



# Global Economic Perspective

PERSPECTIVE FROM THE FRANKLIN TEMPLETON FIXED INCOME GROUP®



**Christopher  
Molumphy**



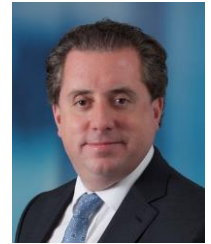
**Michael  
Materasso**



**Roger  
Bayston**



**John  
Beck**



**David  
Zahn**

## IN THIS ISSUE:

- US Economic Conditions Remain Constructive, as Tax Changes Provide Boost for Corporate Sector
- Synchronized Global Expansion Continues, with Signs of Increased Demand for Commodities
- Eurozone's Mix of Robust Growth and Weak Inflation Unlikely to Persuade ECB to Change Course



## US Economic Conditions Remain Constructive, as Tax Changes Provide Boost for Corporate Sector

The constructive conditions for the US economy remain in place, in our view, in keeping with an increasingly solid expansion across the rest of the world. US consumers have been benefiting from an economy that appears close to full employment and a stock market at record levels, while a vibrant corporate sector has been buoyed further by recent tax changes. We would argue that this economic cycle has been markedly different from previous ones, both in terms of its extended length and overall sluggish pace of growth. Consequently, looking for historical comparisons—for example, in evaluating the potential for the tax package to stir hitherto subdued inflation—may be misleading. Though a modest cyclical rebound in inflation might occur, at this point it still seems hard to foresee pricing pressures building enough in coming months to prompt the US Federal Reserve (Fed) to turn significantly more hawkish.

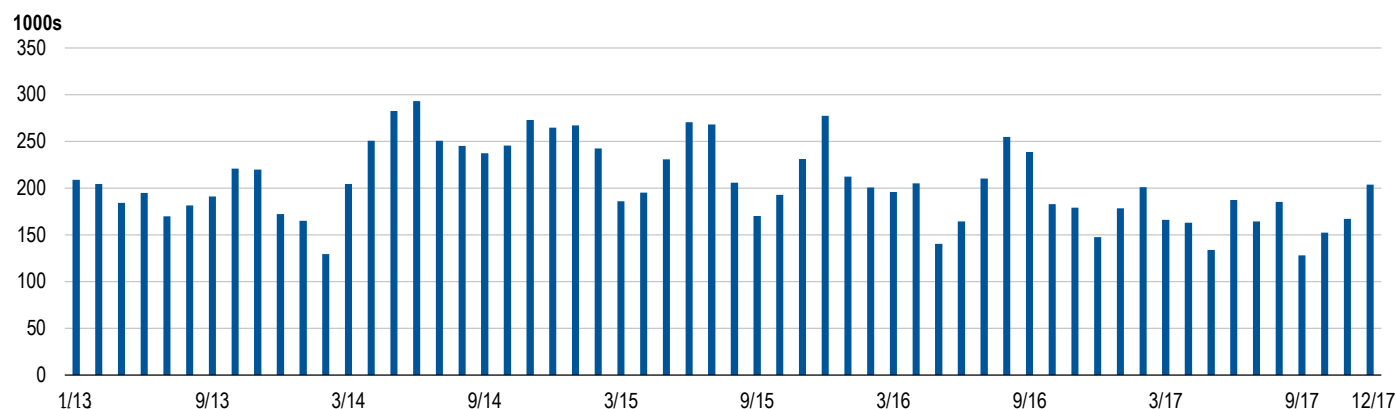
Data generally supported hopes that a moderately quicker pace of US growth had been maintained over the final quarter of 2017 and into 2018. As the new year began, estimates for annualized gross domestic product (GDP) growth in the fourth quarter included one of 2.7% from the Federal Reserve Bank of Atlanta and another of 4.0% from the Federal Reserve Bank of New York. US consumer spending strengthened in November, climbing 0.6% from the previous month, though October's rise was revised down. There was speculation that the latest increase was at least partly financed by consumers' savings, as the savings rate fell to its lowest level since the 2007–2009 global financial crisis. However, the backdrop for consumers remained largely positive, helped by the US stock market's rise to new record levels by the end of 2017.

One of the factors helping to boost stocks was the passage into law of a raft of changes to the US tax system that were heavily tilted toward US corporations. While the most eye-catching element of the package was undoubtedly a reduction in the corporate tax rate from 35% to 21%, another notable component was a one-off cut from 35% to 15.5% in the rate of tax on profits repatriated from overseas. By some estimates, US companies have around \$2.5 trillion of such profits abroad, though it remained unclear how much of this would be attracted back by the offer of a one-time reduced repatriation rate. A number of companies were swift to warn their quarterly earnings would be hit by charges resulting not just from the repatriation measures,

## 2017 Another Year of Solid Employment Growth

### Exhibit 1: Nonfarm Payrolls

Three-Month Average Change, Seasonally Adjusted  
January 2013–December 2017



Source: FactSet, US Department of Labor.

but also from the lower overall corporate tax rate, which would force write-downs on tax credits dating from previous losses. But generally the announcements were viewed as short-term hits to earnings, compared to the long-term benefits likely to accrue to corporations from the package of changes.

Compared to its impact on corporate taxation, the package's effect on individual taxpayers was more limited. Tax rates were reduced across most income brackets, but richer taxpayers were the most significant beneficiaries. Importantly, whereas the cuts for individuals were scheduled to expire after 10 years, those for corporations and unincorporated businesses had no expiry date, meaning the latter comprised most of the estimated \$1.5 trillion additional debt needed in the coming decade to fund the changes.

Other data releases included December's manufacturing purchasing managers' index (PMI) from the Institute for Supply Management, which delivered another healthy reading, boosted by strength in new orders and production. It capped off a year that saw the strongest showing by US factories in the survey since 2004. In contrast, December's PMI for services dipped, missing consensus estimates, possibly due to caution among companies about inventories. Even so, the monthly reading still pointed to a robust level of activity among service providers, and over 2017 as a whole the measure achieved its second-best annual result since 2005.

“ We would argue that this US economic cycle has been markedly different from previous ones, both in terms of its extended length and overall sluggish pace of growth. ”

The December labor market report showed an addition of 148,000 jobs, which was short of consensus estimates, with a decline in retail employment partly responsible. But the latest figures left average job gains over the previous three months at more than 200,000, and with the unemployment rate holding at 4.1% for the third consecutive month, the report provided further evidence the US economy was approaching full employment. Wage data improved, showing a rise of 0.3% month-on-month and 2.5% year-on-year.

In the US Treasury market, the recent trend toward a flatter yield curve continued. This development has been widely viewed as less significant than in previous occurrences—when it was seen as a precursor to slower economic growth—for a number of reasons. With market participants anticipating fewer 2018 interest-rate increases than the Fed, the differential between short- and long-term yields has been shrinking as the Fed has steadily tightened monetary policy. But perhaps a bigger factor has been overall skepticism about the signaling power of the yield curve, given the extent of central bank intervention in debt markets since the global financial crisis. Nevertheless, further changes in the composition of the Fed's rate-setting committee—two of the more dovish members stepped down at the end of 2017, and January's meeting was set to be outgoing Fed Chair Janet Yellen's last—underlined the possibility of increased uncertainty surrounding the path for US monetary policy in 2018.



### Synchronized Global Expansion Continues, with Signs of Increased Demand for Commodities

Data from the larger economies around the world generally supported the scenario of a synchronized global expansion. In China, PMIs covering smaller, privately owned companies pointed to improving sentiment, particularly in the services sector, where December's reading was the highest for more than three years.

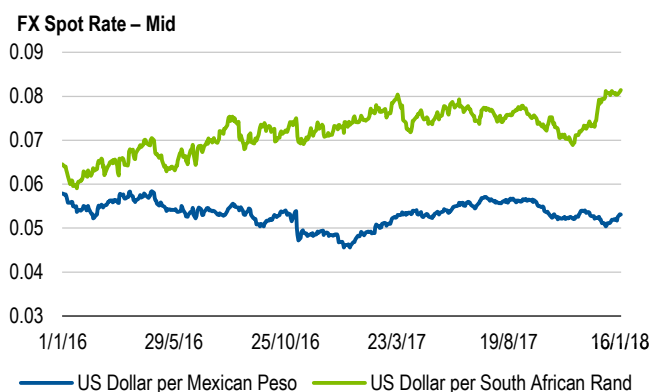
Japanese manufacturers also registered their strongest showing since 2014, and indicated their sales prices had risen for a twelfth consecutive month, the longest such run in nearly 10 years.

The signs of growing global demand helped to boost many commodity prices, and as 2018 began, the Bloomberg Industrial Metals Subindex moved up to its highest level in three years. As supply constraints enacted by major oil producers continued, oil prices climbed to levels last seen in 2015. With most commodities priced in US dollars, a weakening of the US currency toward the end of 2017 provided another boost. The US dollar's appeal dimmed in 2017, leading to a near double-digit percentage loss on a trade-weighted basis for the year as a whole, as market participants looked to other central banks to follow the lead of the Fed and tighten monetary policy.

South African assets were marked higher in the wake of Cyril Ramaphosa's election as leader of the ruling African National Congress (ANC) at its five-yearly delegate meeting. The current South African president, Jacob Zuma, has been dogged by allegations of corruption for some time, including a perceived undermining of the independence of state institutions. Ramaphosa's victory was seen by many commentators as a vital step toward restoring the country's credibility with international investors. However, the margin of his election to the ANC leadership was extremely narrow. It remained an open question whether Ramaphosa would be able to build enough support over the coming months to force President Zuma to step down early, with the incumbent's two-term period in office officially set to end when South Africa's next general elections take place in 2019.

## South African Rand Rallies, Mexican Peso Loses Ground

**Exhibit 2: South African Rand and Mexican Peso vs. US Dollar**  
1 January 2016–16 January 2018



Source: FactSet.

In contrast, the Mexican peso weakened into the end of 2017, as concerns grew that the reduction in the US corporate tax rate could lessen the attractions of investing in Mexico. Such sentiments were voiced by the new head of the country's central bank, shortly after benchmark Mexican interest rates were raised to an eight-year high, on signs inflation was picking up.

Six rounds of talks between the United States, Mexico and Canada to renegotiate the North American Free Trade Agreement (NAFTA) have made little progress so far, adding to uncertainty ahead of Mexico's presidential elections in July 2018. With the ruling Institutional Revolutionary Party beset by corruption scandals, the left-wing populist candidate Andrés Manuel López Obrador has maintained his comfortable lead in opinion polls.

**“For now it would be a mistake to argue global growth could struggle to endure because of cyclical considerations.”**

Just as attempts to use historical precedents to predict the length and durability of the US economic cycle are undermined by the idiosyncratic nature of its recovery since the global financial crisis, much the same argument can be made about the wider global economy. The overall structure and pace of global growth—combined with the disinflationary forces affecting most of the largest economies—have been unparalleled, as indeed have the extraordinary measures taken by central banks over this period. The current synchronized global expansion may be halted by a geopolitical crisis or even a significant misjudgment of policy by central banks—both of which are inherently difficult to predict—but we think for now it would be a mistake to argue that global growth could struggle to endure because of cyclical considerations.



## Eurozone's Mix of Robust Growth and Weak Inflation Unlikely to Persuade ECB to Change Course

Data for the eurozone continued to suggest strong economic growth, at a level much more robust than generally considered to be sustainable for the region over the long term. The brisk momentum was particularly noticeable among manufacturers, for which a leading survey's final monthly reading for December 2017 confirmed it had reached its highest level since the index's inception in 1997. The equivalent survey covering the services sector also had an extremely positive tone, with the index hitting a six-year peak, and businesses seeing the largest expansion in new orders in more than a decade. The optimism extended to the region's consumers as well, according to the European Commission's initial estimate of consumer confidence for December, marking nearly two years of gradual improvement in this survey.

The sentiment indicators underlined not just the strength but also the breadth of the eurozone's expansion, which saw business conditions in many member countries improving faster than that of their global peers over much of 2017. During the year as a whole, confidence among German, Austrian, Irish and

Dutch manufacturers registered record levels, while France and Italy posted their best performances since 2000, and Spain since 2006. But inflation figures remained subdued, and the annual headline rate for December moved down slightly to 1.4%, with the core reading unchanged at 0.9%. Headline inflation in the eurozone has been widely predicted to drift lower during early 2018, as the impact of a previous rebound in energy prices falls out of the annual calculations.

In terms of political news, the date of Italy's general election was set for the start of March, providing the latest opportunity to gauge the strength of populist sentiment across Europe. Polls indicated support for the euroskeptic Five Star Movement and the center-left Democratic Party was more or less even. With none of the main political groupings enjoying a clear advantage, an inconclusive result appears to be the most likely outcome, potentially followed by the formation of a ruling coalition or even a technocrat administration, as has occurred previously.

**“ With the eurozone economy performing so well, speculation about the ECB's path for monetary policy during 2018 is likely to be maintained and could intensify. ”**

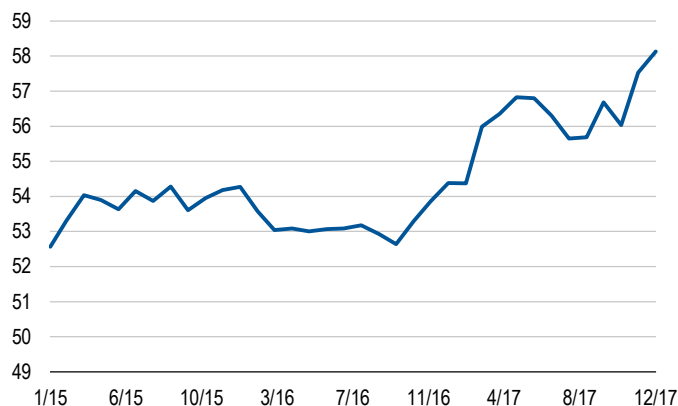
Meanwhile, elections in the Spanish region of Catalonia at the end of 2017 saw separatist parties win a majority of seats in the regional assembly, amid a high turnout of over 80%. However, they failed to secure a majority of the popular vote, with the largest share of the vote going to an anti-independence party. Options for the supporters of Catalonian independence appeared limited. The Spanish government has refused to allow the region a binding referendum on the issue, and there has been negligible support from outside the country for any such move. One of the main separatist parties has indicated a more cautious approach, dampening the possibility of further radical moves like the previous regional government's unilateral declaration of independence in October 2017.

## Europe Economic Growth Continues at Robust Pace

### Exhibit 3: Eurozone PMI Composite Sector

January 2015–December 2017

#### Output Index, Seasonally Adjusted



Source: FactSet, Eurostat.

With the eurozone economy performing so well, speculation about the European Central Bank's (ECB) path for monetary policy during 2018 is likely to be maintained and could intensify. The ECB's previously announced reduction in the amount of bonds it purchases each month—down from €60 billion to €30 billion—has now been implemented. While there may be some impact as market participants adjust to the change, the central bank's re-investment of maturing assets should have a dampening effect. But we think the temptation to assume that the strength of the economy could unduly influence ECB policymakers should be resisted. The central bank's mandate is centered on inflation, for which there seems to be little indication of anything other than a gradual reduction of liquidity in the coming year, with the prospect of interest-rate rises likely still some years off.

## EUROLAND MACROECONOMIC DATA

### FINAL OUTPUT

Gross Domestic Product (GDP) <sup>1</sup>	4Q16	1Q17	2Q17	3Q17
GDP, Y/Y (%)	1.9	2.1	2.4	2.8
Private Consumption, Y/Y (%)	1.9	1.7	1.9	1.9
Gross Fixed Capital Formation, Y/Y (%)	4.4	4.2	3.5	2.4

### ECONOMIC INPUTS<sup>1</sup>

	Aug 17	Sep 17	Oct 17	Nov 17
Retail Sales, Y/Y (%)	2.3	4.1	0.2	2.8
Unemployment Rate (%)	9.0	8.9	8.8	8.7
Industrial Production, Y/Y (%)	3.9	3.4	3.9	3.2

### INFLATION & WAGE PRESSURE

#### Inflation Indicators<sup>1</sup>

	Sep 17	Oct 17	Nov 17	Dec 17
Consumer Price Index (CPI), Y/Y (%)	1.5	1.4	1.5	1.4
Core CPI, Y/Y (%)	1.1	0.9	0.9	0.9

### FINANCIAL MARKETS

	Sep 17	Oct 17	Nov 17	Dec 17
Dow Jones EURO STOXX 50 Price Index EUR, Trailing P/E Ratio <sup>2</sup>	18.73	19.14	18.59	18.25
ECB Refinance Rate (%) <sup>3</sup>	0.00	0.00	0.00	0.00
10-Year Yield—German Bunds (%) <sup>2</sup>	0.46	0.36	0.37	0.43

### BALANCE OF PAYMENTS<sup>1,3</sup>

Trade Balance	Aug 17	Sep 17	Oct 17	Nov 17
Billion Euro	15.38	25.59	18.87	26.27
Current Account Balance	4Q16	1Q17	2Q17	3Q17
% GDP	4.3	2.6	2.5	4.6

## JAPAN MACROECONOMIC DATA

### FINAL OUTPUT

Gross Domestic Product (GDP) <sup>4</sup>	4Q16	1Q17	2Q17	3Q17
GDP, Q/Q ar (%)	1.4	1.5	2.9	2.5
Private Consumption, Q/Q ar (%)	1.1	1.1	3.8	1.4
Fixed Capital Formation, Q/Q ar (%)	6.2	0.7	4.9	4.3

### ECONOMIC INPUTS

	Aug 17	Sep 17	Oct 17	Nov 17
Unemployment Rate (%) <sup>5</sup>	2.8	2.8	2.8	2.7
Industrial Production, Y/Y (%) <sup>6</sup>	5.3	2.6	5.9	3.7
Tertiary Index, Y/Y (%) <sup>6</sup>	0.6	0.5	0.9	1.7
Corporate Activities	1Q17	2Q17	3Q17	4Q17
Corporate Profit Growth (%) <sup>7</sup>	26.6	22.6	5.5	–
Tankan Quarterly Survey (Index Level) <sup>8</sup>	12	17	22	25

### INFLATION

#### Inflation Indicators<sup>5</sup>

	Aug 17	Sep 17	Oct 17	Nov 17
Consumer Price Index (CPI), Y/Y (%)	0.7	0.7	0.2	0.6
CPI ex Fresh Food, Y/Y (%)	0.7	0.7	0.8	0.9

### FINANCIAL MARKETS<sup>2</sup>

	Sep 17	Oct 17	Nov 17	Dec 17
Nikkei 225, Trailing P/E Ratio	17.5	18.9	19.3	19.4
3-Month Yield—JGBs (%)	-0.172	-0.200	-0.201	-0.162
10-Year Yield—JGBs (%)	0.068	0.071	0.039	0.048

### BALANCE OF PAYMENTS

Monthly Trade Balance <sup>7</sup>	Aug 17	Sep 17	Oct 17	Nov 17
Billion Yen	324	846	430	181
Current Account Balance <sup>9</sup>	4Q16	1Q17	2Q17	3Q17
% GDP	3.8	3.8	3.8	4.0

Abbreviations: Q/Q ar: Quarter-over-quarter annualized rate. Y/Y: Year-over-year.

1. Source: © European Union 1995–2017.

2. Source: Bloomberg. P/E ratios of Dow Jones EURO STOXX 50 Price Index and Nikkei-225 Stock Average as calculated by Bloomberg.

3. Source: European Central Bank.

4. Source: Economic and Social Research Institute, Cabinet Office, Government of Japan.

5. Source: Ministry of Internal Affairs and Communications, Japan.

6. Source: Ministry of Economy, Trade and Industry, Japan.

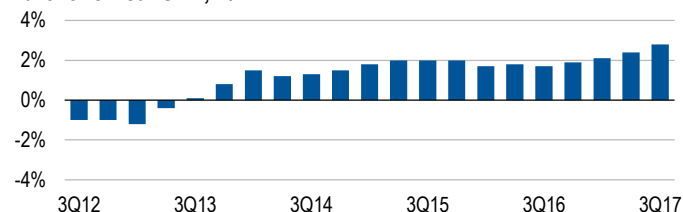
7. Source: Ministry of Finance, Japan.

8. Source: Bank of Japan.

9. Source: Bloomberg Indexes.

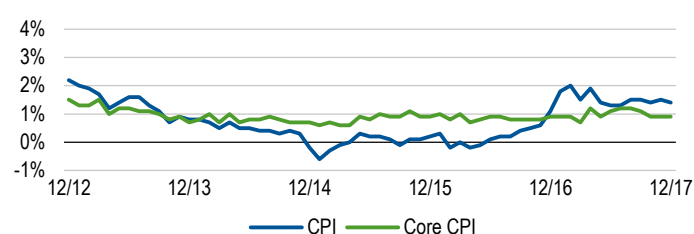
Past performance does not guarantee future results.

## Eurozone Real GDP, Y/Y



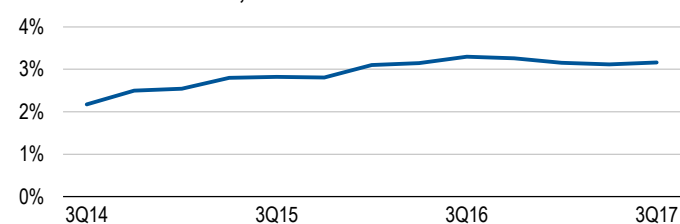
Source: © European Union 1995–2017, as at September 2017.

## Consumer Price Index, Y/Y



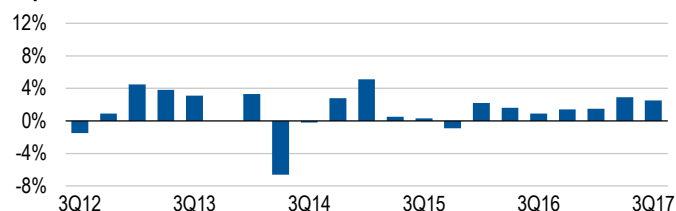
Source: © European Union 1995–2017, as at December 2017.

## External Trade Balance, GDP



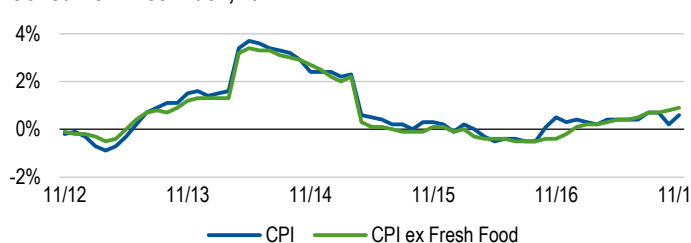
Source: © European Union 1995–2017, as at 30 September 2017.

## Japan Real GDP, Q/Q ar



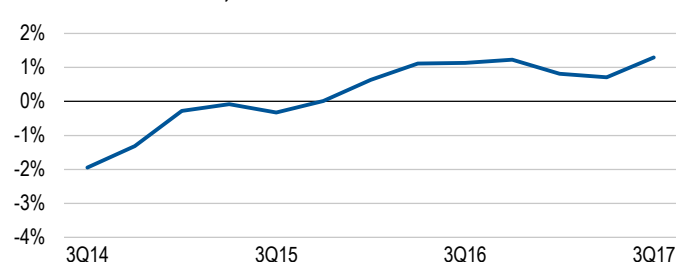
Source: ESRI, Cabinet Office, Government of Japan, as at September 2017.

## Consumer Price Index, Y/Y



Source: Ministry of Internal Affairs and Communications, Japan, as at November 2017.

## Visible Trade Balance, GDP



Source: Ministry of Finance, Japan and Economic and Social Research Institute, Cabinet Office, Government of Japan, as at 30 September 2017.



## US MACROECONOMIC DATA

### FINAL OUTPUT

Gross Domestic Product (GDP) <sup>2</sup>	2Q17	3Q17	4Q17E <sup>1</sup>	1Q18E <sup>1</sup>
Q/Q ar (%)	3.1	3.2	2.7	2.4

### ECONOMIC INPUTS

#### CONSUMPTION/FINAL DEMAND

Income/Savings <sup>2</sup>	Aug 17	Sep 17	Oct 17	Nov 17
Consumer Spending, Y/Y (%)	4.0	4.3	4.2	4.5
Personal Income, Y/Y (%)	2.6	2.9	3.4	3.8
Savings Rate (%)	3.5	3.0	3.2	2.9

#### Employment

	Sep 17	Oct 17	Nov 17	Dec 17
Unemployment Rate (%) <sup>3</sup>	4.2	4.1	4.1	4.1
Participation Rate (%) <sup>3</sup>	63.0	62.7	62.7	62.7
Nonfarm Payrolls (in Thousands) <sup>3</sup>	38	211	252	148
Jobless Claims, 4-Wk Average (in Thousands) <sup>4</sup>	267	233	242	242

#### Housing<sup>5</sup>

	Aug 17	Sep 17	Oct 17	Nov 17
Existing Home Sales (in Millions)	5.35	5.37	5.50	5.81
Y/Y Change (%)	0.2	-1.8	-0.5	3.8

### INVESTMENT

Corporate Earnings <sup>6, 11</sup>	2Q17	3Q17	4Q17E	1Q18E
Earnings, Y/Y (%)	11.2	7.8	11.8	14.5

#### Production & Utilisation<sup>7</sup>

	Aug 17	Sep 17	Oct 17	Nov 17
Industrial Production, Y/Y (%)	1.5	1.9	2.9	3.4
Capacity Utilisation (%)	76.1	76.2	77.0	77.1

#### Nonresidential Fixed Investment<sup>2</sup>

	4Q16	1Q17	2Q17	3Q17
Y/Y (%)	0.7	3.5	4.3	4.6

### INFLATION & PRODUCTIVITY

#### Inflation Indicators

	Sep 17	Oct 17	Nov 17	Dec 17
Personal Consumption Expenditure (PCE), Y/Y (%) <sup>2</sup>	1.7	1.6	1.8	-
Core PCE, Y/Y (%) <sup>2</sup>	1.4	1.4	1.5	-
Consumer Price Index (CPI), Y/Y (%) <sup>2</sup>	2.2	2.0	2.2	2.1
Core CPI, Y/Y (%) <sup>3</sup>	1.7	1.8	1.7	1.8
Producer Price Index (PPI), Y/Y (%) <sup>3</sup>	3.3	2.9	4.3	3.3
Core Producer Prices, Y/Y (%) <sup>3</sup>	1.7	2.0	2.2	2.0

#### Productivity<sup>3</sup>

	4Q16	1Q17	2Q17	3Q17
Productivity, Q/Q ar (%)	1.3	0.1	1.5	3.0
Unit Labour Costs, Q/Q ar (%)	-5.7	4.8	-1.2	-0.2

### FINANCIAL MARKETS

#### Valuation

	Nov 17	Dec 17	Jan 18E	Feb 18E
P/E S&P 500 <sup>6</sup>	22.22	22.47	-	-
Fed Funds Rate <sup>7, 8</sup>	1.25	1.25	1.41	1.42

### BALANCE OF PAYMENTS

#### US Monthly Trade Deficit<sup>2, 9</sup>

	Aug 17	Sep 17	Oct 17	Nov 17
Billion USD	-44.3	-44.9	-48.9	-50.5

#### US Current Account Deficit

	4Q16	1Q17	2Q17	3Q17
Quarterly (in USD Billion) <sup>2</sup>	-114.0	-113.5	-124.4	-100.6
Annualised (% GDP) <sup>10</sup>	-2.4	-2.3	-2.4	-2.3

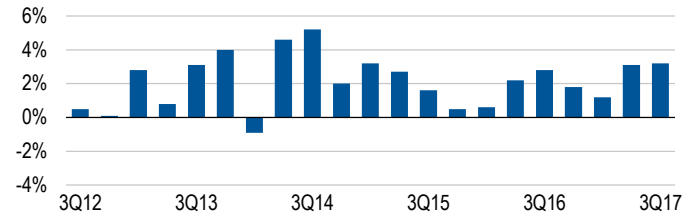
Abbreviations: Q/Q ar: Quarter-over-quarter annualized rate. Y/Y: Year-over-year.

E: Estimate.

- Source: Bloomberg Economic Forecasts as at 31/12/17.
- Source: US Bureau of Economic Analysis.
- Source: US Bureau of Labor Statistics.
- Source: US Department of Labor.
- Source: Copyright National Association of REALTORS®. Reprinted with permission.
- Source: Standard and Poor's.
- Source: US Federal Reserve. At the 13/12/17 meeting the US Federal Reserve raised the main US interest rate to "a target rate" between 1.25% and 1.50%.
- Source: Chicago Board of Trade (30-Day Federal Funds Futures Rate for January 2018 and February 2018), as at 16/1/18.
- Source: US Census Bureau.
- Source: Bloomberg Indexes.
- Source: Bloomberg calculations are share-weighted y/y. Estimates as at 31/12/17.

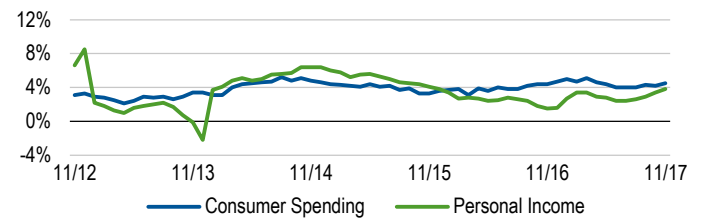
Past performance does not guarantee future results.

### Gross Domestic Product (GDP), Q/Q ar



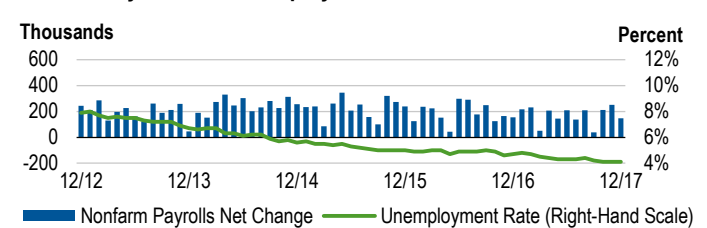
Source: US Bureau of Economic Analysis, as at September 2017.

### Personal Income and Expenditures, Y/Y



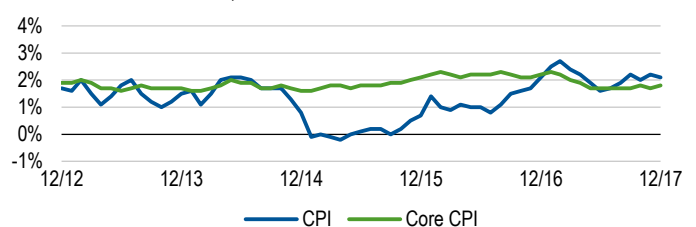
Source: US Bureau of Economic Analysis, as at November 2017.

### Nonfarm Payrolls and Unemployment Rate



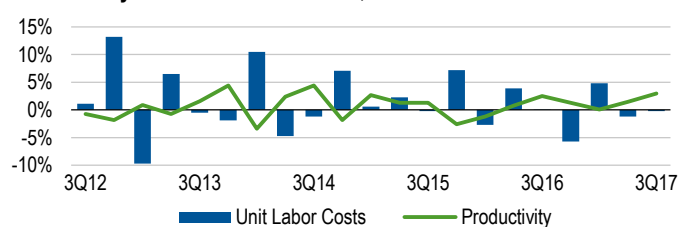
Source: US Bureau of Labor Statistics, as at December 2017. All figures seasonally adjusted.

### Consumer Price Index, Y/Y



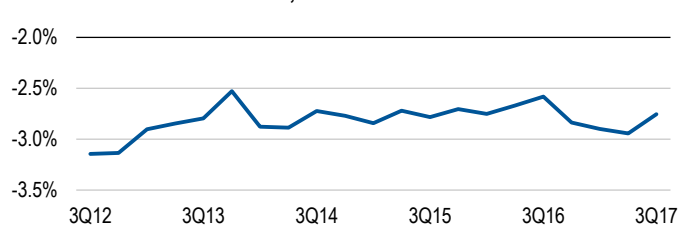
Source: US Bureau of Labor Statistics, as at December 2017.

### Productivity and Unit Labour Costs, Q/Q ar



Source: US Bureau of Labor Statistics, as at September 2017.

### US Annualised Trade Deficit, GDP



Source: US Census Bureau and US Bureau of Economic Analysis, as at September 2017.

## IMPORTANT LEGAL INFORMATION

This material is intended to be of general interest only and should not be construed as individual investment advice or a recommendation or solicitation to buy, sell or hold any security or to adopt any investment strategy. It does not constitute legal or tax advice.

The views expressed are those of the investment manager and the comments, opinions and analyses are rendered as at publication date and may change without notice. The information provided in this material is not intended as a complete analysis of every material fact regarding any country, region or market.

**All investments involve risks, including possible loss of principal.**

Data from third party sources may have been used in the preparation of this material and Franklin Templeton Investments ("FTI") has not independently verified, validated or audited such data. FTI accepts no liability whatsoever for any loss arising from use of this information and reliance upon the comments opinions and analyses in the material is at the sole discretion of the user.

Products, services and information may not be available in all jurisdictions and are offered outside the U.S. by other FTI affiliates and/or their distributors as local laws and regulation permits. Please consult your own professional adviser for further information on availability of products and services in your jurisdiction.

Issued in the U.S. by Franklin Templeton Distributors, Inc., One Franklin Parkway, San Mateo, California 94403-1906, (800) DIAL BEN/342-5236, franklintempleton.com - Franklin Templeton Distributors, Inc. is the principal distributor of Franklin Templeton Investments' U.S. registered products, which are available only in jurisdictions where an offer or solicitation of such products is permitted under applicable laws and regulation.

**Australia:** Issued by Franklin Templeton Investments Australia Limited (ABN 87 006 972 247) (Australian Financial Services License Holder No. 225328), Level 19, 101 Collins Street, Melbourne, Victoria, 3000.

**Austria/Germany:** Issued by Franklin Templeton Investment Services GmbH, Mainzer Landstraße 16, D-60325 Frankfurt am Main, Germany. Authorized in Germany by IHK Frankfurt M., Reg. no. D-F-125-TMX1-08.

**Canada:** Issued by Franklin Templeton Investments Corp., 5000 Yonge Street, Suite 900 Toronto, ON, M2N 0A7, Fax: (416) 364-1163, (800) 387-0830, www.franklintempleton.ca.

**Dubai:** Issued by Franklin Templeton Investments (ME) Limited, authorized and regulated by the Dubai Financial Services Authority. Dubai office: Franklin Templeton Investments, The Gate, East Wing, Level 2, Dubai International Financial Centre, P.O. Box 506613, Dubai, U.A.E., Tel.: +9714-4284100 Fax: +9714-4284140.

**France:** Issued by Franklin Templeton France S.A., 20 rue de la Paix, 75002 Paris France.

**Hong Kong:** Issued by Franklin Templeton Investments (Asia) Limited, 17/F, Chater House, 8 Connaught

Road Central, Hong Kong. **Italy:** Issued by Franklin Templeton International Services S.à.r.l. – Italian Branch, Corso Italia, 1 – Milan, 20122, Italy. **Japan:** Issued by Franklin Templeton Investments Japan Limited. **Korea:** Issued by Franklin Templeton Investment Trust Management Co., Ltd., 3rd fl., CCMM Building, 12 Youido-Dong, Youngdungpo-Gu, Seoul, Korea 150-968. **Luxembourg/Benelux:** Issued by Franklin Templeton International Services S.à r.l. – Supervised by the *Commission de Surveillance du Secteur Financier* - 8A, rue Albert Borschette, L-1246 Luxembourg - Tel: +352-46 66 67-1 - Fax: +352-46 66 76. **Malaysia:** Issued by Franklin Templeton Asset Management (Malaysia) Sdn. Bhd. & Franklin Templeton GSC Asset Management Sdn. Bhd. **Poland:** Issued by Templeton Asset Management (Poland) TFI S.A., Rondo ONZ 1; 00-124 Warsaw. **Romania:** Issued by the Bucharest branch of Franklin Templeton Investment Management Limited, 78-80 Buzesti Street, Premium Point, 7th-8th Floor, 011017 Bucharest 1, Romania. Registered with Romania Financial Supervisory Authority under no. PJM01SFIM/400005/14.09.2009, authorized and regulated in the UK by the Financial Conduct Authority. **Singapore:** Issued by Templeton Asset Management Ltd. Registration No. (UEN) 199205211E. 7 Temasek Boulevard, #38-03 Suntec Tower One, 038987, Singapore. **Spain:** Issued by the branch of Franklin Templeton Investment Management, Professional of the Financial Sector under the Supervision of CNMV, José Ortega y Gasset 29, Madrid. **South Africa:** Issued by Franklin Templeton Investments SA (PTY) Ltd which is an authorized Financial Services Provider. Tel: +27 (21) 831 7400 Fax: +27 (21) 831 7422. **Switzerland:** Issued by Franklin Templeton Switzerland Ltd, Stockerstrasse 38, CH-8002 Zurich. **UK:** Issued by Franklin Templeton Investment Management Limited (FTIML), registered office: Cannon Place, 78 Cannon Street, London EC4N 6HL. Authorized and regulated in the United Kingdom by the Financial Conduct Authority. **Nordic regions:** Issued by Franklin Templeton Investment Management Limited (FTIML), Swedish Branch, Blasieholmsgatan 5, SE-111 48 Stockholm, Sweden. Phone: +46 (0) 8 545 01230, Fax: +46 (0) 8 545 01239. FTIML is authorized and regulated in the United Kingdom by the Financial Conduct Authority and is authorized to conduct certain investment services in Denmark, in Sweden, in Norway and in Finland. **Offshore Americas:** In the U.S., this publication is made available only to financial intermediaries by Templeton/Franklin Investment Services, 100 Fountain Parkway, St. Petersburg, Florida 33716. Tel: (800) 239-3894 (USA Toll-Free), (877) 389-0076 (Canada Toll-Free), and Fax: (727) 299-8736. Investments are not FDIC insured; may lose value; and are not bank guaranteed. Distribution outside the U.S. may be made by Templeton Global Advisors Limited or other sub-distributors, intermediaries, dealers or professional investors that have been engaged by Templeton Global Advisors Limited to distribute shares of Franklin Templeton funds in certain jurisdictions. This is not an offer to sell or a solicitation of an offer to purchase securities in any jurisdiction where it would be illegal to do so.

Important data provider notices and terms available at [www.franklintempletondatasources.com](http://www.franklintempletondatasources.com).



FRANKLIN TEMPLETON  
INVESTMENTS

Please visit [www.franklinresources.com](http://www.franklinresources.com) to be directed to your local Franklin Templeton website.