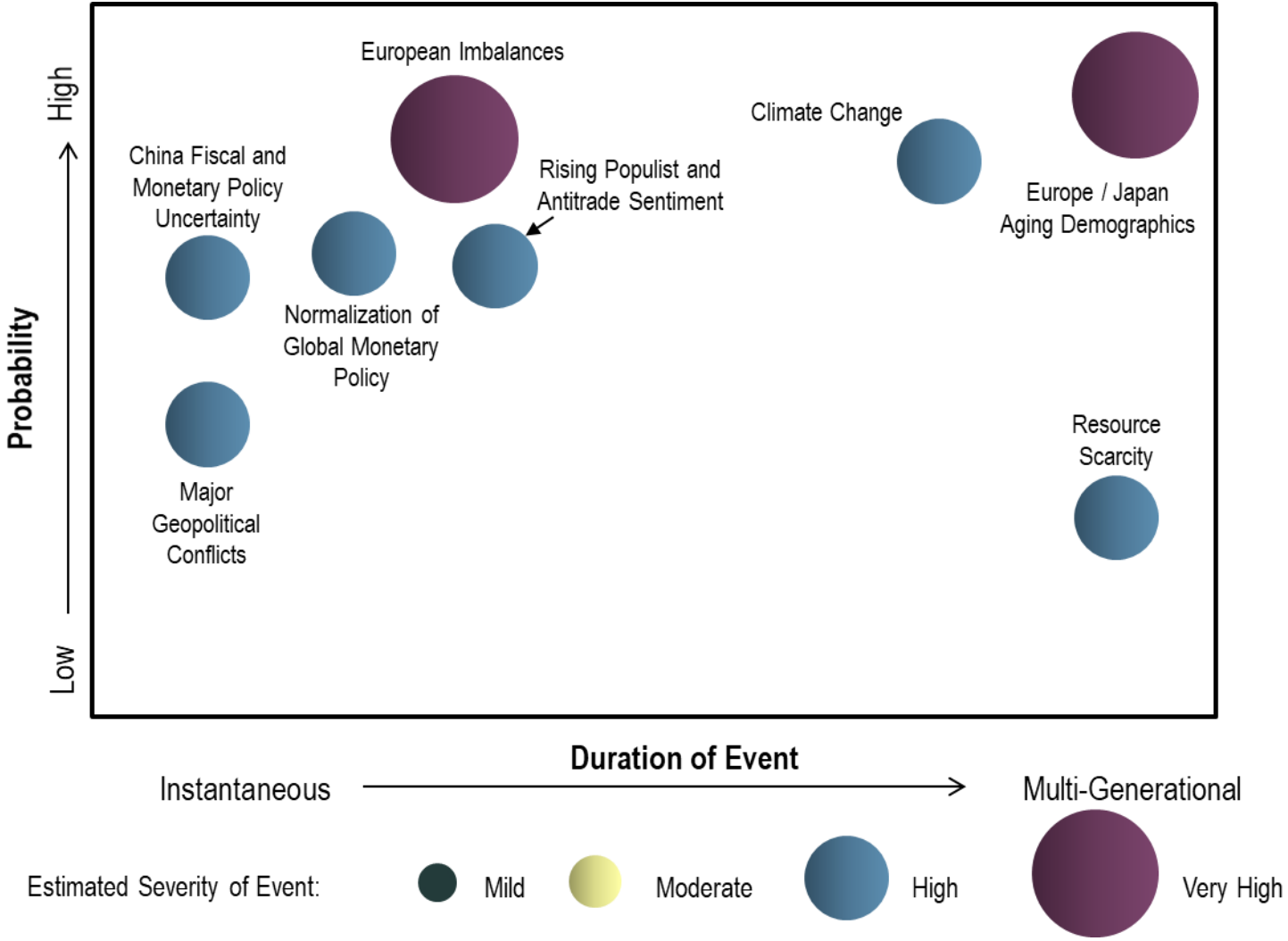
### Global Economic Outlook (continued)

**The boost to growth from recent U.S. tax cuts will likely be short lived, while China could increase policy support. We could be moving into a period of coordinated monetary tightening across central banks.**

- The Federal Reserve continued their rate hiking campaign making their ninth increase in December. They also continue to reduce their balance sheet. Projections for rate increases in 2019 have declined as inflationary pressures slow and market volatility has increased.
- 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 well below target and is projected to decline. At their recent 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.
- The European Central Bank held low rates steady and reaffirmed that they could remain unchanged at least through the summer of 2019. The asset purchases (i.e., quantitative easing) ended, but the proceeds from maturing bonds will continue to be invested for now. If conditions in Italy turn negative, given the political changes and budget discussions, the ECB could reconsider its policies.
- The People's Bank of China (PBOC) continues to cut bank reserve requirements in an effort to stimulate growth as the trade war with the U.S. weighs on the already slowing economy. They may take additional steps to support the economy, but already high debt levels, and their looser peg to the U.S. dollar, limit the extent of possible stimulus.

**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



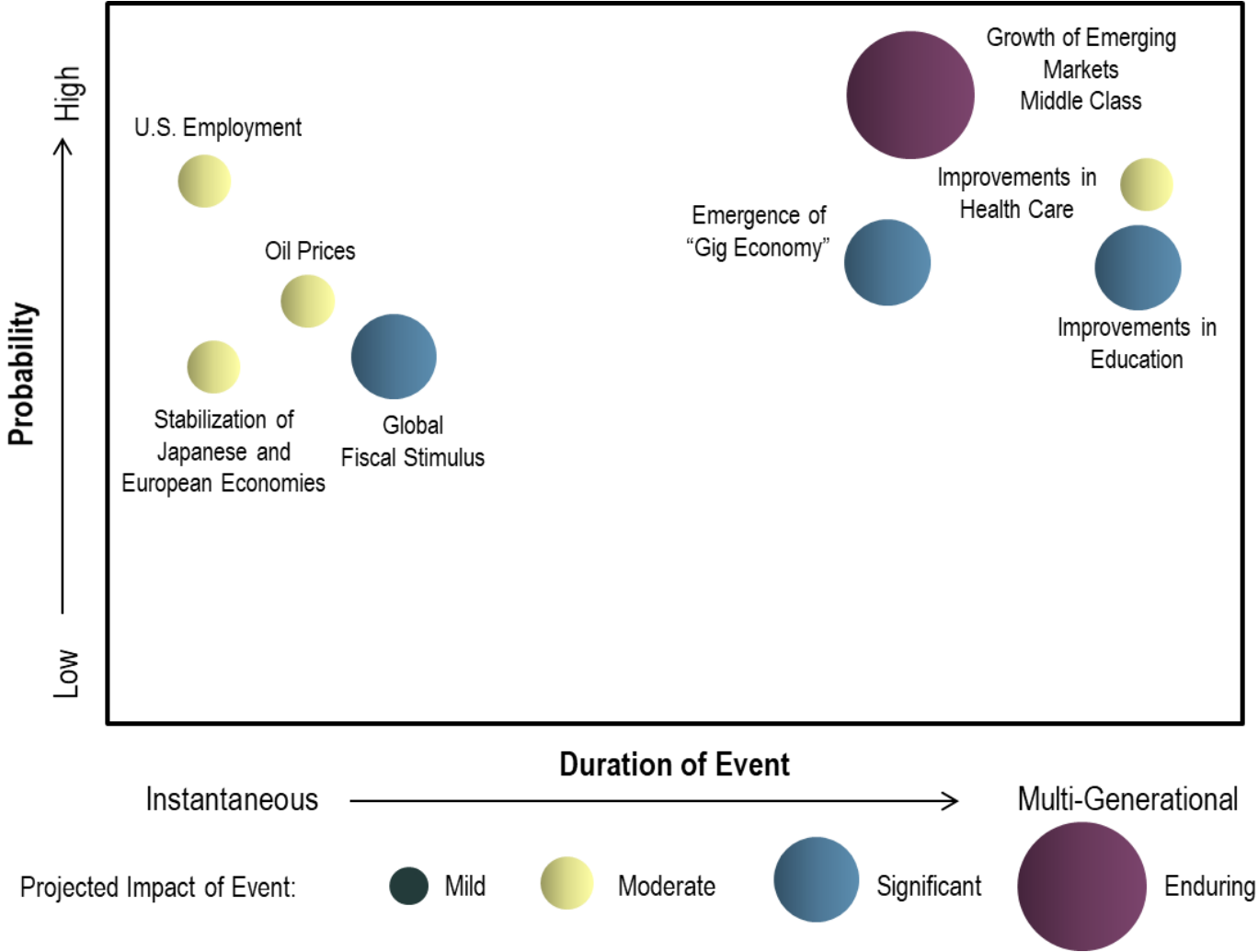
## Macroeconomic Risk Overviews

<b>China Fiscal and Monetary Policy Uncertainty</b>	<p>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. Recent tariffs between the U.S. and China could further weigh on the already slowing growth, as the U.S. is the largest destination for China's exports. 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.</p>
<b>Climate Change</b>	<p>The earth's average temperature has been increasing since preindustrial times with the pace accelerating over the last 35 years. Increased levels of greenhouse gases like carbon dioxide have been the main cause of higher temperatures as they trap heat in the atmosphere. Warmer temperatures have led to the melting of glaciers and polar ice and increased precipitation in wet regions and reduced it in dry regions. The economic impacts of climate change are many including declining crop yields, effects on livestock health, shifts in tourism, damage to infrastructure (rising sea levels and more extreme weather), and higher levels of disease and malnutrition.</p>
<b>Europe/Japan Aging Demographics</b>	<p>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.</p>
<b>European Imbalances</b>	<p>The crisis is rooted in structural issues in the Eurozone related to the combination of a single currency and monetary authority combined with 17 fiscal authorities. Within the European Union, tensions exist, as highlighted by political changes in Italy and the prior U.K. referendum, related to policies on immigration, laws, and budgetary issues. Given the size of Italy's bond market and economy within the euro area a sovereign debt crisis or departure from the euro would have significant consequences. The "Brexit" deadline is approaching with little progress being made on the negotiation of the terms. Theresa May's deal with the European Union suffered a large defeat in Parliament and is in the process of being renegotiated. A departure of the U.K. from the European Union without a deal would be particularly impactful to businesses.</p>

## Macroeconomic Risk Overviews (continued)

<b>Major Geopolitical Conflicts</b>	<p>Tensions with North Korea have softened, while new tensions with Saudi Arabia have emerged. 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 a meeting between President Trump and Kim Jong Un with another expected. Recently, the death of Saudi journalist and U.S. resident, Jamal Khashoggi, in the Saudi Arabia consulate in Turkey has led to tensions between the countries. This has led to calls for sanctions including on weapons. Given that Saudi Arabia is the number one customer for weapons from the U.S. sanctions in that area could be impactful to the relationship. Other outstanding issues include the ongoing conflicts in Syria, Yemen, and Afghanistan, along with tensions between the U.S. and Iran.</p>
<b>Normalization of Global Monetary Policy</b>	<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. In Europe (ECB), they also ended their quantitative easing program. 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>
<b>Resource Scarcity</b>	<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, rising commodity prices may hurt the living standards of many and increase the risk of geopolitical conflicts.</p>
<b>Rising Populist and Antitrade Sentiment</b>	<p>Tariffs started by the U.S. against China and some of its allies, along with elections/votes in the U.S., Europe, U.K., and Mexico 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 higher inflation, reduced efficiencies, and heightened tensions between countries.</p>

### Positive Macroeconomic Trends Matrix



## Positive Macroeconomic Trends Overviews

<b>Emergence of “Gig Economy”</b>	The “gig economy” continues to grow with over a third of workers considering themselves working independently. The new structure allows workers flexibility in the jobs they take, their schedules, and offers the ability to work outside of a traditional office. For companies, it has led to lower labor and overhead costs (more employees are working remotely), flexibility in hiring workers temporarily, and lower recruiting and training costs.
<b>Global Fiscal Stimulus</b>	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 barring any overwhelming headwinds from tariffs. China has also recently reduced bank reserve requirements and could enact other stimulative policies. With interest rates still relatively low, borrowing for infrastructure investments is affordable. Increased fiscal stimulus could help growth while reducing the reliance on monetary policy.
<b>Growth of Emerging Markets Middle Class</b>	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.
<b>Improvements in Education/Healthcare</b>	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.
<b>Oil Prices</b>	Oil prices have recently declined reducing inflationary pressures as slowing global growth has outweighed OPEC’s cuts. If the price of oil continues to remain low it could slow the pace of monetary tightening and help import oriented economies and industries that use oil as an input.
<b>Stabilization of Japanese and European Economies</b>	Despite the ECB ending its quantitative easing, the Japanese and European central banks continue to have relatively accommodative monetary policy compared to the U.S. 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.
<b>U.S. Employment</b>	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 tax reforms.

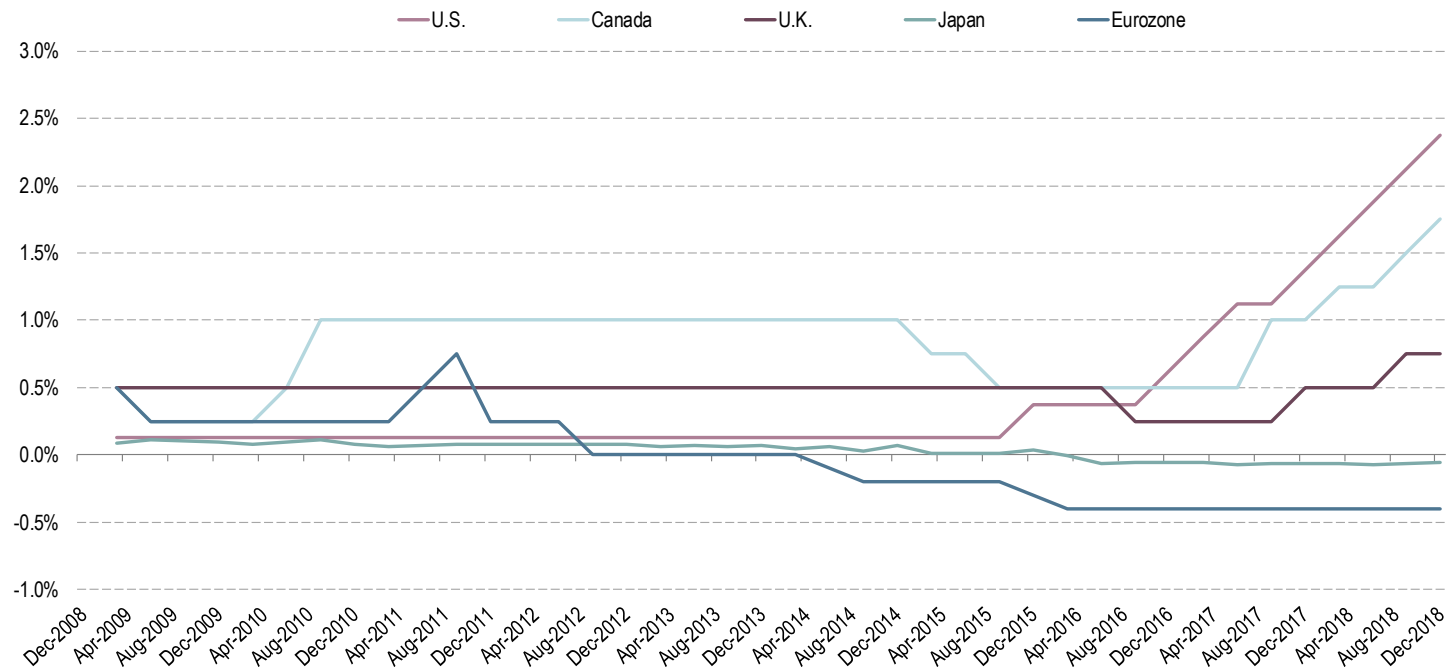


## Global Nominal Gross Domestic Product (GDP) Growth<sup>1</sup>



- We have recently been in a period of synchronized global economic growth.
- Growth is forecasted to slow, given the length of the economic expansion, the impacts of trade tariffs, and monetary policy tightening across many major central banks.

<sup>1</sup> Source: Oxford Economics. Updated December 2018. GDP data after Q4 2017 are estimates.

Central Bank Interest Rates<sup>1</sup>

- Major central banks continued to increase interest rates including the U.S., Canada, and the United Kingdom.
- The U.S. Federal Reserve is also reducing its balance sheet and the European Central Bank announced the end of its quantitative easing program.
- After a long period of accommodative monetary policy globally that supported economic and market growth, higher rates and less demand from central banks for bonds could weigh on overall economic activity and risk assets going forward.

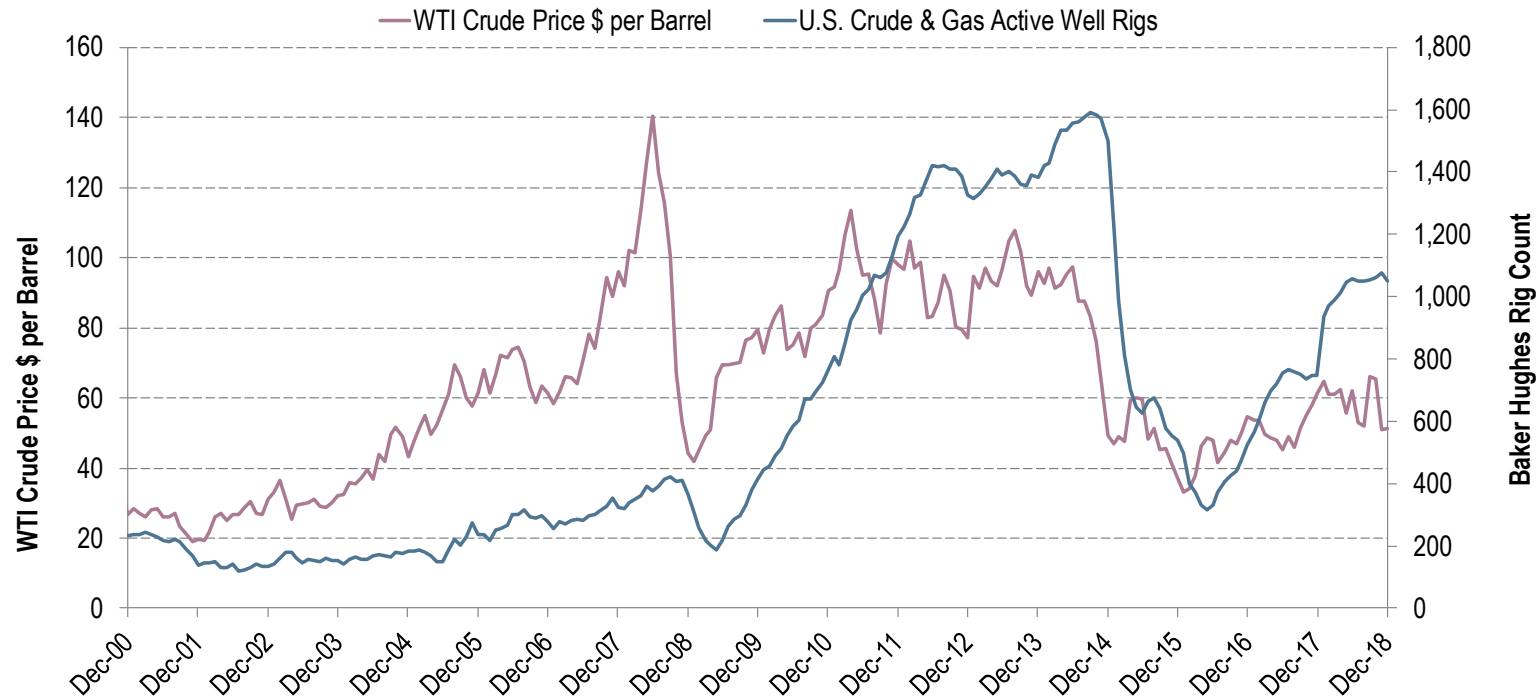
<sup>1</sup> Bloomberg. Data is as of December 31, 2018.

## U.S. Dollar versus Major Currencies<sup>1</sup>



- The U.S. dollar continued to strengthen against a basket of peers in the final quarter of 2018 (+2.0%) with a full year increase of +7.2%.
- Relative strength in the U.S. economy and higher interest rates have been supportive to the dollar.
- If U.S. growth slows and the trade deficit continues to rise, we could see pressure on the dollar going forward.

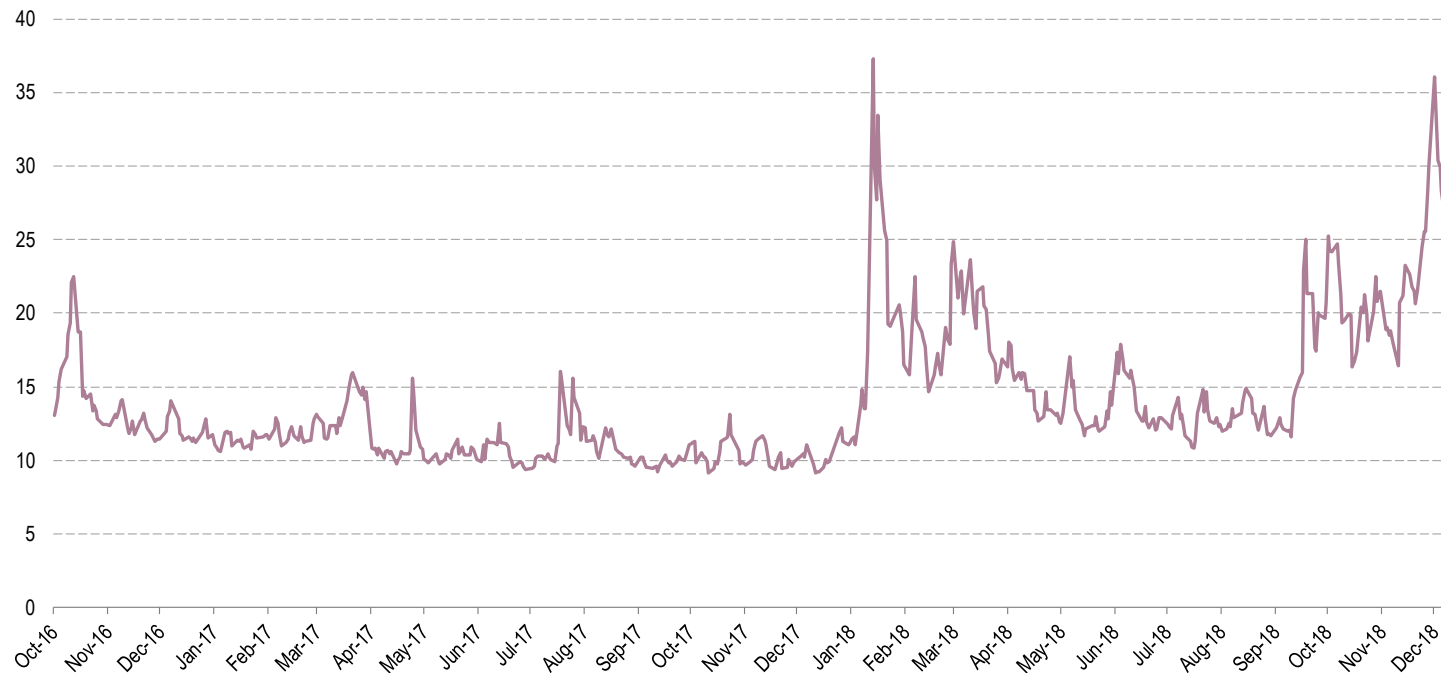
<sup>1</sup> Source: Federal Reserve Bank of St. Louis. Data is as of December 31, 2018.

Oil Price and Rig Activity<sup>1</sup>

- Oil prices declined by over 20% during the quarter with drilling activity plateauing.
- Fears over a slowing global economy and increased supply outweighed the projected cuts by OPEC.
- Lower oil prices have reduced inflationary pressures and could lead to a slower pace of monetary tightening.

<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2018.

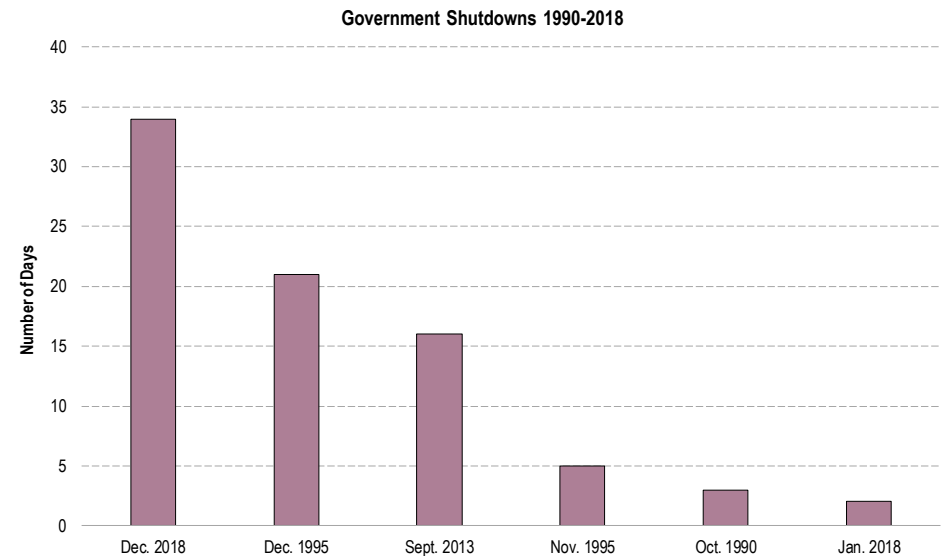
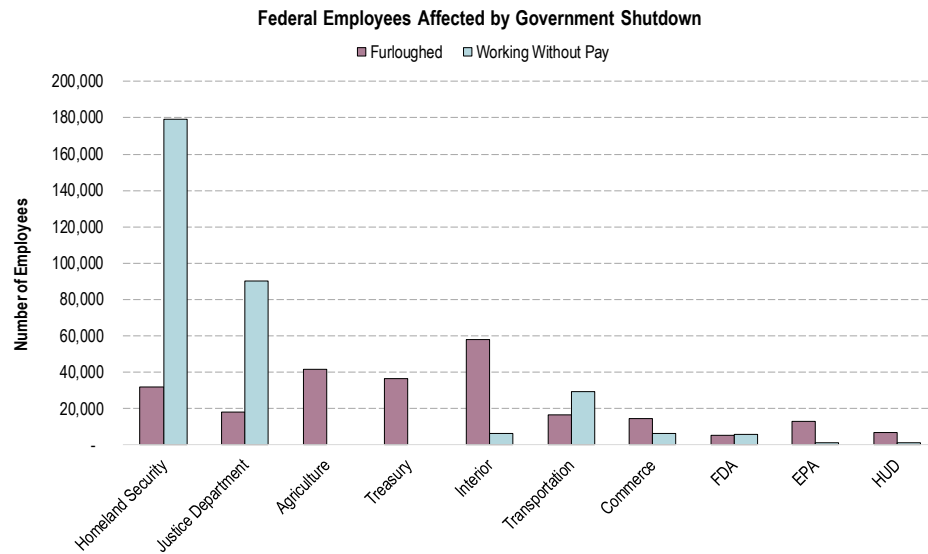
## Volatility<sup>1</sup>



- Volatility spiked in the fourth quarter with the VIX reaching 36 before retracing to 25 at quarter-end.
- A looming government shutdown in the U.S. and less accommodative monetary policy, along with continued trade tensions with China, contributed to the heightened volatility.
- With the long economic and market expansions, and the many unresolved political and trade issues, we could see heightened volatility in 2019 as investors are on watch for the event(s) that tip the scales.

<sup>1</sup> Bloomberg. Represents daily VIX data and is as of December 31, 2018.

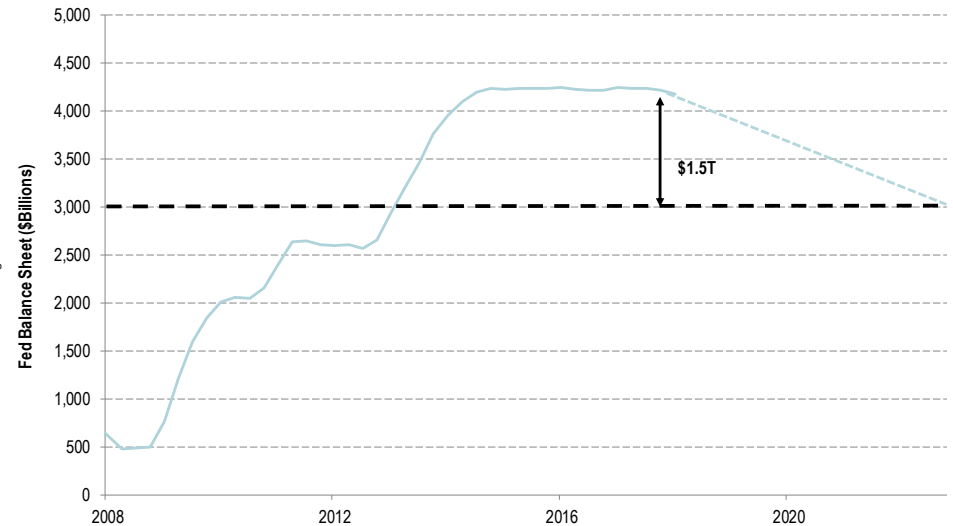
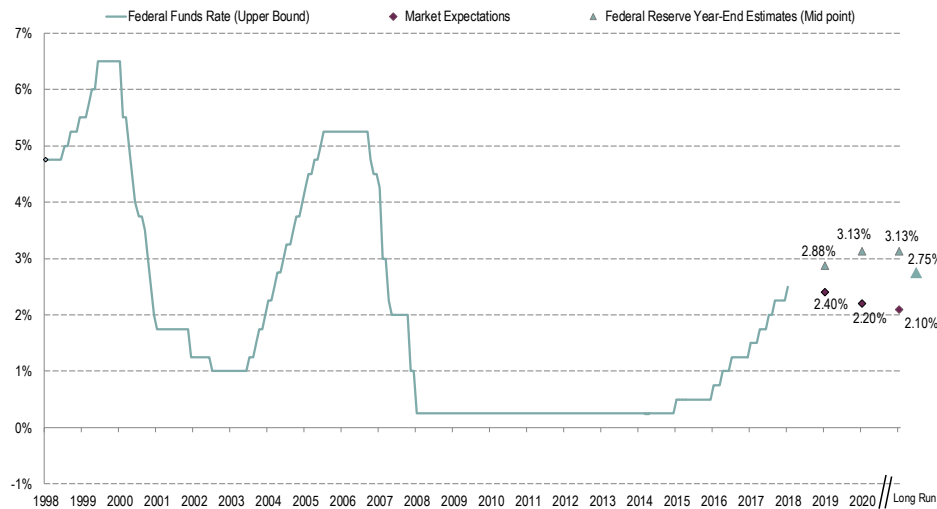
## Government Shutdown<sup>1, 2</sup>



- The recent government shutdown was the longest in history and highlighted the tensions in Washington.
- Many workers were on the job without pay, while others were furloughed.
- In addition to the backlog of government work to be done, it is likely that the shutdown will weigh on first quarter U.S. GDP.

<sup>1</sup> Source for Federal Employees Affected by Government Shutdown: Washington Post, "Hundreds of thousands of Federal employees are working without pay", January 23, 2019, which in turn cites, "Numbers provided by agencies. Figures are rounded." Data for "Working Without Pay" was not available for agriculture and Treasury.

<sup>2</sup> Source for Government Shutdowns 1990-2018: Congressional Research Service, "Federal Funding Gaps: A Brief Overview".

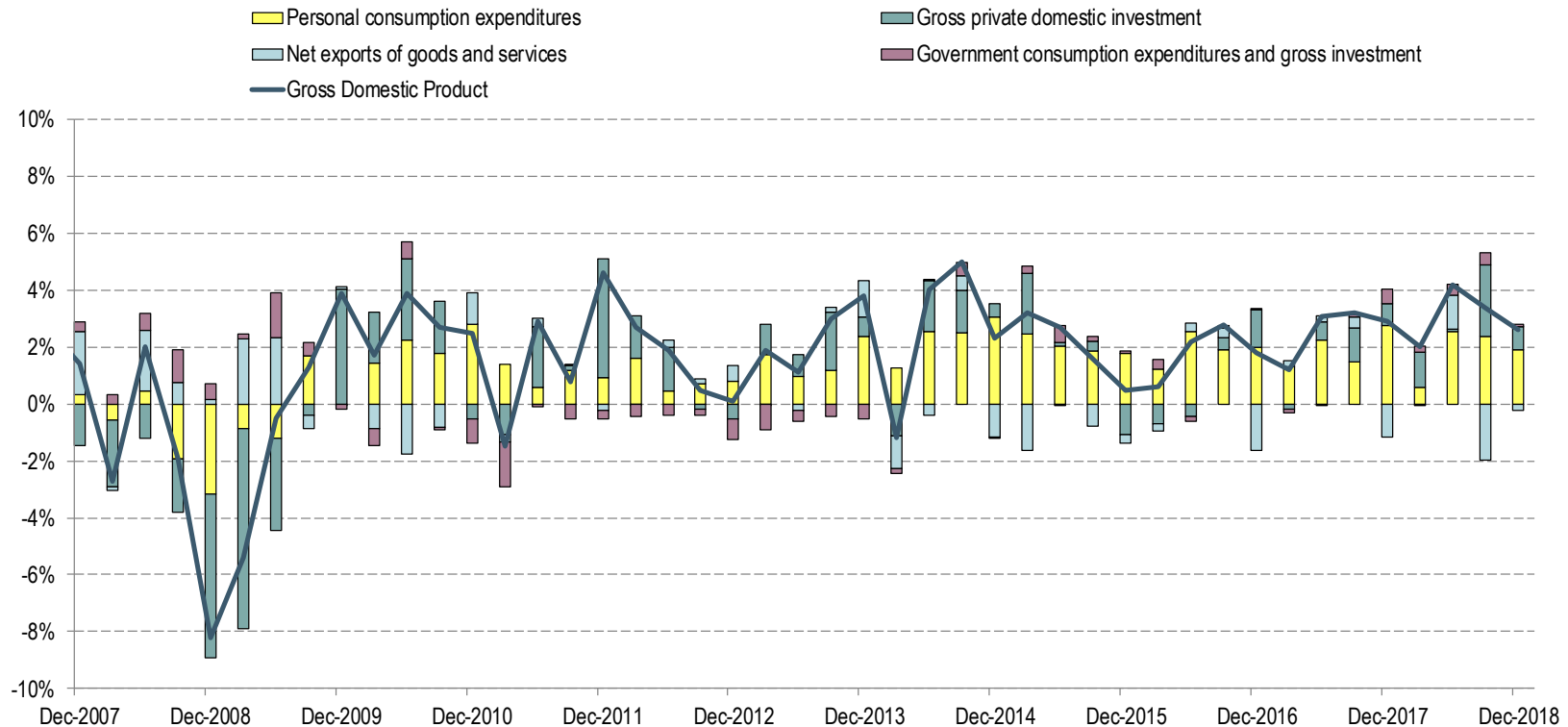
U.S. Monetary Policy<sup>1, 2</sup>

- As strong economic conditions persists, the Federal Reserve continues its path of rate increases. In December, they increased rates to a range of 2.25% to 2.50%.
- As of now, expectations are for two additional rate hikes in 2019; this could change, given the government shutdown, lower inflation, and heightened market volatility.
- The Fed has been actively reducing their \$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.

<sup>1</sup> Source for Monetary Policy: Bloomberg. Data is as of December 31, 2018.

<sup>2</sup> Source for Balance Sheet: Oxford Economics.

## U.S. Real Gross Domestic Product (GDP) Growth<sup>1</sup>

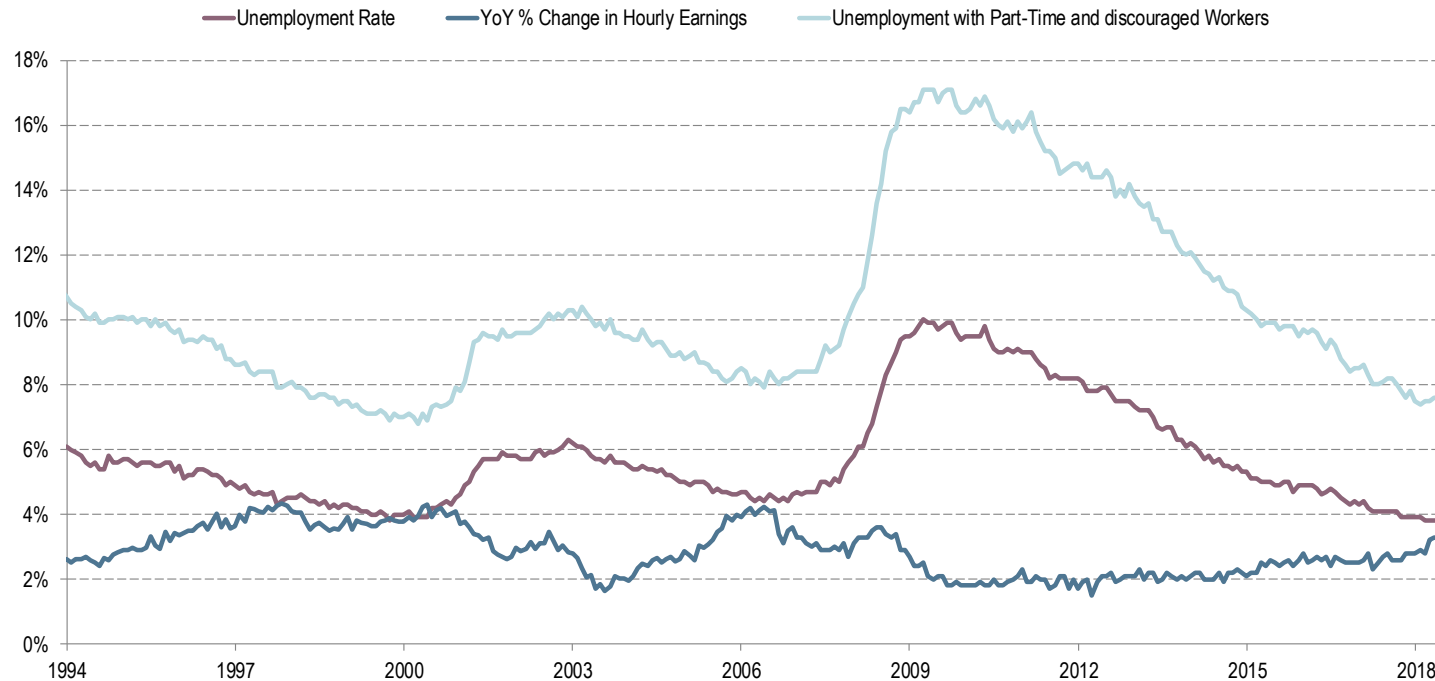


- The first estimate of fourth quarter U.S. GDP growth came in at an annualized rate of 2.6%, ahead of estimates but below the prior reading of 3.4%. Over the last year, GDP grew by 3.1%.
- Consumer spending continues to be the main driver of growth, as the impact of the tax cuts lingers. Imports outpaced exports again, but by a lower margin than the prior quarter.

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

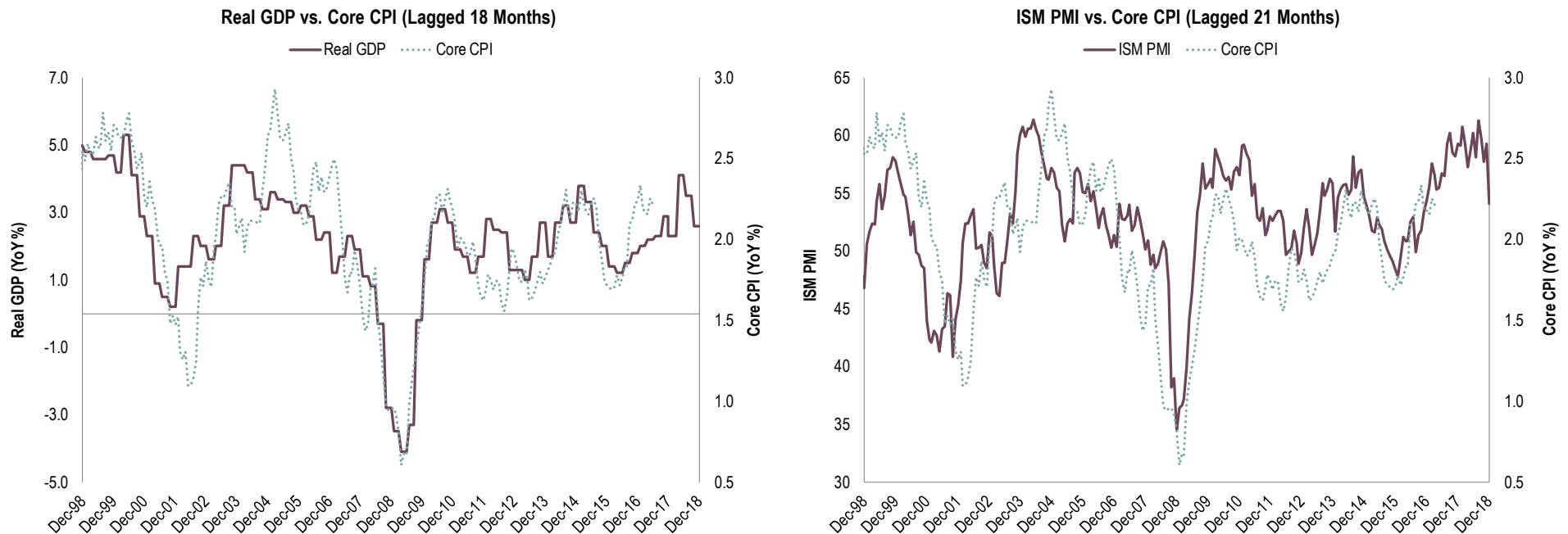


## U.S. Employment & Wages<sup>1</sup>



- In the fourth quarter, the unemployment rate stayed stable at 3.8%, a level last seen in early 2000.
- The broader measure of unemployment (U6) that includes discouraged and underemployed workers ticked up slightly from 7.5% to 7.6%.
- There were improvements in wage growth during the quarter, with the year-over-year change in hourly earnings rising from 2.8% to 3.3%.
- Although there have been improvements in wages, growth is below levels of prior cycles, partly due to automation, the “gig economy,” and globalization.

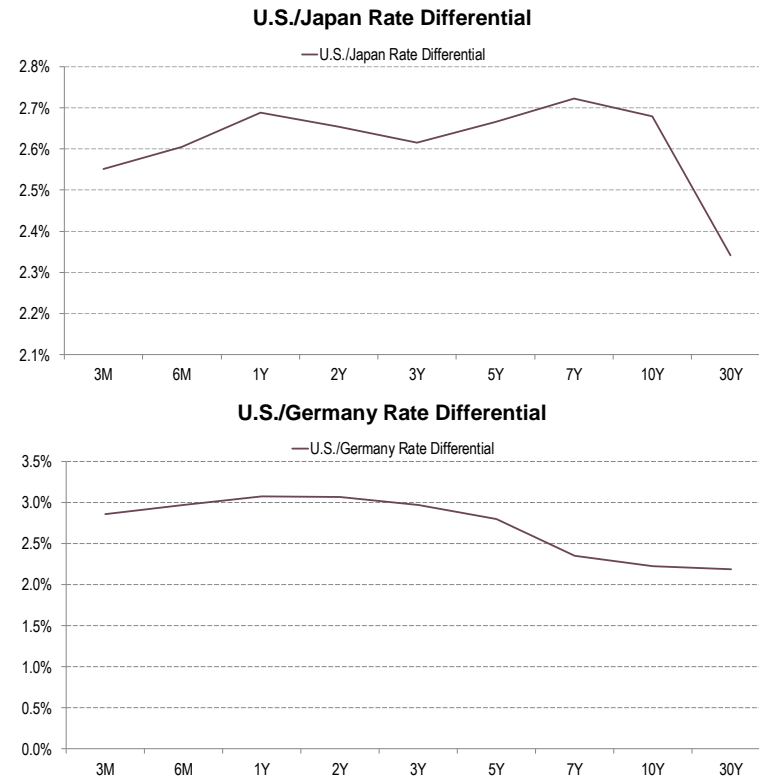
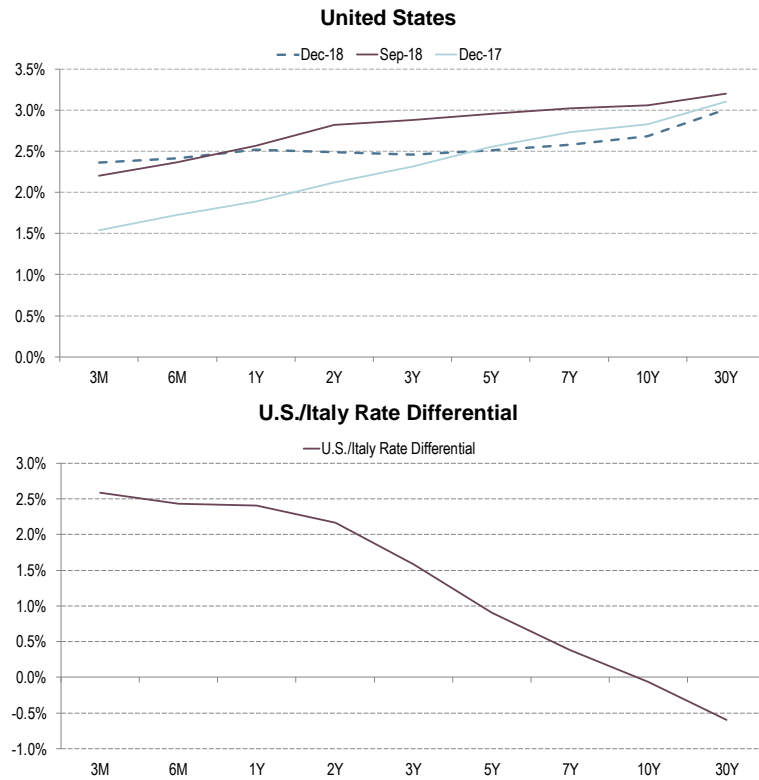
<sup>1</sup> Source: Bureau of Labor Statistics. Data is as of December 31, 2018.

U.S. Inflation<sup>1</sup>

- Inflation is considered a lagging indicator, representing past economic conditions.
- This leads to economic conditions today being a means of forecasting future inflation levels.
- Real GDP and manufacturing indicators, like the ISM Purchasing Managers Index, have historically been reasonable indicators of future inflation.
- Recently, manufacturing data and GDP declined. Lower economic activity, falling oil prices, and slowing manufacturing could all lead to a more modest path for inflation.

<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2018 for ISM PMI and as of the fourth quarter (1<sup>st</sup> estimate) for U.S. Real GDP.

## Government Bond Yield Curves<sup>1</sup>



- With the exception of shorter dated bonds, the entire U.S. yield curve declined in the fourth quarter as high quality bonds acted as a safe haven amidst uncertainty. Compared to the end of 2017, the U.S. yield curve finished 2018 much flatter.
- Rates continue to be higher in the U.S. across the yield curve than Germany and Japan, and for most of Italy. Rates declined in Italy across the yield curve in the fourth quarter after their recent spike related to the election of anti-establishment parties and budget negotiations with the European Union.

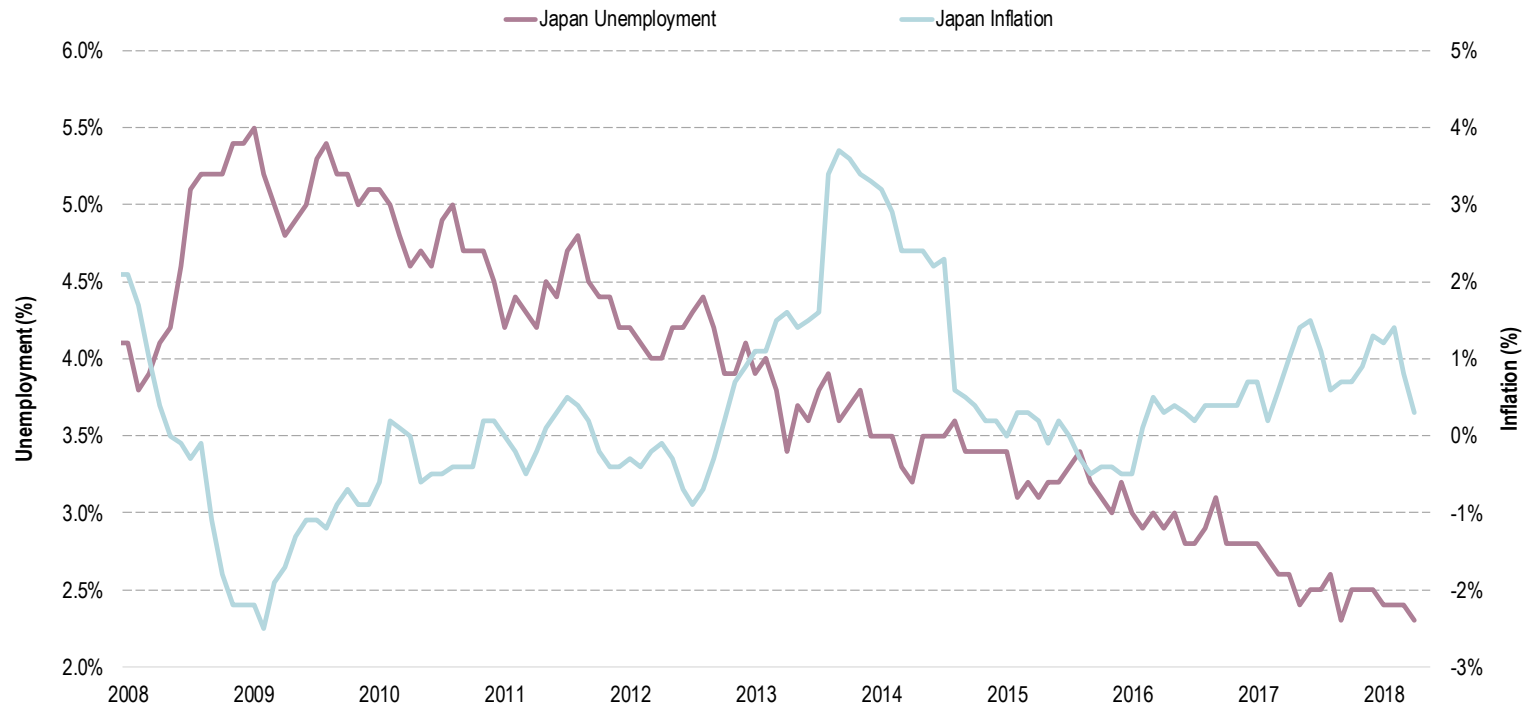
<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2018. Rate differential data represents the differences in the yield for a U.S. Treasury at each maturity versus the respective similar bond for each country.

## European Economic Conditions<sup>1</sup>



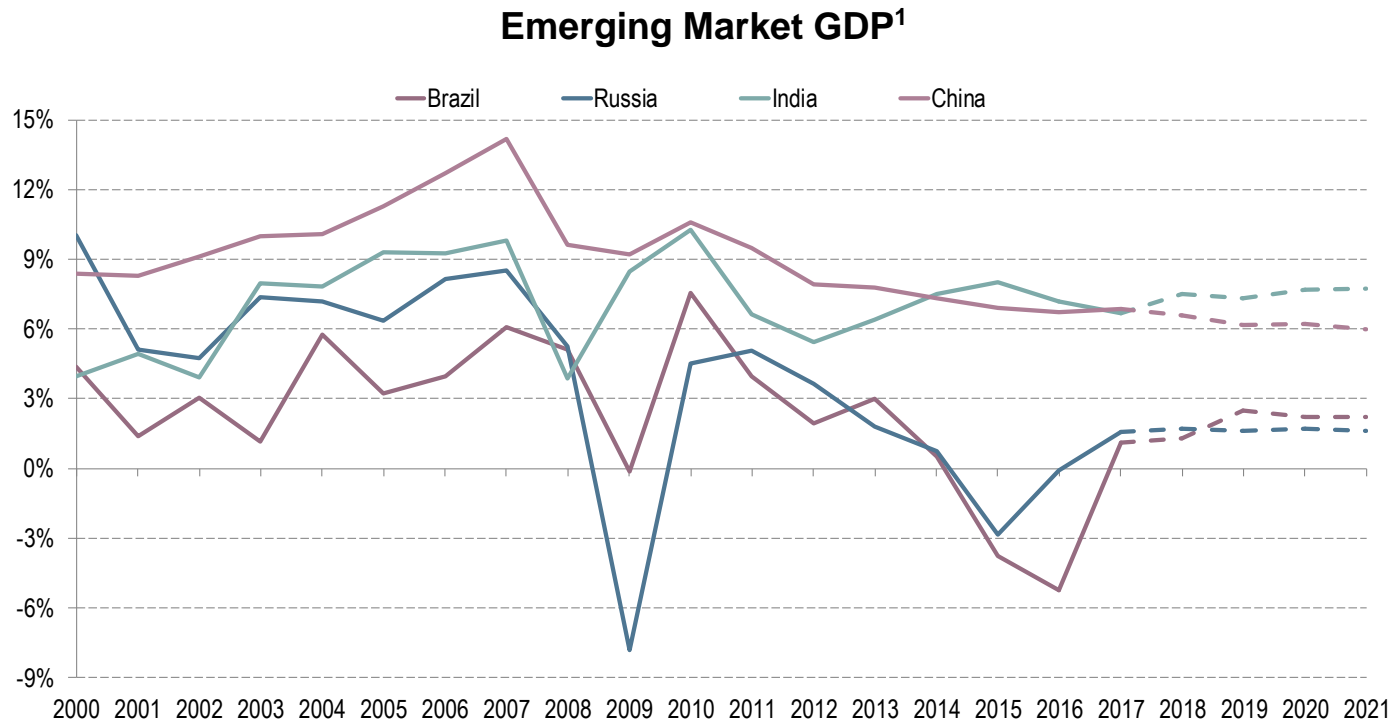
- In Europe, unemployment has declined and inflation picked up, but further room for economic improvements remain. With the unemployment rate at just under 8%, there is a lot of space for improvements in the labor market allowing the ECB some flexibility with its policies.
- Growth has been uneven in Europe with Germany experiencing much stronger growth after the Global Financial Crisis, and lower lows in 2012 and 2013, compared to Italy. High debt burdens have weighed on the Italian economy given the inability to devalue their currency and the limits on fiscal expansion.
- Italy's recently formed populist government clashed with the European Commission in the fourth quarter over a budget proposal that plans to stimulate the economy through higher borrowing. The Commission plans disciplinary actions as they claim the budget breaks EU rules and would ultimately lead to higher costs.
- Given the size of the Italian economy, and the debt load, a sovereign debt crisis or a prolonged battle with the European Commission would be impactful.

<sup>1</sup> Source: Bloomberg. Eurozone inflation and unemployment data is as of December 31, 2018. GDP data is also as of December 31, 2018.

Japanese Economic Conditions<sup>1</sup>

- Inflation in Japan has risen lately, but remains subdued despite very low unemployment levels.
- Looking forward, the consumption tax increase scheduled for later in 2019, along with slowing global growth, could weigh on Japan's growth.
- Of all the major economies, Japan's central bank maintains the largest stimulative effort with no signs of pulling back.

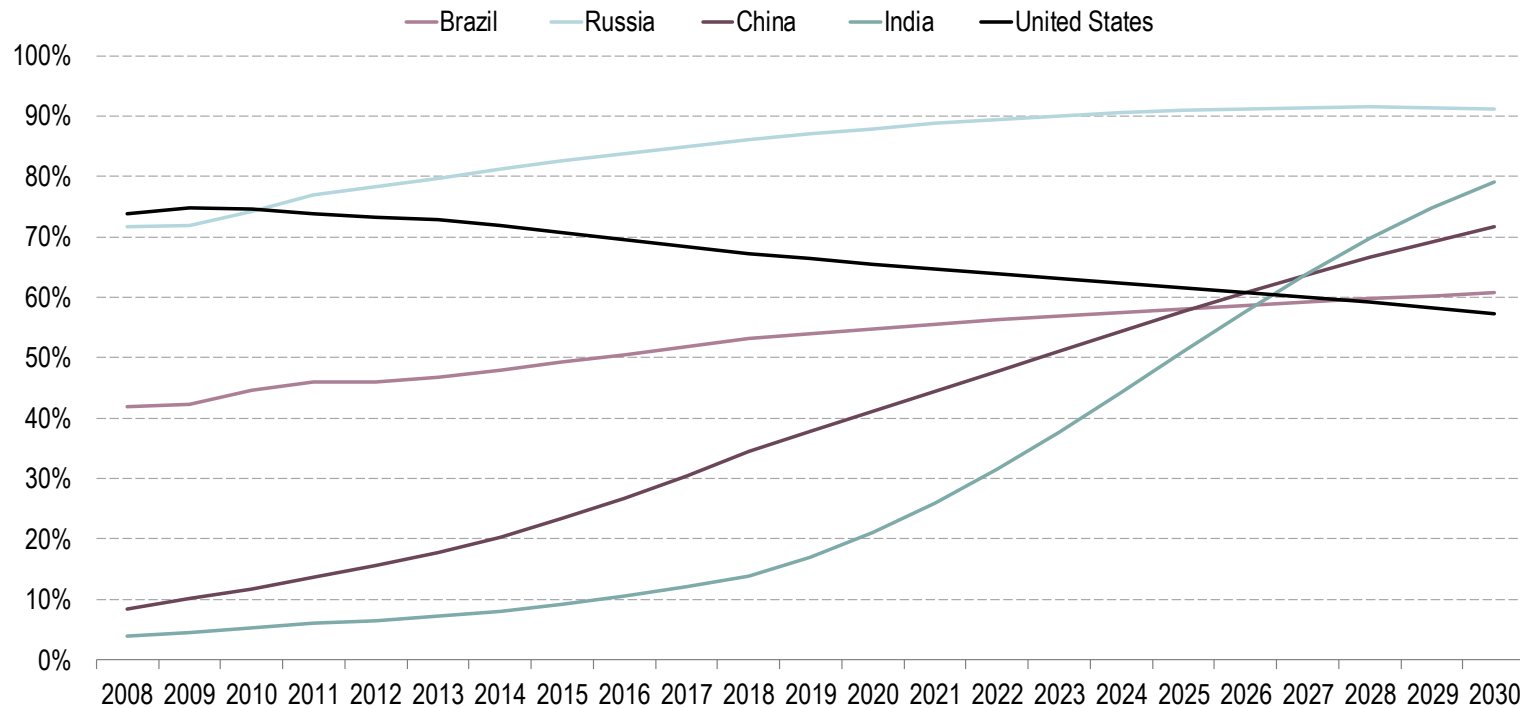
<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2018.



- Growth in emerging economies generally remains higher than developed economies but uneven, with debt levels remaining a key risk.
- China is forecasted to slow as policy makers lead efforts to reposition the economy and deal with lingering debt issues, with trade tensions creating added pressures. India remains a bright spot, with higher growth forecasted. The IMF projects growth from Russia and Brazil, an improvement from the contraction in 2015 and 2016.

<sup>1</sup> Source: IMF. World Economic Outlook. January update. Estimates start after 2017.

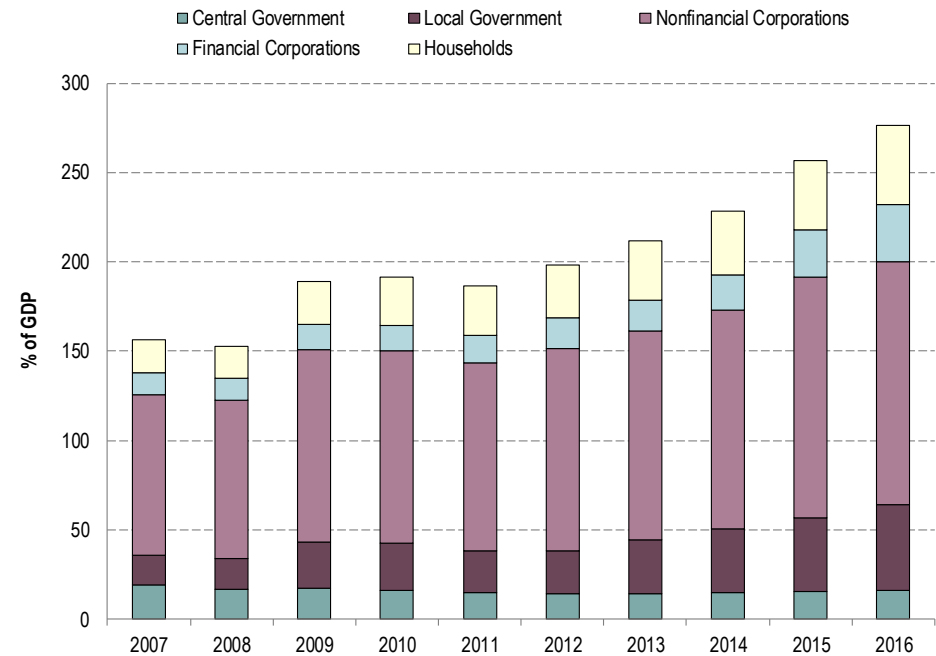
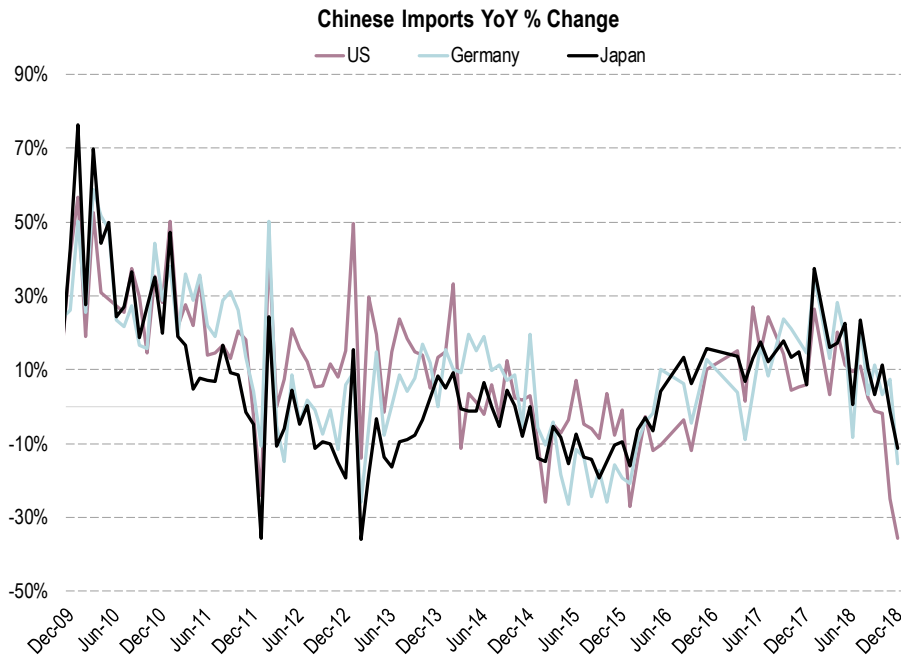
## Growth of the Middle Class<sup>1</sup> (% of Total Population)



- A large part of the long-term emerging market story is the growth of the middle class.
- In advanced economies like the U.S., the middle class segment has matured, while in emerging markets it is expected to grow rapidly.
- The expanding middle class, particularly in China and India, is projected to lead to much higher consumption, and should help the global economy.

<sup>1</sup> Source: Brookings Institute.

### China<sup>1,2</sup>



- In the coming years, China will need to manage the process of transitioning to an economy based more on consumption than investment, while reducing debt levels and dealing with financial risks. A prolonged trade fight with the U.S. could make this process difficult and further diminish already slowing growth.
- Recently, trade has become sluggish in China due to the slowing economy and trade tensions. Imports (above) declined on lower domestic demand, while exports fell as many shipments were made ahead of scheduled U.S. tariffs.
- If economic conditions remain sluggish, it is likely that China’s policymakers will provide more economic support.

<sup>1</sup> Source for China Imports: Bloomberg. Data as of December 31, 2018.

<sup>2</sup> 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 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.**

- Since the Global Financial Crisis, central banks worldwide attempted to support markets and the economy through low interest rates and bond-purchasing programs (i.e., quantitative easing). The U.S. and several others started increasing rates and the U.S. started reducing its balance sheet. The European Central Bank is also ending its bond-buying program. 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. The economic expansion has been long and it is inevitable that growth will eventually slow in the U.S., particularly as the impact of the tax cuts wane. Gridlock remains in Washington as seen by the recent government shutdown with uncertainty related to policies on tariffs, immigration, and strategic alliances remaining.
- China continues to manage a repositioning and slowing of its economy, which could have a meaningful impact on countries that depend on its trade. High debt, particularly in the corporate sector, and recent tariffs between China and the U.S. remain key issues. Trade tensions and overall slowing global demand has already started to affect China as seen through recent trade data. This could lead to additional policy support and efforts to further devalue the yuan.
- Elections in Italy following those in Germany show that political tensions remain in Europe. Conflict has already materialized between Italy and the European Commission over Italy's budget proposal. Given that Italy is the world's fourth largest bond market and the third largest economy in Europe, what happens there matters, with a debt crisis or departure from the euro having far-reaching effects. The on-going negotiations of the U.K. to leave the EU is another key issue.