

## Rates and Uncertainty on the Rise

- **Global momentum remains strong, but US trade policy is generating much uncertainty. Trade tensions between the United States and China are the dominant risk to the economic and financial market outlook. NAFTA negotiations, on the other hand, seem to be on a much improved track.**
- **Despite rising uncertainty, economic conditions in the US, UK and Canada continue to point to the need for higher interest rates. All three countries are expected to hike interest rates two more times this year.**
- **The strength of global demand is leading to a significant increase in most commodity prices relative to last year. This is benefitting commodity exporting nations, such as those in the Pacific Alliance, where growth is expected to be much stronger than in 2017 in spite of political uncertainty in some countries.**
- **The Canadian dollar is expected to strengthen through the year, with the potential for an even more aggressive appreciation if the NAFTA negotiations are concluded.**

We are on the cusp of a long-feared escalation in trade tensions, the dominant risk of the Trump presidency. Though we have flagged this risk since his election, our hope was that the costs of a trade conflict would be high enough to ensure a more rational course of action. As we finalized this forecast, it has become clear that the Trump administration is placing greater weight on antagonism than on the economic costs to the United States of retaliatory trade policies. What is less clear at this time is how serious the threat of a trade war is: the Trump administration has proposed tariffs on USD 150 bn worth of Chinese imports, with the Chinese promising to respond in kind. Whether this is a bluff, as most of President Trump's aggressive statements on various issues have been so far, remains to be seen. For the moment, increasing trade tensions are leading to heightened financial volatility, affecting virtually every asset class. There is no question, however, that an escalation in tit-for-tat trade measures would have very significant implications for the United States and China, and that these consequences would spill over into other economies, notably those that are most closely integrated with these countries. This threat looms large over economic outcomes, and on central bank actions in North America.

The NAFTA negotiations stand in some contrast to the escalation in trade protectionism undertaken by the US with the rest of the world. It is now clear the US wants to remain in NAFTA, as the Trump Administration appears willing to compromise on key demands in a rush to secure a revised NAFTA for the fall US midterm elections. Since NAFTA-related uncertainty has been a drag on Canadian and Mexican activity, an early deal has the potential to lift many of the negative consequences associated with the trade negotiations.

Setting aside trade risks, all indications suggest that the global expansion remains solid, largely synchronized, and resilient. Broadly-based growth remains evident in

### CONTACTS

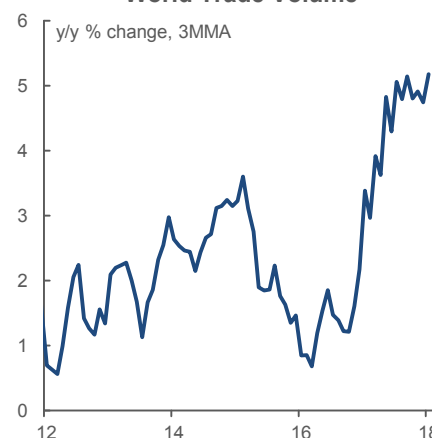
Jean-François Perrault, SVP & Chief Economist  
416.866.4214  
Scotiabank Economics  
[jean-francois.perrault@scotiabank.com](mailto:jean-francois.perrault@scotiabank.com)

### CONTENTS

Overview	1–3
Canada	4–10
The Provinces	11–13
United States	14–19
US & Canadian Monetary Policy & Capital Markets	20–29
Mexico	30–31
Latin America	32–40
United Kingdom	41–42
Eurozone	43–44
Asia-Pacific	45–51
Commodities	52–54
Foreign Exchange	55–56
Summary Forecast Tables	A1–A3

Chart 1

### World Trade Volume



Sources: Scotiabank Economics, Netherlands Bureau for Economic Policy Analysis.

almost all parts of the globe, as consumption and business activity generally remain robust, though pockets of weakness are appearing. As a testament to the strength and mutually-reinforcing nature of the global expansion, global trade volumes are rising to levels not seen since mid-2011 despite concerns about trade protectionism (chart 1).

Global momentum and strong growth in global industrial production have led to a significant rise in commodity prices relative to last year. This strength is expected to last, even though trade-related increases in risk aversion have led to some softness in prices in March. Gold prices are perhaps the best demonstration of the impact of risk aversion, as prices of bullion have departed from the usually stable relationship with real interest rates. The impact of strong global demand is most evident in the energy sector, with WTI expected to average US\$65 per barrel, up nearly US\$15 per barrel from 2017 levels, but metals and materials have also strongly benefitted from strong demand. Zinc and nickel, for example, are expected to trade roughly 25% higher than last year's levels.

In Europe and the UK, momentum remains solid in spite of a softening in indicators early this year. In Europe, this pause follows a torrid pace set last year, while in the UK it reflects temporary factors, such as an outage in a major pipeline. Japanese growth should slow from last year's rapid pace, by Japanese standards, and remain above its potential. Among these three central banks, we forecast only the Bank of England to be active in 2018, with 2 additional hikes this year. Inflationary pressures remain too muted for the ECB and Bank of Japan to raise rates in the foreseeable future. In China, growth will slow given the reduced amount of policy stimulus being provided by authorities, but remain around 6.5%. As China continues on its path of structural reform and economic liberalization, brewing trade tensions with the US pose a significant risk to the outlook. We will need to adjust our forecast if these risks materialize.

In the US, growth remains robust, turbocharged by fiscal stimulus that is adding, on average, about half a percentage point to growth this year and next. Confidence remains high, and fundamentals remain strongly supportive of continued strength, even if consumption is off to a slow start in 2018. The industrial and service sectors are both expanding at paces not seen in the last decade. Though investment has been strong, capacity utilization rates continue to climb, which indicates a need for greater investment. Capital expenditures will also receive a boost from elements in the recently passed tax package. The economy should trip into excess demand this year owing in large measure to fiscal policy, leading to greater inflationary pressure, which in turn would necessitate monetary tightening. Our model-based approach suggests US policy rates need to rise by 125 bps through end-2019, but we currently forecast that the Fed will raise rates only two more times this year, and twice more next year. A number of considerations motivate this deviation from our model, ranging from the recent rise in Libor-OIS spreads whose effect is difficult to capture, to the uncertainty associated with US trade policy. The path for US interest rates is highly conditional on the evolution of trade tensions between the US and China.

In Canada, we continue to look for slowing, but still above-potential, growth. Informed by our model, we project real GDP growth to keep coming down from 3.0% in 2017 to 2.2% in 2018 and 2.1% in 2019. These growth projections reflect two cross-cutting and largely offsetting sets of influences: Canadian economic activity receives positive spillovers from US fiscal stimulus and rising oil prices, but this is counter-balanced by our presumption that investment is dampened by uncertainty stemming from the still-pending status of NAFTA, escalating US-China trade rhetoric, and adjustment to the recent additional tightening of mortgage lending standards in Canada. Remove these caveats and our macro model implies growth rates about 30 bps higher in 2018 and 10 bps higher in 2019.

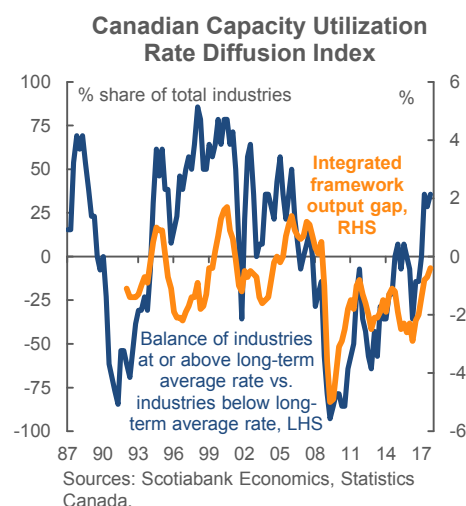
**Table 1**

Global Real GDP	2000–16	2016	2017	2018f	2019f
(annual % change)					
<b>World (PPP)</b>	3.9	3.2	3.7	3.8	3.7
Canada	2.1	1.4	3.0	2.2	2.1
United States	1.9	1.5	2.3	2.6	2.4
Mexico	2.2	2.9	2.0	2.4	2.8
United Kingdom	1.8	1.9	1.8	1.7	1.9
Eurozone	1.3	1.8	2.5	2.5	2.3
Germany	1.3	1.9	2.6	3.0	3.0
France	1.3	1.2	1.9	2.5	2.0
China	9.4	6.7	6.9	6.5	6.2
India	7.1	7.9	6.4	7.4	7.5
Japan	0.9	0.9	1.7	1.3	0.9
South Korea	4.2	2.9	3.1	2.8	2.8
Australia	3.0	2.6	2.3	2.6	2.5
Thailand	4.0	3.3	3.9	3.5	3.4
Brazil	2.6	-3.5	1.0	2.5	2.7
Colombia	4.1	2.1	1.8	2.5	3.5
Peru	5.1	3.9	2.5	3.3	3.7
Chile	4.0	1.2	1.5	3.6	3.9

Sources: Scotiabank Economics, Statistics Canada, BEA, BLS, IMF, Bloomberg.

The Bank of Canada (BoC) is expected to raise rates further. Although Canadian growth is decelerating, it is set to remain above the economy's potential. Capacity pressures are undeniable and will increase: the share of industries operating with capacity utilization rates above their long-run average is at its highest level in 12 years (chart 2), order backlogs are rising, the unemployment rate is at a 43-year low, and there are increasingly widespread labour shortages. These developments are naturally creating inflationary impulses, with underlying inflation having increased from 1.3% y/y to 2.0% in the span of nine months. Our forecast implies that the Canadian economy will move squarely into excess demand in 2018, leading to a further pick-up in inflation over the next two years to just above the BoC's 2% target. To keep inflation from rising too much above its target, the BoC will need to raise rates by 50 bps by end-2018 and a further 75 bps by end-2019. That being said, trade-related uncertainties loom menacingly over this forecast. With higher oil prices, Canadian rates rising, and those in the US forecast to rise less than anticipated by the market, we see the Canadian dollar appreciating to USDCAD 1.25 (80 cents) by year-end. An early conclusion of the NAFTA renegotiations could represent an important positive shock for the CAD, potentially pushing it below USDCAD 1.23 (81.3 cents).

Chart 2



Prospects remain generally strong for the Pacific Alliance countries (PAC), owing to the strength of the global economy and higher commodity prices. In Mexico, a raft of indicators reveals that domestic and external demand are leading to a significant acceleration in activity relative to last year (to 2.4% in 2018 from 2.0% in 2017), despite NAFTA-related uncertainty and the upcoming election. As is the case with our Canadian forecast, an early and conclusive end to the NAFTA renegotiation could have a powerful positive impact on activity, though uncertainty surrounding the electoral outcome could act as a drag on growth for some time. In Peru, growth is expected to accelerate sharply from 2017 (to 3.3% in 2018 from 2.5%) though political developments that led to the resignation of the President will result in lower growth than earlier thought. A key challenge for the outlook will be the government's ability to implement long-delayed and much-needed infrastructure projects. Colombian growth will pick up this year given the strength of foreign demand and commodity prices (to 2.5% from 1.8%), but the presidential elections are an important source of uncertainty given the diverging views of the main candidates. At 3.6%, two full percentage points above last year's rate, Chile will lead the PAC this year, as it too benefits from the external environment, and stands to enjoy the payoff of a new more business-friendly administration.

## Canada

- As both US and global growth continue to pick up, Canadian growth remains set to slow gradually over the next two years from its peak in 2017, but remain supported by domestic and US fiscal stimulus. With economic activity still growing above potential, inflation is expected to head north of the Bank of Canada's 2% target in 2018 and prompt further increases in the Bank's overnight rate target.
- Risks to the near-term outlook appear mixed as the chances for a deal on renewing NAFTA may be improving at same time as the US-China trade conflict threatens to undermine global growth. Over the medium-term, however, Canada's business prospects could be somewhat complicated by US tax reform and policy developments in Canada.

### SLOWING, BUT STILL STEADY

Coming into 2018, Canadian growth has slowed from 2017's hot pace and inflation has gradually picked up as anticipated in our previous *Global Outlook*. Canadian macroeconomic aggregates are closely tracking the forecasts generated by the *Scotiabank Global Macroeconomic Model* (SGMM) that we introduced last year and discussed in our *Long-Term Outlook*. The SGMM's performance so far buttresses our view that Canadian growth should continue to decline through 2018 and 2019 toward our 1.6% estimate of potential as households begin to pull back from spending in response to tighter credit conditions.

Informed by our model, we project real GDP growth to keep coming down from 3.0% in 2017 to 2.2% in 2018, down from our previous projection of 2.4%, and 2.1% in 2019, up from 1.9% in our previous forecasts—owing to our current view that spillovers from US fiscal stimulus will take a bit longer than previously programmed to materialize in Canada's economy through increased export demand (tables 1, 2, and 3). Growth also receives a boost in 2019 from higher oil prices.

Our revised growth projections also reflect two cross-cutting and largely offsetting sets of influences: Canadian economic activity does receive positive spillovers from US fiscal stimulus, but this is counter-balanced by our presumption that investment is dampened by uncertainty stemming from the still-pending status of NAFTA, escalating US-China trade rhetoric, and adjustment to the recent additional tightening of mortgage lending standards in Canada. Remove these caveats and our macro model implies growth rates about 30 bps higher in 2018 and 10 bps higher in 2019, respectively (table 2).

Although Canadian growth is decelerating, a closed output gap and excess demand still imply a pick-up in inflation over the next two years to just above the Bank of Canada's 2% target (chart 1). The *Monetary Policy & Capital Markets* section of the *Global Outlook* translates our macro outlook into an expected rate path for the Bank of Canada. We continue to look for slowing, but still above-potential, growth to be met with two more increases in the Bank's target for the overnight rate later this year—although somewhat more back-loaded than previously projected—and three more increases in 2019.

### CONTACTS

**Brett House, VP & Deputy Chief Economist**  
416.863.7463  
Scotiabank Economics  
[brett.house@scotiabank.com](mailto:brett.house@scotiabank.com)

**Carlos Gomes**  
416.866.4735  
Scotiabank Economics  
[carlos.gomes@scotiabank.com](mailto:carlos.gomes@scotiabank.com)

**Juan Manuel Herrera**  
416.866.6781  
Scotiabank Economics  
[juanmanuel.herrera@scotiabank.com](mailto:juanmanuel.herrera@scotiabank.com)

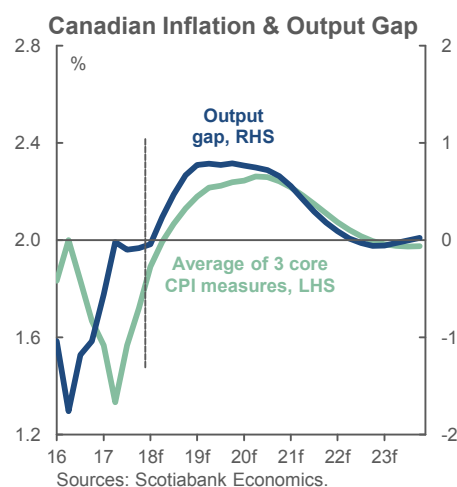
**René Lalonde**  
416.862.3174  
Scotiabank Economics  
[rene.lalonde@scotiabank.com](mailto:rene.lalonde@scotiabank.com)

**Nikita Perevalov**  
416.866.4205  
Scotiabank Economics  
[nikita.perevalov@scotiabank.com](mailto:nikita.perevalov@scotiabank.com)

**Adrienne Warren**  
416.866.4315  
Scotiabank Economics  
[adrienne.warren@scotiabank.com](mailto:adrienne.warren@scotiabank.com)

**Mary Webb**  
416.866.4202  
Scotiabank Economics  
[mary.webb@scotiabank.com](mailto:mary.webb@scotiabank.com)

Chart 1



## CONSUMERS REMAIN THE MAINSTAY OF CANADIAN GROWTH

Consumers continue to make an outsized contribution to Canada's overall economic performance. A confluence of highly favourable factors—a still-strong employment market, rising wages, increased government transfers, increasing wealth, low borrowing costs, and a growing population—drove up household expenditures last year by the strongest pace since 2010; positive, albeit more moderate, momentum continues into 2018 (table 3). The surge in spending has been led to this point by big-ticket durable goods, a testament to consumer confidence—but this sentiment is beginning to be pared back by higher prices and tighter macroprudential measures.

The fundamental drivers supporting strong household spending remain in place. Last year saw the strongest pace of hiring in a decade, with the vast majority of the new positions in full-time roles. The unemployment rate has dropped to a 43-year low of 5.8%—equivalent to 4.8% using the same methodology that is standard in the United States where the unemployment rate is 4.1%. The prime-age (i.e., 25–54 years old) employment-to-population ratio now sits at 82.5%: down slightly from its all-time high of 82.7% in December, 2017.

While forward-looking surveys of hiring intentions remain upbeat, some slowing in job growth seems inevitable during the remainder of 2018. Growing labour shortages are being reported across sectors and regions, as the number of job vacancies has surged 15% over a year ago. The pool of available workers to be tapped to fill these openings appears increasingly limited or mismatched with employer needs given that the participation rate of Canadians aged 15 to 64 is already near record highs.

Accelerating wage gains should sustain healthy income growth even in the face of more muted hiring. Average hourly earnings growth has more than doubled over the past year to 3% year-over-year amid the tightening in labour markets and minimum wage increases in a number of provinces. Further legislated minimum wage increases this year and in 2019 in nine of ten provinces are expected to take wage growth to 4% in 2018 and keep it around 3% in 2019. Combined with employment gains, overall earnings growth for Canada as a whole is set to exceed 5% in 2018.

A buoyant tourism sector also is fueling higher outlays, including on accommodation and food services, recreation and entertainment, and transportation. Inflation-adjusted tourism spending in Canada rose 4% last year, reflecting increased expenditures by

Chart 2

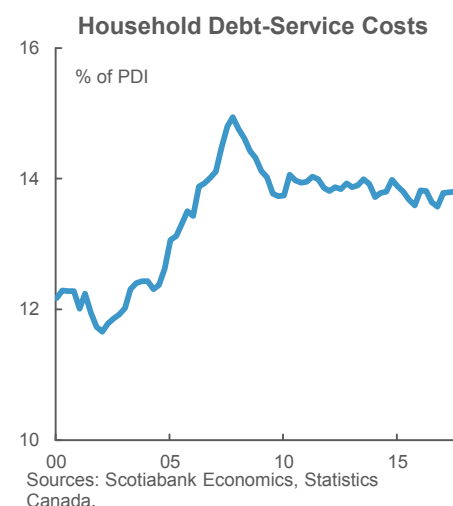


Table 1

Quarterly Canadian Forecasts	2017		2018				2019			
	Q3	Q4	Q1e	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>Economic</b>										
Real GDP (q/q ann. % change)	1.5	1.7	1.8	2.6	2.4	2.4	2.2	1.9	1.6	1.6
Real GDP (y/y % change)	3.0	2.9	2.4	1.9	2.1	2.3	2.4	2.2	2.0	1.8
Consumer prices (y/y % change)	1.4	1.8	2.0	2.2	2.3	2.3	2.3	2.3	2.3	2.3
Avg. of new core CPIs (y/y % change)	1.5	1.7	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.2
<b>Financial</b>										
Canadian Dollar (USDCAD)	1.25	1.26	1.29	1.27	1.26	1.25	1.25	1.22	1.22	1.25
Canadian Dollar (CADUSD)	0.80	0.80	0.78	0.79	0.79	0.80	0.80	0.82	0.82	0.80
Bank of Canada Overnight Rate (%)	1.00	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.25	2.50
3-month T-bill (%)	1.00	1.06	1.15	1.25	1.55	1.80	2.05	2.30	2.30	2.50
2-year Canada (%)	1.52	1.69	1.78	1.90	2.10	2.30	2.40	2.50	2.55	2.60
5-year Canada (%)	1.75	1.87	1.97	2.10	2.25	2.45	2.55	2.60	2.65	2.70
10-year Canada (%)	2.10	2.05	2.09	2.25	2.40	2.50	2.60	2.65	2.70	2.75
30-year Canada (%)	2.48	2.27	2.23	2.40	2.60	2.70	2.80	2.85	2.90	2.95

Sources: Scotiabank Economics, Statistics Canada, Bloomberg.



Canadians staying at home as well as by international visitors to Canada. While the tourism boost from last year's Canada 150 celebrations has wound down, stricter requirements on travel into the US, improved Canadian visa facilitation, and increased air capacity from key Canadian tourism markets, including China, India, and Mexico, are together expected to sustain a rising number of international arrivals in 2018 and 2019. Meanwhile, a relatively soft Canadian dollar limits short cross-border shopping trips by Canadians to the United States.

We continue to forecast relatively healthy consumer trends, but it is unlikely that the recent pace of spending can be sustained. The largest initial boost to income and spending from enhanced child-benefit payments provided during 2016–17 has faded and further assistance to low-income households is less comprehensive. Wealth effects also are expected to be weaker in light of the softening in house prices in some markets and lacklustre equity returns thus far in 2018.

Higher borrowing costs also are likely to dent consumer purchases. Household debt-servicing costs as a share of disposable income are edging higher, a trend that is set to continue as the Bank of Canada moves to normalize interest rates. Over most of the past decade, increased borrowing has been offset by falling interest rates, leaving overall debt financing burdens relatively flat (chart 2). For the first time since 2010, five-year fixed mortgages are set to roll over at higher rates than at origination (chart 3).

At the margin, sales of big-ticket items that are more likely to be financed on credit, including motor vehicles, furniture, and major household appliances, are expected to soften first. Accelerating price increases for new cars and light trucks have reduced new-vehicle affordability to its lowest level of the past decade and will likely also weigh somewhat on new sales. Many households have started to shift to the used-vehicle market, with sales of pre-owned models jumping an estimated 10% y/y in 2017, outpacing gains in new vehicle purchases. Full-year 2018 new motor vehicle sales are forecast to moderate to 2 mn units, putting an end to a string of five consecutive annual sales records, but still keeping overall volumes at extremely high levels.

Canadian households appear to be taking initial steps toward deleveraging. Consumer and mortgage credit growth has decelerated in recent months near to 5.5% y/y, near a two-year low. The ratio of household credit-market debt to disposable income inched down to 170.4% in Q4 from a record high of 170.5% in Q3, and likely edged lower in Q1 in the wake of a sharp slowdown in home sales. Recalculated on the same terms as US numbers, the Canadian ratio currently sits at 156.4%, below the US peak of 168.4% recorded in 2007. Consumer confidence surveys are signalling increased caution toward major purchases. Overall, real consumer spending growth is projected to slow from a seven-year high of 3.5% in 2017 to 2.6% this year and 2.0% in 2019, bringing it closer in line with underlying income trends.

## NEW MORTGAGE RULES AND HIGHER RATES COOL HOUSING DEMAND

The new, tougher, B-20 stress-test rules that took effect on January 1st sparked a larger-than-expected fall-off in home sales in early-2018 after buyers rushed to close deals

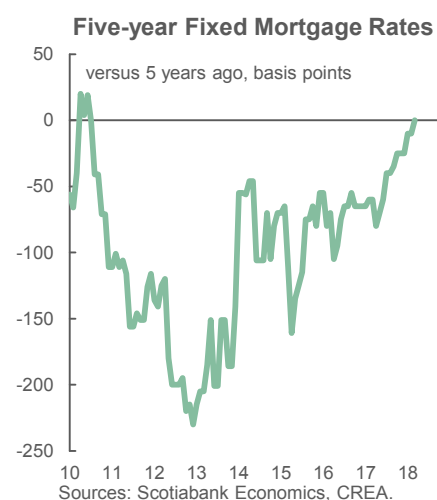
**Table 2**

### Real GDP growth: impact of policy developments

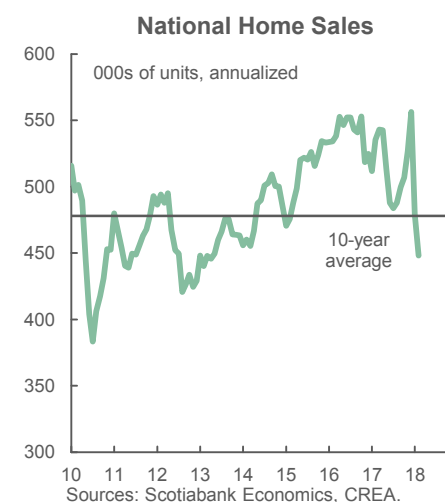
	2018f	2019f
<b>Model-based projections based on fundamentals</b>	<b>2.5</b>	<b>2.2</b>
<b>Less: adjustments for policy developments</b>	<b>-0.3</b>	<b>-0.1</b>
B-20 mortgage rules	-0.1	0.0
NAFTA uncertainty	-0.1	0.0
Global protectionism	-0.1	-0.1
<b>Current baseline</b>	<b>2.2</b>	<b>2.1</b>

Source: Scotiabank Economics.

**Chart 3**



**Chart 4**



before the end of 2017 (chart 4). The current pullback has been sharpest in the Greater Vancouver (see our recent report on [BC housing](#)) and Greater Toronto areas, which are disproportionately affected by the new rules compared with other regions owing to their high home prices and relatively large share of uninsured mortgages. Buyers, some of which are now able to qualify only for smaller mortgages than they previously considered, continue to shift their preferences toward more affordable housing options, including condominiums and townhomes.

Heading into Q2, a partial recovery is likely as buyers and sellers adjust to the new guidelines. Housing demand fundamentals, including low unemployment, strengthening wage gains, ageing Millennials, and strong immigration rates, remain supportive. While affordability is increasingly strained in the Greater Vancouver and Toronto-Hamilton areas, it remains healthy in much of the rest of the country.

Even so, the combination of the new stress tests, BC's recently announced housing tax measures, and higher interest rates is expected to lead to some moderation in Canadian home sales this year. National home sales are forecast to decline by 5–10% in 2018 before stabilizing in 2019 at what remain historically high levels. Annual increases in nationwide home prices, measured by the benchmark composite MLS Home Price Index (HPI), are expected to moderate from 14% to around 3% in 2018, with the majority of local markets in balanced territory.

Housing starts are projected to slow from 220,000 units in 2017 to 208,000 in 2018 and 196,000 units in 2019, in line with underlying demographic demand and some boost from affordable housing initiatives. While the overall temperature of the housing market has cooled, builder confidence remains underpinned by rising new home prices, still strong pre-construction sales, and a declining inventory of completed and unsold units. There is little evidence of over-supply in the vast majority of major markets in Canada.

## NON-RESIDENTIAL CONSTRUCTION STRENGTHENING

Private non-residential construction spending is set to stage a gradual recovery during 2018–19 after two years of contraction during 2016–17. Strengthening industrial activity and rising capacity utilization rates are prompting some businesses to increase spending on new facilities, notwithstanding uncertainty created by the ongoing renegotiation of NAFTA. Industrial construction intentions are trending close to their highest level in five years.

Commercial building construction volumes are also turning higher. Tight central office market conditions persist in Toronto and Vancouver, which is spurring additional development activity, while Calgary and Edmonton are showing signs of stabilization after years of high vacancy rates. Demand remains strong across the country for new warehouse and distribution facilities amid the continuing rise in e-commerce.

## HIGH-TECH LEADS MANUFACTURING OUTPERFORMANCE

While the Canadian economy has moderated in recent months, the manufacturing sector has held up better, with growth advancing by 3.2% y/y in January, ahead of economy-wide growth which slowed to 2.7% y/y. However, nearly half of all manufacturing industry groups also decelerated at the start of the year by at least as much as the overall economy. The high-tech sector is a notable exception, with output growth accelerating to 13.9% y/y in January, its best performance since the opening months of 2004. Ordering activity for Canadian high-tech products also remains robust, which is leading to an expanding order backlog that has increased 8% overall as inventories have come down since late-2016.

**Table 3**

Canada	2000–16	2016	2017	2018f	2019f
(annual % change, unless noted)					
<b>Real GDP</b>	2.1	1.4	3.0	2.2	2.1
Consumer spending	2.9	2.3	3.4	2.6	2.0
Residential investment	3.7	3.4	3.0	1.2	0.4
Business investment	2.2	-8.8	2.5	4.1	2.5
Government	2.2	2.7	2.5	2.4	1.5
Exports	1.3	1.0	1.0	1.6	3.6
Imports	2.9	-1.0	3.6	3.0	2.5
Nominal GDP	4.2	2.0	5.3	4.5	4.5
GDP Deflator	2.1	0.6	2.3	2.2	2.4
Consumer price index (CPI)	1.9	1.4	1.6	2.2	2.3
CPI ex. food & energy	1.6	1.9	1.6	2.0	2.2
Pre-tax corporate profits	3.6	-1.9	20.2	6.0	1.0
Employment	1.3	0.7	1.9	1.3	1.0
Unemployment rate (%)	7.1	7.0	6.3	5.8	5.7
Current account balance (CAD bn)	-17.1	-65.4	-63.9	-58.6	-47.6
Merchandise trade balance (CAD bn)	25.1	-25.9	-23.9	-23.8	-16.0
Federal budget balance* (FY, CAD bn)	-2.8	-1.0	-17.8	-19.4	-15.1
percent of GDP	-0.2	0.0	-0.9	-0.9	-0.7
Housing starts (000s)	199	198	220	208	196
Motor vehicle sales (000s)	1,657	1,949	2,041	2,000	1,950
Industrial production	0.6	0.1	5.1	2.2	1.0
WTI oil (USD/bbl)	63	43	51	65	68
Nymex natural gas (USD/mmbtu)	4.94	2.55	3.02	2.80	2.85

Sources: Scotiabank Economics, Statistics Canada, CMHC, Bloomberg. \* Canada ex risk adjustment of \$1.5bn & \$3.0bn for FY18 & FY19.

Canadian mineral processing and machinery manufacturing also continue to post robust gains, buoyed by ongoing growth in global business investment. Data from the OECD indicate that capital expenditures among the advanced OECD economies grew by 4% y/y in Q4-2017, the largest expansion since early 2014. In fact, capital expenditure has accounted for one-third of the growth in overall economic activity among industrialized nations over the past year; on average, capital expenditure usually contributes only about a fifth of total growth across the OECD. Preliminary industry data on global equipment sales point to ongoing momentum, led by a 40% y/y increase in Asia for February 2018.

### NEAR-RECORD CAPACITY UTILIZATION POINTS TO INCREASED INVESTMENT

Monthly data for Canada also point to accelerating domestic machinery demand, driven by near-record industrial operating rates and strengthening business confidence. The advance in machinery orders is broadly-based, but is strongest for metalworking machinery, as well as construction and mining equipment. Industrial operating rates in Canada have jumped by 4.6 percentage points over the past year to 86%, one of the largest year-over-year increases on record (chart 5). The current rate is well above the 80.5% average operating rate of the last decade, which appears to reflect both high demand for Canadian industry's products and some reticence to invest in new capacity in export-intensive sectors that are dependent on NAFTA for trade with the US.

Outside of the auto sector, the order backlog at Canadian factories continued to deepen by 10% y/y in January 2018 even after the solid 4% annual production gains recorded in 2017; however, expansion in the order backlog has moderated from the more than 20% annualized rate recorded in the first half of 2017. Ongoing robust interest in Canadian-made machinery, owing to rising orders from the US market, as well as increased demand for chemicals and plastics, accounts for nearly half of the jump in the non-automotive order backlog over the past year—even though those sectors account for less than a quarter of total Canadian manufacturing activity.

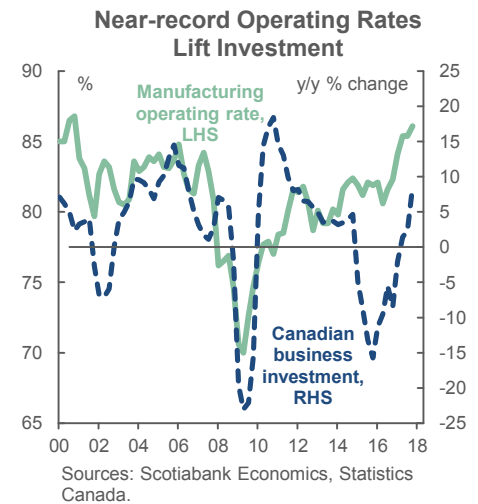
Recent surveys of investment intentions remain mixed. In the Bank of Canada's Q1-2018 *Business Outlook Survey*, released on 9 April, 44% of firms expect to increase spending on machinery and equipment over the next twelve months, down modestly from 48% the previous quarter and well above the low of 26% in Q4-2015. In contrast, Statistics Canada's latest more broadly-based and detailed *Capital Expenditure Survey* details a fourth consecutive annual decline in Canadian business investment intentions on the way into 2018.

Actual investment data look stronger: tight capacity and ongoing gains in new orders prompted domestic businesses to boost capital expenditures by 8.6% y/y in Q4-2017. If uncertainty around NAFTA eases, we expect Canadian business investment to pick up further and lift full-year 2018 capital spending to its fastest growth in six years, led by export-intensive sectors in central Canada that have been running hot for a couple of years.

### BUOYANT SPENDING TURNS FISCAL POLICY PRO-CYCLICAL

Across all levels of government, the already robust contributions of current and capital expenditures to Canada's real GDP are now expected to edge up to a combined 0.5 percentage points in 2018 (i.e., nearly a quarter of total economy-wide growth of 2.2%) and 0.3 percentage points in 2019. The extra boost stems from growth in provincial spending plans, particularly in Ontario's and Quebec's pro-cyclical pre-election budgets: we assume that some of the current governments' new spending will proceed even if power changes hands in the coming provincial votes. The upswing in provincial outlays that we have incorporated in our forecasts would be even higher were it not for (i) our usual caution that ambitious infrastructure agendas are unlikely to be fully implemented on their scheduled timeline; (ii) Alberta's decision to scale back its capital outlays by almost 30% during fiscal 2018–19; and, (iii) continued wage restraint and public service attrition in a couple of provinces.

Chart 5

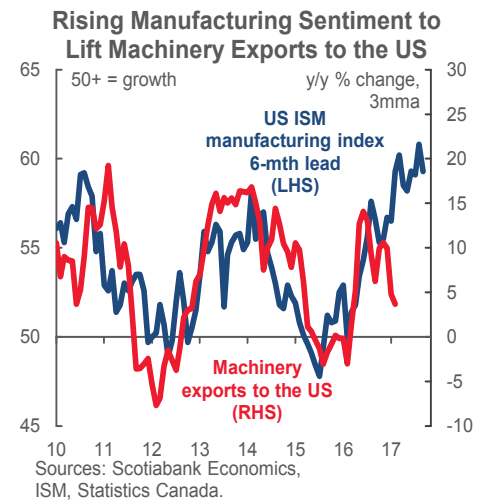




This year's federal budget outlined new initiatives and incremental additional spending on existing initiatives that will more than reverse: (i) the reduction in expenditures in Ottawa's Fall Update; and (ii) the bottom-line improvements brought about by stronger GDP growth. This additional spending also shifts the composition of federal outlays from previous plans: for example, during fiscal 2018–19, planned infrastructure investment of CAD 1.9 bn is re-profiled to future years to allow current funds to be repurposed to support research & development and to provide incentives to increase female labour-force participation. Federal efforts to, amongst other things, explore the creation of a national pharmacare program are likely to shift overall provincial structural expenditures to a higher path over the next decade.

The challenges posed to Canadian competitiveness by the recent reform of US personal and corporate income taxes have so far elicited only limited responses from Canada's federal and provincial governments. A couple of provinces are engaged in streamlining regulatory burdens, particularly on environmental assessments, but we anticipate that further efforts to reinforce Canada's relative strengths will likely be required.

Chart 6



### EXPORT BOOST COMING FROM US STIMULUS, BUT TAKE-AWAY CAPACITY LIMITS OIL SHIPMENTS

Export growth was muted in Q4-2017 and is tracking weakly in Q1-2018 following an auto plant's closure for retooling in late-2017. Nevertheless, overall export growth is projected to accelerate from 1.0% in 2017 to 1.6% in 2018 (table 3). Canadian machinery manufacturing should particularly benefit from the increases in US business investment needed to relieve rapidly-rising capacity pressures in the US industrial sector, where some measures of confidence remain near their highest points since 2011 (chart 6). Labour market strength and rising household incomes in the US should also provide a boost to Canadian exports of consumer goods. Economic strength is not limited to the US, however: accelerating growth in Europe, Latin America, and India, with still-solid growth in China, should lift demand for Canadian industrial and consumer goods.

In 2017, exports of energy products rose by 10.7% y/y in volume terms, their fastest annual pace of growth since data have been available; however, this high growth rate has been primarily due to the sector's bounce-back from the 2016 Alberta wildfires. We anticipate slower volume growth over the coming 18–24 months. While output is growing, bottlenecks in the transportation of crude due to tight pipeline capacity (see our report [here](#)) have decreased the price received by producers and have prompted a widening in the price discount on western Canadian oil compared with the West Texas Intermediate (WTI) benchmark. While exports by rail may ease some of western Canada's take-away constraints, crude exports are pushing rail capacity in Canada to its limits and, in turn, displacing exports of other products: canola and wheat exports saw steep month-on-month declines in February owing to inadequate availability of railcars and engine sets.

### NAFTA RISK MAY BE RECEDING, BUT IT'S NOT OVER 'TIL IT'S OVER

The US administration appears newly eager to conclude an agreement-in-principle on a renegotiated and modernized NAFTA, with the possibility that a preliminary deal may be announced in the coming weeks or months. The recent rush appears to be driven in part by the US Trade Representative's (USTR) desire to show progress on NAFTA with Canada and Mexico ahead of the 1 May deadline to extend their exemptions from US steel and aluminum tariffs. The new urgency on NAFTA may also stem from a USTR desire to focus on the escalating trade conflict with China. An announcement of an agreement-in-principle on NAFTA would likely require some additional flexibility from the three parties that builds on recent progress on revising the auto-sector's rules of origin. The very modest revisions to the US-Korea Free Trade Agreement (KORUS) that were deemed a victory by the White House at end-March imply, however, that the bar for US Presidential satisfaction on a revised NAFTA may now be lower than previously supposed.

The threat that US tariffs on Canadian (and Mexican) steel and aluminum will be imposed if a NAFTA deal is not reached by end-April is only a modest stick to force closure on the talks. Canada alone provides about 16% of US steel imports and around 45% of US aluminium imports (chart 7): the US would find it somewhere between difficult and impossible to generate domestic

replacements for these imports in the short- to medium-term, if ever. As a result, the US would likely have to maintain imports of Canadian steel and aluminum with relatively modest changes, which implies that the burden of any tariffs imposed would fall mainly on US industry and consumers.

When an agreement-in-principle is announced, a great deal of work will remain to conclude the negotiations and subject the final agreement to ratification in all three countries. For instance, US Congressional processes would require at least 195 days to proceed to a ratification vote on a modest set of revisions to the pact; more significant changes could require at least 285 days before a vote is called. In either case, the Congressional clock starts only once a final agreement—not an agreement-in-principle—has been concluded amongst the three countries' negotiators.

Canada and Mexico will need to use their newly-found leverage in the NAFTA talks with great judiciousness. Uncertainties about NAFTA will likely hang over Canadian business activity at least until a preliminary agreement is announced. But this uncertainty will not be fully eliminated until a final NAFTA text is agreed and ratified—and ratification will almost certainly stretch into 2019 despite the current urgency coming from the US Trade Representative to proceed more quickly. As the future of NAFTA becomes clearer, the Canadian real GDP growth rate could be raised by 10 bps in 2018 (table 2).

### NEAR-TERM RISKS ABATING, LONG-TERM RISKS INTENSIFYING

Since our last quarterly *Global Outlook*, immediate risks to the Canadian economy have remained mixed. For the moment, very preliminary data imply that Canada's tight labour markets appear to be absorbing recent minimum wage increases, while these boosts to income are likely helping to improve household finances by shifting the low end of the wage distribution. At the same time, pressure in parts of the country's hottest housing markets has begun to recede, while increases in household indebtedness have started to level off as Canadians adjust to tighter mortgage standards and reassess their appetite for consumer debt.

The US tone on NAFTA has also turned more constructive, with the recent push for a quick conclusion to the talks representing a positive for Canada as it likely implies a respite from the chilling effect of NAFTA-related uncertainties and a relatively minimalist set of revisions to the pact. Pro-cyclical fiscal stimulus in both the US and Canada provides additional support to growth—but at the potential cost of more aggressive action by the countries' respective central banks, which is the typical catalyst to the end of very prolonged expansions. The rapidly-developing trade skirmish between the US and China could undo the synchronization of global growth just as it has taken hold.

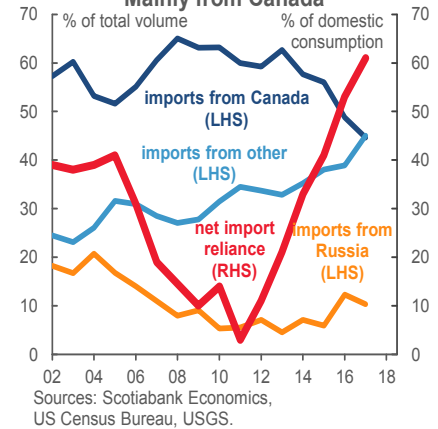
Canada's medium-term prospects have, in contrast, dimmed somewhat. Canada's open economy is heavily dependent on trade, and tit-for-tat tariffs between the US and China, even if quickly unwound as such measures have been in the past, could slow Canadian growth more rapidly than we already anticipate. Scotiabank Economics' [Recession Probability Model](#) implies that the current low probability of a recession in Canada rises materially by 2021 when spillovers to Canada from the present US fiscal stimulus will have waned.

US policy reforms have eliminated Canada's corporate tax advantages compared with the US, while the federal and provincial governments have introduced a set of long-term policy shifts pointed towards greater environmental sustainability and social inclusion—including higher minimum wages, tighter rules on pay equity, carbon pricing, and more extensive project approval processes—that together could make Canada a relatively more complicated place to invest and do business compared with the US. Canada's attractiveness as a destination for foreign direct investment appears to have waned since 2015, nearly halving from CAD 58 bn in 2015 to CAD 31 bn in 2017. Weaker inward investment into energy and mining has accounted for a large share of the drop as volatile oil prices, combined with uncertainty about the sector's regulatory environment and take-away infrastructure, appear to have dented investor confidence in undertaking projects that require heavy front-end capital outlays. Inflows into the manufacturing sector also significantly slowed throughout 2016 and most of 2017, possibly on trade concerns, though they picked up late last year.

Competitiveness is more than sum of low tax rates and policy permissiveness, but Canada will likely need to do more in the years ahead to accentuate the full sweep of features that make it an attractive place to invest and work.

Chart 7

#### The US Relies on Aluminum Imports, Mainly from Canada



## The Provinces

- **Alberta and British Columbia are expected to retain growth leadership through 2019. All provinces are forecast to post gains this year and next, though only two avoid the slower trend anticipated after the 2017 surge.**
- **For a second year, the Provinces project an aggregate deficit for fiscal 2017–18 (FY18) less than CAD 10 bn (0.4% of GDP). Spring *Budgets* forecast a combined deficit of up to CAD 17 bn for FY19, pending election outcomes this year in Ontario, New Brunswick and Quebec.**

## SUSTAINING EXPANSION

For Canada's three major oil-producing provinces, a significant assist is anticipated from the steep gains forecast for WTI and Brent oil prices this year and the more moderate advance for Western Canadian Select prices for bitumen. This assumes, however, that at least two of the three major oil pipeline projects—the Line 3 refurbishment and either the Trans Mountain Expansion or Keystone XL—proceed as planned. Combined, the other seven provinces enter 2018 expanding faster than their underlying trend rates, with capacity constraints emerging. In these provinces, the share of longer-term unemployed has slid to levels not seen since 2012 (chart 1), and the fraction of part-time workers seeking full-time jobs in 2017 fell to a post-recession low.

Job creation across the seven oil-consuming provinces is expected to ease over the next two years from the robust 2017 pace. As growth moderates, it will take time to absorb the jump in full-time positions that approached or exceeded 2.0% in six provinces last year. Wage increases, as measured in several surveys, appear to be picking up in higher-growth areas reflecting skills shortages in some instances. In Central Canada, unemployment rates are at historic lows. The 2015–16 setback in Alberta's and Saskatchewan's wages that dampened national averages into early 2017 is reversing. The upward trend in minimum wages has steepened, reflecting double-digit increases in the four largest provinces since the end of 2016, and annual indexation in a number of other provinces providing gradual steady increases. Also boosting household incomes are job gains in high-wage industries such as professional, scientific & technical services, where weekly wages were 38% above the all-industry average in 2017, and employment rose in nine provinces (chart 2).

Core consumer price inflation in recent months has picked up in PEI, Nova Scotia, Manitoba and BC, and with the exception of Manitoba, services are a frequent source of higher prices. In coming quarters in regions witnessing above-trend growth, rising inflation is expected to diminish the real purchasing power of higher wages. On a sector-specific basis, unexpectedly strong housing starts last year plus elevated infrastructure investment are bolstering apartment construction costs apart from land prices (chart 3).

A gentle cooling characterizes our consumption and housing outlooks for most provinces given new mortgage restrictions, moderating job creation, debt burdens and rising interest rates. For the first time on record, six of the net oil-consuming

## CONTACTS

**Mary Webb**  
416.866.4202  
Scotiabank Economics  
[mary.webb@scotiabank.com](mailto:mary.webb@scotiabank.com)

**Marc Desormeaux**  
416.866.4733  
Scotiabank Economics  
[marc.desormeaux@scotiabank.com](mailto:marc.desormeaux@scotiabank.com)

Chart 1

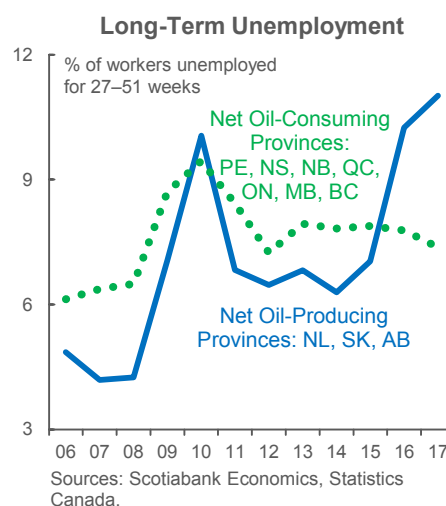
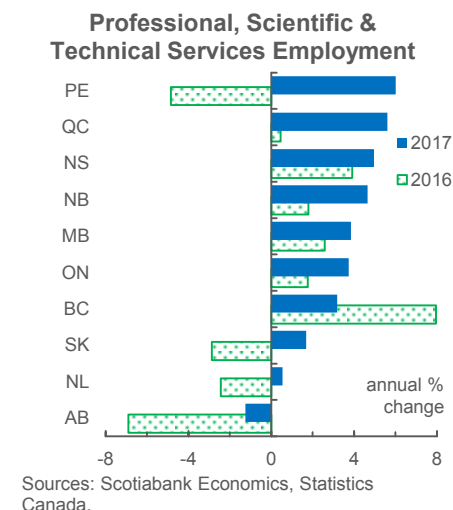


Chart 2



provinces reported 2017 retail sales growth over 6%, a surge that is likely unsustainable. Motor vehicle unit sales are forecast to drop in seven provinces both this year and next (table 1) while less buoyant housing market activity is expected to constrain spending on other durables. Upbeat statistics for 2017, such as increased international visitors in seven provinces, affirm the rising trend in tourism receipts. Further gains should be supported by the Canadian dollar averaging roughly 80¢(US) and multiple regional tourism investments, either completed or under way.

Housing affordability issues are expected to persist in and around British Columbia's largest cities and in Ontario's Greater Golden Horseshoe. More balanced housing markets, however, are anticipated for most other regions, with affordable ownership options and rental vacancy rates typically at or above the 3.0% threshold indicating supply matching demand. In Nova Scotia, an upswing in multi-units has accounted for 55% of housing starts over the last three years, transforming the Halifax skyline and leaving sufficient inventory to drop provincial starts back below 4,000 units annually through 2019. In Quebec City, average residential transaction prices have been virtually flat since 2013, but Montreal witnessed a 5.5% jump in house prices in 2017, mirroring the CMA's strong job creation and the Province's significant personal tax relief. Inventories of completed and unsold housing units, built up since the 2014 commodity price correction, remain elevated in Calgary, Edmonton and Saskatoon, and to a lesser extent in Regina. This inventory is expected to forestall new residential construction and limit price gains, even as housing demand firms.

The projected recovery in business investment this year will be concentrated among the oil-consuming provinces and in machinery & equipment (M&E). Statistics Canada's capital investment intentions survey indicated a 4.2% rebound in nominal M&E purchases for the net oil-consuming provinces (chart 4). This may well understate the eventual increase given reported capacity constraints, particularly in Central Canada and British Columbia, and the anticipated market opportunities. The expected upswing in M&E investment in the oil-consuming provinces is corroborated by the late 2017 spike in industrial machinery imports, and the surge last year in domestic machinery orders and shipments.

Business investment activity across the three oil-producing provinces, after three years of substantial declines, is unlikely to begin regaining lost ground until 2019–20. While their M&E purchases are expected to stabilize over the next year and western Canada's conventional oil & gas exploration remains buoyant, new oil sands construction is more limited after recent major capacity additions and the completion of Hebron, Newfoundland and Labrador's fourth offshore oil field. Apart from the oil & gas sector, non-residential construction is expected to advance this year in areas such as commercial development, pipelines, and utilities.

As in 2017, net exports in 2018 are expected to support the three oil-producing provinces' expansion. Their imports will be constrained by their subdued business investment plans as their oil production continues to climb, albeit with some easing from last year's gains. For non-energy exports, BC should continue to benefit from its strong Asian ties (chart 5) and the Comprehensive Economic and Trade Agreement with the EU offers opportunity for all regions. In Ontario, net exports are posing a drag on growth. As the province's domestic spending strength pushes Ontario's imports higher, the forecast 7½% decline in motor vehicles assembled will detract from the anticipated gains in areas such as machinery.

Chart 3

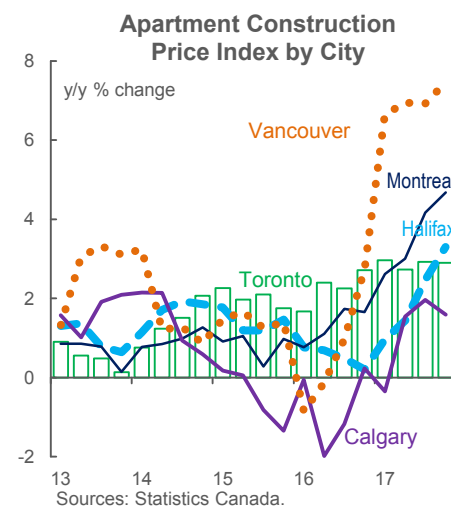


Chart 4

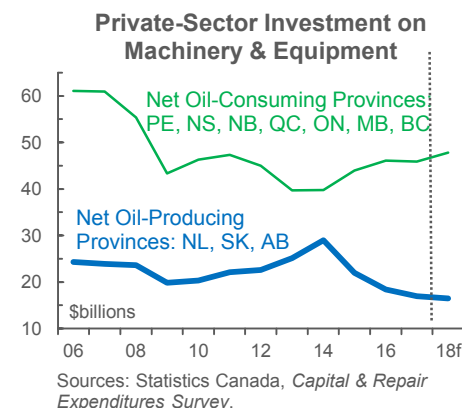
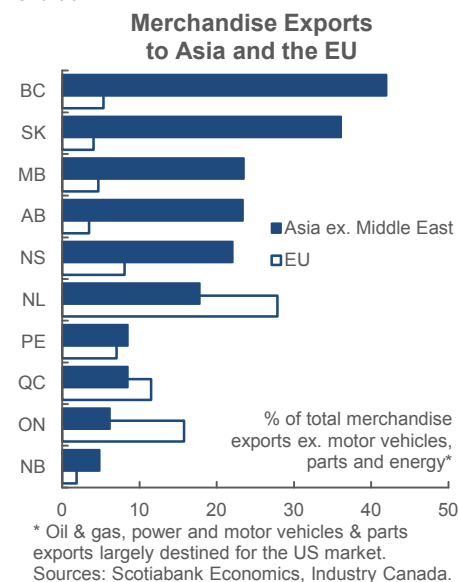


Chart 5



## POTENTIAL DIVERGENCE IN PROVINCIAL FISCAL PATHS

The Provinces' wider FY19 aggregate deficit is primarily due to BC's and Quebec's more modest surpluses and Ontario's CAD 6.7 bn deficit, though upcoming Central Canada elections could alter the forecast (chart 6). Deficit reduction by the three oil-producing Provinces continues, with a forecast CAD 3 bn (-25%) improvement since FY17. New Budget priorities this year include: raising child care availability and affordability; expanding lower-price rental housing supply; reinforcing immigrant attraction and retention efforts; and broadening innovation, in addition to each region's participation in Ottawa's selected superclusters on oceans, AI, advanced manufacturing, protein industries and digital technology. Challenges include the rising amortization and interest charges resulting from several consecutive years of stepped-up infrastructure investment and employee remuneration demands after lengthy restraint.

Chart 6

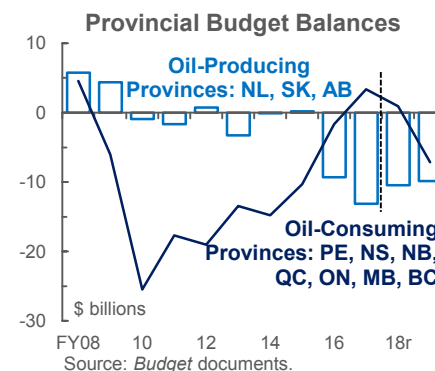


Table 1

The Provinces	(annual % change except where noted)										
	CA	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC
<b>Real GDP</b>											
2000–16	2.1	2.5	1.7	1.3	1.2	1.7	2.0	2.3	2.0	2.7	2.8
2016	1.4	1.9	2.3	0.8	1.2	1.4	2.6	2.2	-0.5	-3.7	3.5
2017e	3.0	-1.5	2.2	1.6	1.4	2.8	2.9	2.3	1.9	4.3	3.5
2018f	2.2	0.5	1.8	1.4	1.0	2.1	2.1	2.0	1.8	2.5	2.6
2019f	2.1	1.2	1.6	1.0	0.7	1.9	2.0	1.8	2.0	2.3	2.4
<b>Nominal GDP</b>											
2000–16	4.2	5.6	4.2	3.4	3.3	3.6	3.8	4.4	5.3	5.9	4.5
2016	2.0	2.6	4.0	2.8	3.6	2.7	4.3	2.3	-4.0	-4.9	4.8
2017e	5.3	3.1	4.0	3.2	3.0	4.2	5.1	4.0	4.8	7.6	5.6
2018f	4.5	3.6	3.6	3.1	2.7	4.0	4.5	3.9	3.8	5.3	4.8
2019f	4.5	4.5	3.6	2.9	2.4	4.1	4.4	3.6	4.3	5.3	4.8
<b>Employment</b>											
2000–16	1.3	0.8	1.0	0.6	0.4	1.3	1.3	0.9	1.1	2.3	1.4
2016	0.7	-1.5	-2.3	-0.4	-0.1	0.9	1.1	-0.4	-0.9	-1.6	3.2
2017	1.9	-3.7	3.1	0.6	0.4	2.2	1.8	1.7	-0.2	1.0	3.7
2018f	1.3	-0.8	1.5	0.5	0.3	1.5	1.5	0.6	0.4	1.5	1.6
2019f	1.0	-0.5	0.8	0.2	0.1	0.8	1.0	0.6	0.6	1.1	1.2
<b>Unemployment Rate (%)</b>											
2000–16	7.1	14.3	11.2	8.8	9.6	8.0	7.1	5.1	5.0	5.1	6.6
2016	7.0	13.4	10.7	8.3	9.5	7.1	6.5	6.1	6.3	8.1	6.0
2017	6.3	14.8	9.8	8.4	8.1	6.1	6.0	5.4	6.3	7.8	5.1
2018f	5.8	14.9	9.9	8.2	8.0	5.5	5.5	5.3	5.8	7.0	4.8
2019f	5.7	15.0	10.0	8.0	8.0	5.4	5.4	5.2	5.7	6.9	4.8
<b>Housing Starts (units, 000s)</b>											
2000–16	199	2.6	0.7	4.3	3.5	44	71	5.1	5.2	34	28
2016	198	1.4	0.6	3.8	1.8	39	75	5.3	4.8	25	42
2017	220	1.4	0.9	4.0	2.3	46	79	7.5	4.9	29	44
2018f	208	1.3	0.9	3.8	2.1	42	77	6.3	5.0	28	42
2019f	196	1.3	0.8	3.8	2.1	38	71	6.3	5.0	30	38
<b>Motor Vehicle Sales (units, 000s)</b>											
2000–16	1,657	29	6	48	38	413	635	47	45	216	180
2016	1,949	33	9	54	44	458	807	55	51	220	218
2017	2,041	33	9	59	42	453	847	62	56	245	235
2018f	2,000	32	8	58	40	445	821	61	56	248	231
2019f	1,950	30	8	56	39	434	791	60	56	250	226
<b>Budget Balances, Fiscal Year Ending March 31 (CAD mn)</b>											
2000–16*	-2,803	-93	-38	-30	-153	-768	-5,115	-142	307	1,064	319
2016	-987	-2,206	-13	-13	-261	2,191	-3,515	-839	-1,520	-6,442	811
2017	-17,770	-1,148	-1	150	-119	2,361	-991	-764	-1,218	-10,784	2,737
2018f**	-19,400	-812	1	134	-115	850	642	-726	-595	-9,066	151
2019f	-15,100	-683	1	29	-189	0	-6,704	-521	-365	-8,802	219

Sources: Scotiabank Economics, Statistics Canada, CMHC, Budget documents. \* MB:FY04–FY16; AB:FY05–FY16. \*\* Federal & Provinces' FY18 & FY19: Budget documents. Federal FY19: ex risk adjustment of \$3.0bn.



## United States

- The large federal spending increases authorized for 2018 and 2019 will end an eight-year run in which fiscal policy has added little net contribution to overall growth. Combined with recent tax cuts, the expenditure boost will provide substantial fiscal stimulus to an economy on a firm upswing late in an elongated expansion.
- Risks continue to come from within. The combination of weaker public and private saving is likely to produce even larger trade deficits, which could make it difficult for the White House to walk back its sabre-rattling on trade with China.

### FISCAL POLICY RUNS HOT AS TRADE SKIRMISHES HEAT UP

Recent policy decisions in Washington, DC have revived Reagan- and Bush-era concerns about the rise of the US's "twin deficits" driven by looser domestic fiscal policy and widening external current-account gaps. On the heels of December's tax reform and the roughly USD 300 bn increase in spending over the next two years under February's Bipartisan Budget Act, the US federal deficit is set to widen from 3.4% of GDP in 2017 to 4.7% of GDP in 2019. After eight years in which US fiscal policy has made either a marginal or negative contribution to growth, about a fifth of US growth will be contributed by government (chart 1). Even more stimulus may be coming through the White House's planned infrastructure initiative.

Nevertheless, our forecast for real growth has been shaved from our March [Forecast Tables](#)' projection of 2.7% in 2018 to 2.6% for the year, owing to what we expect will be a temporary pause by consumers to start 2018. Growth is revised upward in 2019 from 2.2% to 2.4% as the effects of the federal tax cuts and spending increases kicks in. Growth in 2018 and 2019 is dampened somewhat by the widening of the US trade deficit as the fiscal stimulus is expected to drive aggregate consumption growth ahead of aggregate savings.

In an economy that is already running hot, the combination of substantial fiscal stimulus with possible new tariffs on a sizable slice of imports from China and foreign steel and aluminum suppliers implies greater upward pressure on prices—and a stronger impetus for the US Fed to keep raising rates. On fundamentals alone, the *Scotiabank Global Macroeconomic Model* (SGMM), introduced last year and discussed in our [Long-Term Outlook](#), points toward a rate path in line with the FOMC's March dot plots. We have, however, left our US rate call unchanged at two more 25 bps increases in 2018 and two further hikes in 2019, which would take the fed funds rate to only 2.75% at end-2019 (table 1). This decision reflects two major developments: a recent tightening in financial conditions from capital markets (which does some of the Fed's work), and intensifying risks to US and global growth stemming from the escalating trade-policy spat between the US and China. The *Global Outlook's Monetary Policy & Capital Markets* justifies our view in greater depth.

Risks to the US outlook continue to come from within. The White House's capricious approach to trade policy combined with Washington's delivery of

### CONTACTS

**Brett House, VP & Deputy Chief Economist**  
416.863.7463  
Scotiabank Economics  
[brett.house@scotiabank.com](mailto:brett.house@scotiabank.com)

**Carlos Gomes**  
416.866.4735  
Scotiabank Economics  
[carlos.gomes@scotiabank.com](mailto:carlos.gomes@scotiabank.com)

**Juan Manuel Herrera**  
416.866.6781  
Scotiabank Economics  
[juanmanuel.herrera@scotiabank.com](mailto:juanmanuel.herrera@scotiabank.com)

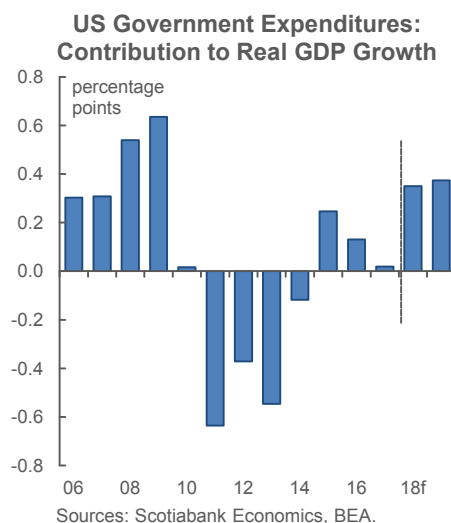
**René Lalonde**  
416.862.3174  
Scotiabank Economics  
[rene.lalonde@scotiabank.com](mailto:rene.lalonde@scotiabank.com)

**Nikita Perevalov**  
416.866.4205  
Scotiabank Economics  
[nikita.perevalov@scotiabank.com](mailto:nikita.perevalov@scotiabank.com)

**Adrienne Warren**  
416.866.4315  
Scotiabank Economics  
[adrienne.warren@scotiabank.com](mailto:adrienne.warren@scotiabank.com)

**Mary Webb**  
416.866.4202  
Scotiabank Economics  
[mary.webb@scotiabank.com](mailto:mary.webb@scotiabank.com)

Chart 1



intensive fiscal stimulus in a late-cycle economy that doesn't need it have the marks of the policy mistakes that typically curtail long-running expansions.

### ROBUST JOB MARKETS DRIVE STEADY HOUSEHOLD SPENDING GAINS

US consumers have taken a bit of a breather to start 2018, albeit after embarking on a mini spending spree to close out 2017. Solid fundamentals, including a robust job market and healthy household balance sheets, imply that the recent pause will prove short-lived. Consumer confidence is near a 17-year high, and major purchase plans remain elevated. Overall, real consumer spending growth is forecast to increase 2.6% in 2018, matching the advance of the prior two years, before moderating to 2.4% in 2019.

US job growth has cooled slightly in early 2018, but remains solid with job gains averaging just over 200,000 new positions each month. Hiring gains have been broadly-based across private-sector goods and services industries. The overall pace of hiring is likely to be more subdued this year given increasingly-tight labour market conditions. The unemployment rate is holding at a 17-year low of 4.1%—below the Federal Reserve's long-run range of 4.2–4.8%. Jobless claims are near a 50-year low.

Reports of labour shortages are becoming more widespread. The number of job openings reached 6.3 mn in January, or 4.1% of all positions, the highest share in records that date back to 2001. Rising vacancy numbers are now approaching the declining number of unemployed Americans looking for work (chart 2). Encouragingly, the strength in hiring is beginning to draw discouraged workers back into the labour force. The prime-age participation rate increased to 82.0% in Q1-2018, its highest level since 2010, and up from a cycle-low of 80.7% in 2015 (chart 3).

The trend in wage growth has firmed, and is expected to accelerate this year with the labour market near full employment. Household purchasing power is getting a further boost from both minimum wage increases in many states and the tax cuts that began to roll out in early-February 2018. The tax cuts disproportionately benefit higher-income households with a lower propensity to spend out of income, which is expected to dull their macroeconomic impact. Meanwhile, some lower- and middle-income households may face higher health care premiums as a result of the elimination of the

Chart 2

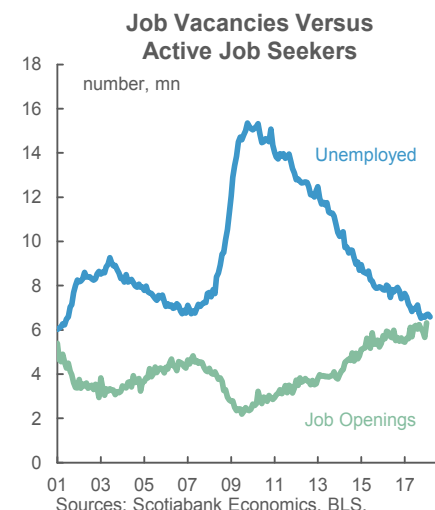


Chart 3

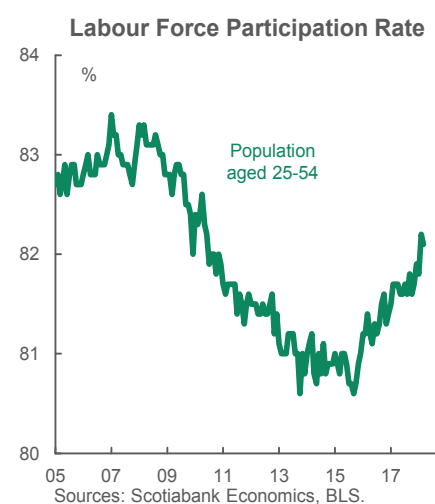


Table 1

Quarterly US Forecasts	2017		2018				2019			
	Q3	Q4	Q1e	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>Economic</b>										
Real GDP (q/q ann. % change)	3.2	2.9	2.2	2.6	2.5	2.5	2.4	2.3	2.1	2.1
Real GDP (y/y % change)	2.3	2.6	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.2
Consumer prices (y/y % change)	2.0	2.1	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4
CPI ex. food & energy (y/y % change)	1.7	1.7	1.9	2.2	2.3	2.3	2.3	2.3	2.3	2.3
<b>Financial</b>										
Euro (EURUSD)	1.18	1.20	1.23	1.25	1.28	1.30	1.30	1.33	1.35	1.35
U.K. Pound (GBPUSD)	1.34	1.35	1.40	1.40	1.42	1.47	1.48	1.48	1.50	1.50
Japanese Yen (USDJPY)	113	113	106	108	110	110	110	110	108	105
Fed Funds Rate (upper bound, %)	1.25	1.50	1.75	1.75	2.00	2.25	2.25	2.50	2.50	2.75
3-month T-bill (%)	1.04	1.38	1.70	1.85	2.05	2.30	2.30	2.55	2.60	2.80
2-year Treasury (%)	1.48	1.88	2.27	2.40	2.55	2.70	2.80	2.95	3.00	3.05
5-year Treasury (%)	1.93	2.21	2.56	2.65	2.75	2.90	2.95	3.00	3.10	3.15
10-year Treasury (%)	2.34	2.40	2.74	2.85	2.95	3.00	3.05	3.10	3.15	3.25
30-year Treasury (%)	2.86	2.74	2.97	3.00	3.15	3.20	3.25	3.30	3.35	3.40

Sources: Scotiabank Economics, BEA, BLS, Bloomberg.

federal individual mandate under the new tax legislation, which may crowd out some discretionary spending.

### ROBUST HOUSEHOLD FINANCES BOLSTER CONFIDENCE

Healthy household balance sheets are providing another fillip to confidence and spending. Notwithstanding increased debt loads, rising property and stock market valuations have pushed household net worth further into record territory to levels that average almost seven times disposable income as of Q4-2017. Assuming a wealth effect of 3 cents on the dollar, the USD 7.2 tn increase in household net worth last year may have added more than a percentage point to 2017's annual increase in consumer spending. The average homeowner gained almost USD 13,000 in home equity last year.

Debt-service costs as a share of disposable income are near record lows, but have likely bottomed with interest rates headed higher. Stronger income growth has helped to shore up the savings rate which had fallen to a decade low of 2.5% at the end of last year, but has subsequently moved back above 3%. Delinquency rates are low, though they are edging higher for some types of lending.

### GROWING HOMEOWNERSHIP CHALLENGES

US housing demand fundamentals, including robust job growth, low unemployment, and rising incomes, remain broadly supportive of the market. Millennials are ageing into their prime home-buying years, in turn driving up the homeownership rate for the first time since the 2007 housing crash. Lenders continue to gradually ease mortgage standards.

Home sales momentum, however, remains lacklustre. Potential buyers are facing a persistent shortage of listings, which is most acute for entry-level homes. The inventory of existing homes for sale has fallen to its lowest level in at least 35 years. The dearth of lower-priced listings is holding first-time buyers share of overall home sales at around 30%, compared with a typical level of about 40%. High-end home sales have outperformed, but may be slowed by new tax rules that have reduced interest rate and property tax deductions. The National Association of Realtors (NAR) estimates that about 5–6% of homeowners are affected by the new caps.

The combination of higher mortgage rates and home prices that are rising at about double the pace of wage growth is leading to gradual erosion in housing affordability. The 30-year fixed-rate mortgage rate has risen almost 50 bps since the beginning of the year to the highest level since early-2014. Higher mortgage rates also dampen 'move-up buyer' demand, which could be choking off the new supply of existing home listings.

US housing starts are forecast to climb to 1.26 mn units this year and 1.30 mn in 2019, up from 1.20 mn units in 2017. Despite the ongoing recovery, the overall level of single-family construction remains well below historical trends, constrained by labour shortages and rising land and construction costs. Multi-family starts rebounded strongly following the 2008–09 recession, but appear to have peaked for the current cycle amid slowing rental demand and rising completions (chart 4).

Chart 4

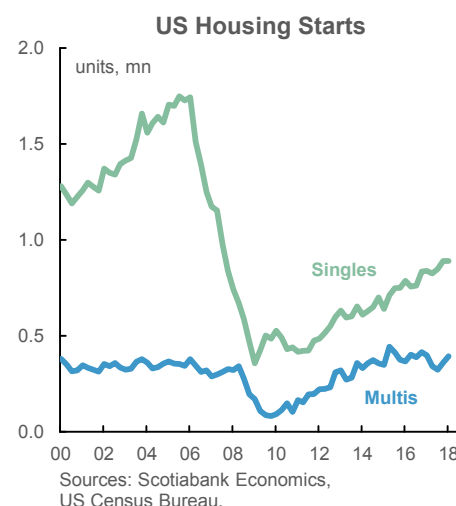


Table 2

United States	2000–16	2016	2017	2018f	2019f
(annual % change, unless noted)					
<b>Real GDP</b>	1.9	1.5	2.3	2.6	2.4
Consumer spending	2.4	2.7	2.8	2.6	2.4
Residential investment	-0.4	5.5	1.8	2.3	2.1
Business investment	2.3	-0.6	4.7	5.1	2.8
Government	1.0	0.8	0.1	2.1	2.2
Exports	3.6	-0.3	3.4	3.3	2.5
Imports	3.4	1.3	4.0	4.8	3.2
Nominal GDP	3.9	2.8	4.1	4.7	4.5
GDP Deflator	2.0	1.3	1.8	2.0	2.1
Consumer price index (CPI)	2.2	1.3	2.1	2.4	2.4
CPI ex. food & energy	2.0	2.2	1.8	2.2	2.3
Pre-tax corporate profits	5.5	-2.1	4.4	2.7	0.5
Employment	0.7	1.8	1.6	1.4	1.1
Unemployment rate (%)	6.2	4.9	4.4	4.0	3.9
Current account balance (USD bn)	-507	-452	-466	-554	-612
Merchandise trade balance (USD bn)	-673	-753	-811	-908	-982
Federal budget balance (USD bn)	-150	-585	-665	-812	-990
percent of GDP	-1.0	-3.1	-3.4	-4.0	-4.7
Housing starts (mn)	1.27	1.17	1.20	1.26	1.30
Motor vehicle sales (mn)	15.5	17.5	17.1	17.4	17.3
Industrial production	0.6	-2.0	1.6	2.8	1.1
WTI oil (USD/bbl)	63	43	51	65	68
Nymex natural gas (USD/mmbtu)	4.94	2.55	3.02	2.80	2.85

Sources: Scotiabank Economics, BEA, BLS, Bloomberg.

## MIXED OUTLOOK FOR NON-RESIDENTIAL CONSTRUCTION

Private non-residential construction spending is advancing at a moderate pace. Strong demand for warehousing and distribution facilities is driving commercial expansion, and investment in private transportation projects, including airport improvements, is up sharply. Office-market activity is expected to remain more subdued, given a high level of completions, and expectations of slowing employment growth with the US labour market near full capacity. Tightening manufacturing capacity rates should set the stage for a modest revival in industrial construction in 2018–19.

## BROADLY-BASED SERVICE SECTOR EXPANSION

Service-sector activity—which accounts for roughly 70% of US output and employment—is rising at what is nearly its fastest pace in 10 years (chart 5). The pick-up has been broadly based. Strengthening business confidence and investment is lifting demand for professional, scientific, and technical services; the ongoing expansion of US retailers' e-commerce capabilities is fueling the warehousing and transportation sectors; and an ageing population is boosting demand for health care services. Of the 18 industries in the ISM non-manufacturing business survey, only two are contracting: arts, entertainment and recreation, and accommodation and food services.

The softness in the latter two industries may, at least in part, reflect continuing weak international tourism. Hampered by a strong dollar and new travel restrictions, international tourist visits to the United States through the first three quarters of 2017 fell 4% from a year earlier, bucking the broad strengthening trend in global tourism. Spain overtook the United States last year as the second most-visited country in the world.

## INDUSTRIAL ADVANCES

US and global industrial activity continue to sustain momentum and a revival in manufacturing jobs has taken hold across the United States. Industrial production is advancing more than 4% y/y in early 2018, the best performance since 2011 and is lifting manufacturing employment at the fastest year-on-year pace in twenty years. In fact, US manufacturing payroll growth is currently outpacing overall US job growth, a development last seen when the global economy was just beginning to rebound from the global economic downturn of a decade ago (chart 6).

New orders for manufacturing goods continue to advance at an even faster pace than production, both in the US and across the globe, pointing to a further acceleration in both industrial output and manufacturing job growth in the coming months. For example, new orders for US manufactured goods have jumped 6.6% y/y in early-2018, and the advance is even stronger across Europe, with order growth in excess of 9% y/y.

The economically-sensitive resource sector also remains in the forefront of both employment and order growth as US economic growth accelerates. New orders for metals and fabricated products have consistently climbed more than 10% y/y since May 2017, and employment growth in the sector is advancing at double the pace of overall jobs growth. This represents the widest outperformance by the resource sector since the opening months of 2012, and highlights that broad economic activity continues to build momentum, both in the United States and across much of the globe.

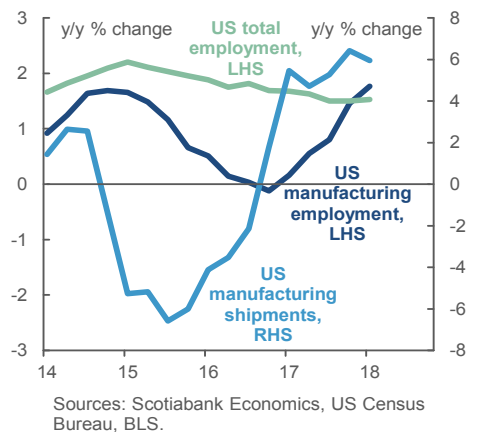
High-tech demand also remains robust, highlighted by a 36% y/y surge in semiconductor orders in the United States in the year to end-February 2018, and gains in excess of 22% y/y around the world. This represents the fastest demand growth since early-2011, and is being supported by accelerating business investment. Spending on high-tech products recently picked up in the United States to the fastest rate of growth of the past decade, which is lifting job growth in the computer and peripheral equipment sector at the fastest pace on record. The United States accounts for about 20% of global high-tech spending.

Chart 5



Chart 6

**Manufacturing Employment Outperforms**



## BUSINESS INVESTMENT ACCELERATES

US business investment is 'firing on all cylinders', with expenditures on machinery and equipment advancing 9% y/y in Q4-2017, even before the recent US corporate tax overhaul which provides more positive treatment of capital expenditures. Core capital goods order growth, a proxy for business investment, has gained additional momentum in the opening months of 2018, supported by more than a 2.5 percentage point increase in operating rates over the past year. The capital intensive high-tech sector has the highest capacity utilization rate of any manufacturing sector, with computer and peripheral equipment manufacturers operating at 97% of capacity, even after the recent surge in output and hiring over the past year. However, overall manufacturing operating rates have jumped 2.5 percentage points year-over-year through February even when one excludes technology, which provides a positive backdrop for business investment.

## MAJOR FISCAL STIMULUS DRIVES RECALIBRATION OF THE US OUTLOOK

The Bipartisan Budget Act of 2018 authorizes federal spending for fiscal 2018 and fiscal 2019 that is atypical outside of a recession or a global conflict. It halts the eight-year trend of modest or negative contributions from government spending to real GDP. Federal spending is set to overwhelm the minimal real spending growth anticipated from state and local jurisdictions, pushing up the aggregate government contribution to real GDP growth from a weak 0.1 to 0.35 percentage points in calendar 2018 and toward 0.4 percentage points in 2019. A long-term infrastructure plan is expected to move towards the top of the Congressional agenda after the November mid-term elections and add even more pro-cyclical fiscal stimulus to the US economy.

Combining this additional spending with US personal and corporate tax reform implies an average half percentage point fiscal boost to US real GDP growth this year and next. The projected growth response to this sizeable aggregate stimulus would be larger if the US economic recovery were not already well advanced. With the US output gap closed, the stimulus is expected to support the further rate hikes by the Fed anticipated in table 1 and explained in the [Monetary Policy & Capital Markets](#) section.

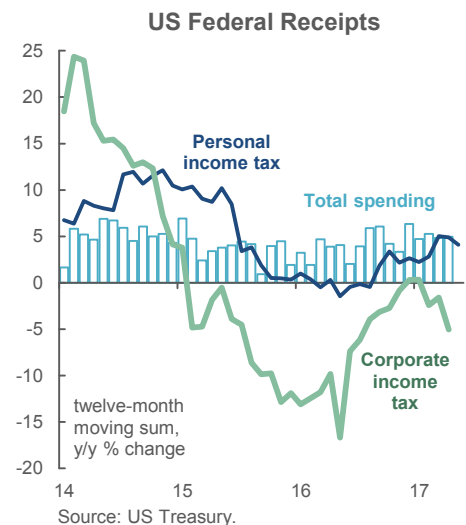
By fiscal 2019, the combined stimulus is expected to ratchet the US federal deficit toward USD 1.0 tn (around 4¼% of GDP), roughly double the fiscal 2015 deficit of USD 438 bn (2.4% of GDP). The subdued trend in federal income tax receipts witnessed during fiscal 2016–17, possibly reflecting income management in anticipation of tax reform benefits, appears to be receding (chart 7), assisted by the pick-up in economic growth. During the second half of fiscal 2018, some revenue impact is anticipated from the revised personal income tax withholding schedules in place since mid-February and the lower tax burden on pass-through income and domestic corporate earnings. As individual state governments sort through the impact of federal tax reform on their definitions of taxable income and allowed deductions and exemptions, proposed fiscal 2019 state budgets to date suggest modest real spending increases, partly as insurance while federal programs continue to evolve.

## TRADE DEFICIT TO CONTINUE EXPANDING FROM SPENDING AND TAX STIMULUS

Last year, US goods exports grew at their fastest pace since 2011 though the country's trade deficit continues to widen as import growth surpassed that of exports for the fourth consecutive year. The US's goods trade deficit will likely reach a record high within the next few quarters as US fiscal stimulus stokes demand for foreign goods. However, the imposition of tariffs by the US administration on a variety of products may restrict imports in specific sectors. US exports may also be dented if the countries impacted by the tariffs retaliate by imposing their own on US goods. China has announced trade measures in response to both (i) US tariffs on steel and aluminum, and (ii) US tariffs on up to USD 50 bn exports to the US from China. A White House threat to hit another USD 100 bn of imports from China with tariffs drew a promise of reciprocal action from Beijing, but more recent comments have indicated a possibility of compromise.

Capacity pressures are building in the US industrial sector with manufacturing shipments reaching a record-high in January in dollar terms. US firms are set to ramp up spending to accommodate demand from continuing household sector strength and renewed economic optimism, which will likely require an increase in imports of raw and intermediate inputs as well as industrial machinery—in direct conflict with White House aims to shrink the US trade deficit.

Chart 7





## GROWING SUPPLY OF GOVERNMENT DEBT MAY REQUIRE INCREASED FOREIGN PARTICIPATION

Net official purchases of US Treasury bonds (USTs) by official institutions are trending back toward positive levels after a large unwinding that began in late-2014. Foreign buyers, both official and private, were the biggest purchasers of USTs in 2017. Increased issuance resulting from wider deficits and a move to replenish cash balances, combined with the run-off of the Fed's balance sheet, should result in significant new supply of US government marketable debt on markets (exclusive of Fed holdings) in the coming years, particularly beyond 2020.

Further increases in foreign participation in the UST market, which currently sits at around 52% of total privately-held USTs (down from close to 60% in 2014) will likely be required—just as trade tensions have put China's future activity in the Treasuries market into question. Heightened geopolitical tensions could, however, drive investors in search of a safe-haven into USTs.

Foreign purchases of domestic corporate debt have steadied since late-2014, while net acquisitions of US equities came back from the red in mid-2016 as stock market indices in the US outperformed their global peers in 2017. Protectionist rhetoric may turn international investors off US equities and direct investments, particularly in those sectors with large foreign exposure to integrated supply chains that are vulnerable to trade-policy retaliation by other countries.

The expected widening of the country's current account deficit will also require additional funding from abroad. Even as official US policy stokes trade-policy conflicts with other countries, domestic-policy choices are set to make the US public and private sectors more dependent on foreign capital. Credit markets may, however, see some crowding-out as a larger pool of available USTs pushes up market rates.

## RISKS FROM THE INSIDE

As the US economy looks in May to take on the mantle of the country's second-longest expansion on record, the main threats to the recovery's continuation are coming principally from domestic policy choices. Just as the world is getting used to discussing 'synchronized global growth', one of the core sources of this synchronization is heading off-rhythm.

The move by Washington to boost the US fiscal impulse through tax reform, increased budget spending, and additional infrastructure investments risks inducing both tighter financial conditions from markets and moves by the Fed to remove monetary accommodation more quickly. The combination of looser fiscal policy and tighter monetary policy in an already-heated economy materially raises the risk of a policy mistake that could see the US's long-running 'Goldilocks' combination of moderate growth with moderate inflation brought to an unnecessary end.

The White House's approach to reforming US commercial relations with its major trading partners poses potentially greater danger for both the US and the global economy. The burgeoning trade conflict with China could easily widen to encompass other economic channels. If the US follows through with its threat to impose tariffs on up to USD 150 bn or so of imports from China, reciprocal action by Beijing would then cover all Chinese imports from the US. In a battle of 'tit for tat', China would not have any more 'tats' left on which to levy additional tariffs, whereas the US would have imposed new tariffs on only about a third of its imports from China.

Beijing may then move to intensify non-tariff barriers and skew procurement processes to favour non-US firms. Ultimately, Beijing's range of options is limited on both fronts by China's demand for US industrial, technological, and agricultural products, and the need to maintain a competitive environment amongst China's suppliers. Beijing could also reduce its purchases of US Treasuries, which could tighten financial conditions further in the US by pushing up interest rates, but China's scope for action is limited here too. There are only narrow opportunities to substitute USD-denominated paper from other countries for USTs; therefore, a move to limit UST purchases or reduce holdings would tend to induce an appreciation in China's currency and make China's exports less competitive. China could also *increase* UST purchases in order to devalue the RMB versus the USD, but this runs the risk of prompting destabilizing capital flight.

White House freedom to act against China is also likely to be curtailed by business sectors and political constituencies, such as agriculture, that would see markets for their products narrowed and their costs of inputs pushed upward by reciprocal tariffs with China. Reflecting these interests, US Senators and Representatives could act to stymie the presumed automatic renewal on 1 July of the President's existing 2015 Trade Promotion Authority (TPA). Loss of the TPA or heavier restrictions on its use could complicate ratification of revisions to NAFTA if they are not agreed before end-June.

While both Washington and Beijing face constraints on their pursuit of a trade war, the danger is that these constraints may not bind before serious damage is done to the global economy and the international trading system.

## US & Canadian Monetary Policy & Capital Markets

- The outlook for Federal Reserve policy over 2018–19 is unchanged. Two further hikes this year and two more next year are anticipated.
- Further Bank of Canada policy rate changes have been postponed compared to the prior forecast round. We anticipate two more hikes over 2018H2 and then three next year.
- Our view remains in favour of further curve flattening in both countries (charts 1–3, table 1) and a continuation of a significant Canadian rate advantage relative to Treasuries.

### BANK OF CANADA — UNCERTAIN PATH TOWARD AN UNCERTAIN ENDING

Scotiabank's house forecast calls for two more rate hikes over 2018H2 on the path toward a 2.5% rate that is forecast to be hit by the end of 2019.

There are three broad categories of uncertainty that need to be considered:

- One involves estimating the defining end-point or neutral rate for long-run policy tightening which will also inform the degree to which the policy rate may need to cumulatively adjust.
- Second involves an evaluation of the current and future steady state fundamentals in order to inform how quickly this end point could be reached. I'll briefly comment on these considerations but also refer the reader to the Canada section of this *Global Outlook* that discusses real side developments.
- Third is an assessment of trade policy and geopolitical risks that could continue to serve as overrides on the broad steady state fundamentals and the financial stability framework in ways that inform the policy rate path.

#### 1. The Neutral Rate As Guidepost

First is the issue of where the end-point for the policy rate lies that balances longer run inflationary risks around the 2% target as the mid-point of the 1–3% policy band. The inflation-adjusted neutral rate theoretically exists at the intersection of when actual GDP equals the potential GDP level signalling no slack while operating at the BoC's 2% inflation target. One could argue that with gaps shut, we are already definitionally at said point of equilibrium such that monetary policy is behind the inflation curve. Countering this could be uncertainty toward the sustainability of operating at the point of reduced or no slack in the face of sundry risks to the demand and supply sides of the slack equation. It may also be that considerations beyond slack are driving inflation higher and there are significant question marks hanging over the durability of present inflation readings. I'll come back to the latter question marks but for now the issue is the estimation of the neutral rate itself.

The neutral rate likely sits toward the bottom half of the BoC's published range, but we await updated guidance from the BoC as this publication goes to print. [This](#)

#### CONTACTS

Derek Holt, VP & Head of Capital Markets Economics  
416.863.7707  
Scotiabank Economics  
[derek.holt@scotiabank.com](mailto:derek.holt@scotiabank.com)

Chart 1

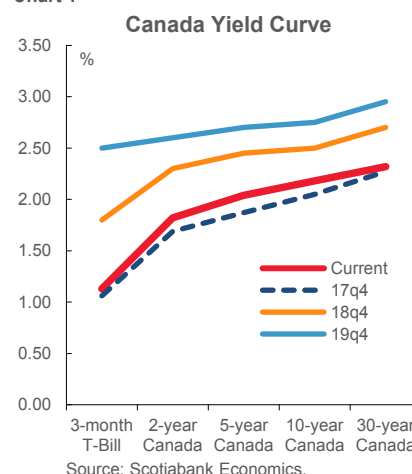


Chart 2

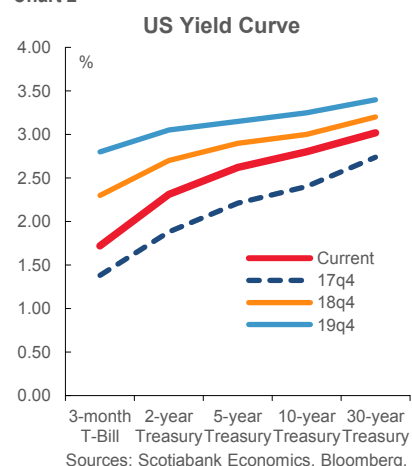
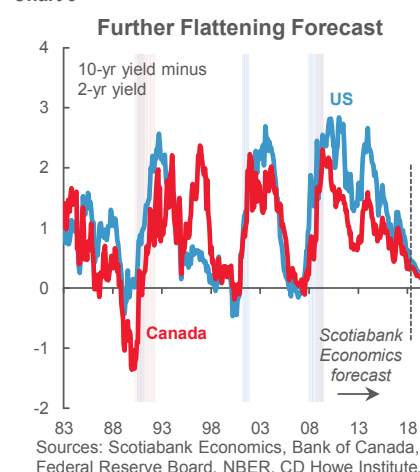


Chart 3



piece last Fall reinforced last April's changed estimate when the BoC lowered the inflation-adjusted neutral policy rate to a range from 0.5–1.5% which was 25bps lower than in April 2016 and 50bps lower compared to its prior estimate of 1–2% in 2014 ([here](#)). By corollary, a 2% inflation target translates into a nominal neutral policy rate of between 2.5–3.5% with a mid-point of about 3%. A lower neutral rate could be motivated by demand-side uncertainties such as risks to global trade policy that sap well-being and productivity out of the longer-run growth picture.

The BoC's present 3% mid-point would rest in line with or could be slightly higher than the Federal Open Market Committee's (FOMC) revised estimate of 2.9%. Can Canada have a neutral policy rate at the Fed's level, let alone above it especially if we start to consider the upper half of the range? That seems implausible in that by corollary it partly implies that Canada would be likely to have long-run growth prospects equal to or firmer than the US economy. The US has a deeper capital stock with arguably fewer internal barriers to the movement of capital and labour and may over time continue to be more successful at incorporating newer technologies that raise the US long-run non-inflationary growth rate above Canada's and with that the US neutral policy rate relative to Canada's.

The mystery will soon be solved. BoC Deputy Governor Tim Lane recently advised "We will be providing a fuller assessment of potential growth, as well as of the neutral interest rate, in our April *Monetary Policy Report*." Dragging out rate hikes and hence maintaining existing stimulus for longer is a risk informed by hesitation to get to the neutral rate too quickly given the limited policy response implied in a future crisis around such a low estimate. Accelerating rate hikes to get to the neutral rate carries uncertain influences upon financial stability risks by amplifying them in the nearer term but perhaps providing more market discipline to future financial decisions. The matter of where the neutral rate rests is, therefore, critically important to inform pricing of risks to the front-end and belly of the Canada curve. At a present policy rate of 1.25% and a possible neutral rate of 2.5–2.75%, monetary policy conditions are loose, but not outrageously so. This provides the BoC with some flexibility to explore the nearer-term policy risks. Nevertheless, it's reasonable to have reservations toward a tendency for central banks to revisit policy goal posts yearly as has been the recent pattern. The ability to forecast long-run potential growth—and hence the neutral rate—is very limited to begin with, so set the neutral rate once and revisit rarely.

## 2. Steady State Fundamentals

Second is an assessment of the fundamentals both present and forecast. Consider the following points:

Output gaps serve as one indication of slack and they simultaneously signal little to no runway left for growth without adding to inflationary pressure while counselling caution on immediate next steps (chart 4). The average of the BoC's two output gaps is roughly closed, but the measures have not materially budged over the past three quarters during which growth has been averaging at a one-handed quarterly pace. In my opinion, the BoC has overly downplayed the fact there has been no material pressure on its output gap framework as it has alternatively chosen to emphasize full year growth rates that ignore momentum arguments. Nevertheless, we still forecast a gradual further tightening of capacity constraints. The implication is that the BoC may have reason to pause to reassess its evaluation of pressures on slack, but we think modest pressures will return.

Chart 4

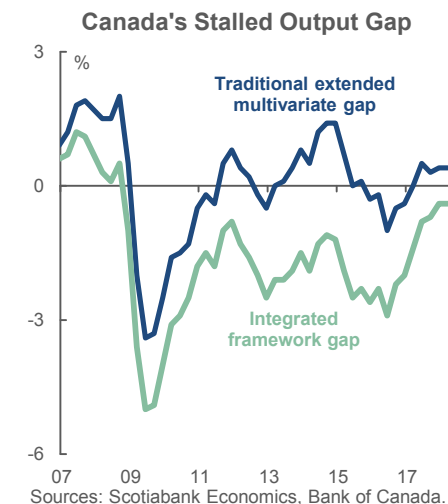


Chart 5

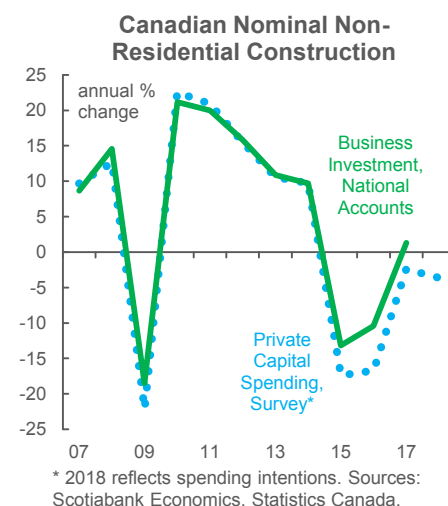
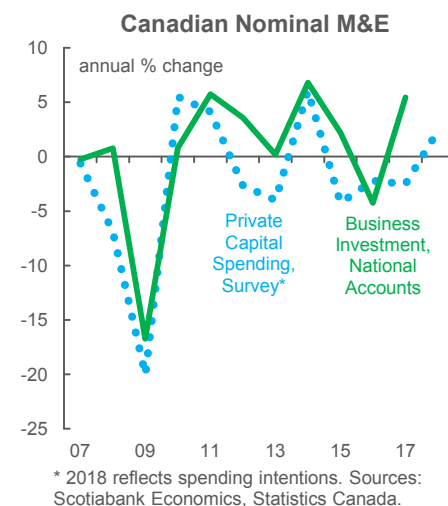


Chart 6



The investment picture is uncertain but an expanding capital stock would mitigate upside inflation risks through expanding the supply side via estimates of potential GDP all else equal, while the opposite also holds true. To date, there has been a decent rebound in business investment over the past year, but recent investment intentions were soft, somewhat partly as energy investment stabilizes and NAFTA and other risks to global trade concern boardrooms (charts 5, 6). Nevertheless, the way the BoC views this was recently summarized by Lane: "...while it's also too early to tell how much additional potential output in the economy is being created, last week's strong investment figures are encouraging." How this influences BoC thinking was well put by Governor Poloz: "The bank has concluded there remains a degree of untapped supply potential in the economy. This is important, for it means that Canada may be able to have more economic growth, a larger economy, and therefore more income per person, without generating higher inflation."

Perhaps not surprisingly, the closure of slack has put some upward pressure upon the average of the three central tendency inflation gauges (chart 7). On both headline CPI and the central tendency measures, the BoC is already at its inflation target. There are solid reasons—both durable and transitory—why the central tendency measures may have accelerated toward target. The Phillips curve model of Scotiabank's René Lalonde has performed well at calling the gradual rise in core inflation over the past year (charts 8). The economy is expected to go into mild excess demand conditions (chart 9). Core inflation has risen a little more quickly than anticipated of late and probably for transitory reasons (see [here](#) for a review). The BoC targets an inflation range of 1–3%, however, and it is unclear whether the economy will materially slip into excess aggregate demand that threatens the upper bound of the inflation target range. Our forecast is that it will not but our forecast embeds further modest policy tightening this year with lagging effects on inflation.

Strong labour markets have coincided with improved wage growth. The BoC's preferred measure is the wage-common metric ([here](#)). It is not made public on a regular basis but two of its components have risen significantly of late including the more heavily weighted measure from the payrolls survey that is wickedly volatile (chart 10). Some of this acceleration is likely transitory and reflects the impact of minimum wage hikes across several provinces and with more to come over the

Chart 7

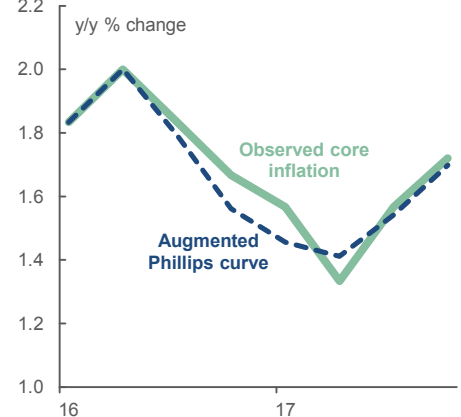
### Average 'Core' Inflation



Sources: Scotiabank Economics, Statistics Canada.

Chart 8

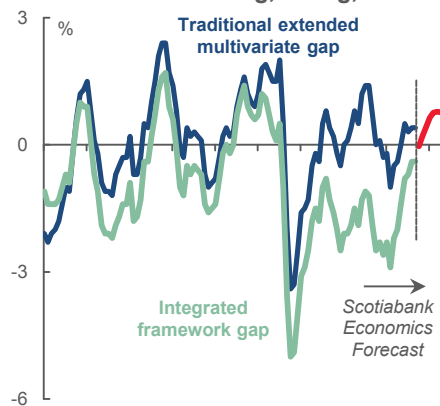
### Core Inflation Dynamic Simulation



Sources: Scotiabank Economics, Statistics Canada.

Chart 9

### Canadian Slack Going, Going, Gone!



Sources: Scotiabank Economics, Bank of Canada.

Chart 10

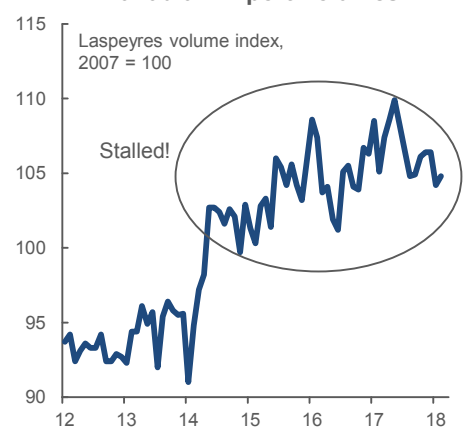
### Canadian Wage Growth



\* Weighted hourly earnings of salaried and hourly employees. Sources: Scotiabank Economics, Statistics Canada.

Chart 11

### Canadian Export Volumes



Sources: Scotiabank Economics, Statistics Canada.

remainder of this year. Other possibly transitory upsides include shaking off the prior wage disinflation of the commodity shock. Regardless, labour market slack continues to tighten as a more durable rationale for possible future wage inflation.

It's not just growth that concerns the BoC. It's the composition of growth amid the long hoped for rotation away from excess reliance upon inflated housing markets and consumer spending toward more constructive sources of longer-run growth and living standards, namely exports and investment. On that count, there has been very little durable progress (chart 11).

Difficult-to-assess credit conditions are a combination of forward-looking risks and backward-looking assessments of the drivers. Some of the measures—like Bloomberg's Canadian high yield index—remain very elevated. Other measures like household credit growth are of little use, in my opinion. It's natural to expect credit growth to come off relative to the strong market last Spring (chart 12). In month-ago terms, we have little to go by as the mortgage figures speak to the dead zone called Canada's Winter. In any event, growth in booked mortgage balances outstanding reflects decisions made after pre-approvals and rate commitments were made in late 2017. There is no public information on how the Spring season is shaping up as of yet but pre-approvals are the key. Booked mortgage data will only reflect what happened in the Spring season by the time Summer rolls around. Among other matters, it's premature to judge whether non-bank lenders can fill the void.

### 3. Forecast Overrides

The third issue concerns NAFTA and other geopolitical risks. Insofar as it informs BoC policy risks, there is little to go by at the time of publishing that would suggest the BoC should move toward materially reducing negative forecast judgement from its outlook because of NAFTA or global trade policy uncertainties. This could change abruptly in either direction. The willingness to negotiate is there on all sides which tilts the balance of probabilities toward the more constructive side, but material differences persist and all three legislative bodies in the US, Canada and Mexico would have to pass a NAFTA 2.0 agreement. Before the BoC has conviction that the trade policy risks are shaping up more favourably, it's premature to expect the BoC to alter forecast judgement at this juncture. This issue will be revisited in subsequent forecast rounds and as new information arises, but for now, it's likely that the BoC continues to shave NAFTA-related forecast growth prospects for trade policy uncertainty in the April forecast round. Whether that means they should reduce negative judgement applied to growth forecasts because of global trade policy developments will remain uncertain.

## FEDERAL RESERVE — MARKETS ADD TO POLICY TIGHTENING

Scotiabank's house forecast calls for two more hikes from the Federal Reserve this year and two more next year on the path toward a nominal policy rate of 2.75% by the end of 2019. Somewhat tightened financial conditions, trade policy uncertainties, late cycle considerations, fiscal policy effects on bond markets, intensifying Fed balance sheet reductions and the possibility that improved inflation readings are partly driven by transitory considerations are among the issues that lead to notable uncertainty and why at present we are undercutting the consensus call for a 3% target rate by the end of next year. At this point, we are cognizant of the economic momentum and the application of fiscal stimulus to the outlook, but hesitant to add to forecast tightening at this juncture given too many unknowns by way of financial market vulnerabilities and trade policy uncertainties. These risks will be informed into our next forecast round. Our four more hikes through the end of 2019 is one short of the Bloomberg consensus and notably lighter than the highest forecasts from shops that anticipate seven hikes over this time period at about a once-per-quarter pace.

I'll explore three broad sources of uncertainty as they inform the forecasts.

### 1. Policy Guideposts

First is mild uncertainty with respect to the Fed's overall policy framework and ultimate goal posts and how they may change. The appointment of John Williams to head the NY Federal Reserve is dovish at the margin and in ways that may signal a desire for

Chart 12





more diverse perspectives on monetary policy around Chair Powell's table. The regional board made the decision no doubt informed by many sources but approved by the Fed's Board of Governors.

Williams supports near-term Fed policy goals but has tended to be more publicly open-minded toward a lower nominal neutral policy rate of 2.5% than the FOMC consensus of 2.9%, a higher inflation target that implies a yet lower real neutral rate and consideration of alternative policy frameworks such as price level targeting or NGDP targeting. Congress sets the mandate and it took years to move toward a dual mandate over four decades ago so Williams will not have immediate effect upon the framework, but the Fed sets the parameters within the framework including its inflation target and neutral rate. Williams may very well speak from a higher pulpit on such matters. If he still believes in a 2.5% neutral rate then his is the second lowest dot on the Fed's longer-run dot plot within a range of voices from 2.25–3.5%. The NY Fed's permanent voting status at the table therefore just became at least as dovish as under its successful predecessor, Bill Dudley, and quite possibly more so.

## 2. Financial Stability

Broad financial conditions remain stimulative, but significantly less so amid uncertain risks. This counsels caution at the Fed which, in my opinion, shaves the policy risks to our base case call for two more hikes this year against more hikes than forecast. Indeed, judged by some measures such as the LIBOR-OIS spread, the US may have already had the equivalent of an extra Fed hike this year. Work such as [this](#) piece from the NY Fed effectively demonstrates the policy focus upon risk management surrounding growth forecasts and the role that uncertainty toward financial conditions can play.

It's important to emphasize the most informative measures of financial conditions. Overly broad measures like the Chicago Fed's national financial conditions index mix over one hundred variables together of varying frequencies and freshness (chart 13). Lending officers' opinions, for instance, are factored in quarterly and hence in seriously lagging ways. Bloomberg's measure (also chart 13) includes equities that are skewed toward the top earners. At the margin, I'd have preference for measures derived from debt and FX markets that speak more closely to mainstream economic conditions through repricing debt carrying costs.

Widened LIBOR-OIS spreads are influenced by uncertain drivers but from the standpoint of LIBOR-linked debt markets have nevertheless appeared to impose the equivalent of two extra rate hikes beyond what the Federal Reserve has done with a 25bps hike so far this year. Clearly not all debt is LIBOR-linked, however, and we figure that about 30% of US household and business loans and debt securities are linked to LIBOR. The roughly 50bps widening of LIBOR-OIS spreads since November therefore equates to under one additional Fed rate hike delivered through this channel on top of the March Fed hike. For the 'four hike' camp, there should be some comfort that money market developments add to the Fed's three hikes in 2018 including the March hike. Obviously the effects are more significant to firms with debt linked to LIBOR but it's not a large impact, although worth monitoring going forward given marked uncertainty over the drivers.

On the drivers, a rise in T-bill issuance is only a part of the story through depressing their prices and raising required rates of return because a) the historical connection

Chart 13

### These Measures Might Understate Financial Stress



Chart 14

### Libor-OIS Spread Isn't Just About T-bill Issuance

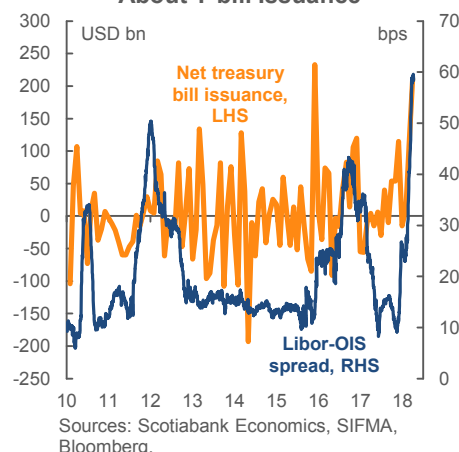


Chart 15

### Are FX Markets Warning About the US Economy?



between the spread and issuance has been imperfect, b) the spread is at a ten year high but T-bill issuance certainly is not (chart 14), and c) T-bill issuance is already plummeting and everyone expects this to continue so why isn't the spread reacting?

Other drivers of the LIBOR-OIS spread may keep it elevated for some time. The Tax Cuts and Jobs Act is likely a contributor. Previously, earnings were taxed at a single statutory rate of 35% but foreign tax liabilities could be indefinitely deferred. Now companies must pay taxes on profits wherever sourced but the 21% rate applied to domestic earnings drops to about half that and possibly less for liquid assets returned from abroad. This is a liquidity shift to pay the tax bill that essentially involves selling liquid holdings and by corollary putting upward pressure on money market rates. If repatriation is the influencing factor, then a sizeable portion of the just under \$3 trillion in earnings held abroad could, under the TCJA provisions, be subject to conversion for an extended period. The widened LIBOR-OIS spread may also reflect other influences, including as a signal about counter-party risks in a world of escalating trade tensions amid financial asset vulnerabilities and late cycle considerations. If this latter set of influences is the driver, then one would probably wish to be conservative and not ignore prospects for further spread widening over our forecast horizon and use this assumption to inform Fed expectations.

In addition to higher Treasury yields this year and pass-through to mortgage rates, widened foreign exchange hedging costs are an added consideration. The EURUSD hedging costs have not been this high since before the global financial crisis while hedging costs out of yen into dollars are also wide. A portion of this is the currency basis which serves as the plug to covered interest parity. While FX markets may at times be overly reactive to headline risk, they are still the most efficient broad marketplace and may be signalling future risks to currency market developments that may have a tie back to fundamentals. Lag out EURUSD hedging costs and note its ability to call turns in US GDP growth (chart 15).

### 3. Fundamentals

The US growth, inflation and wage dynamics are constructive by way of lending a hand to a picture of further monetary policy tightening. More on the US outlook is available in the US section of the *Global Outlook* so I'll focus upon why concern about faster tightening than projected must be tempered by possibly transitory influences upon the wage and prices complex.

The US output gap is signalling the closure of spare capacity (chart 16). Output gaps are a crude guide to forward-looking inflation risks but our baseline view assumes actual GDP growth with a fiscal policy assist will outpace the economy's noninflationary speed limit and thus incrementally push the US economy into excess aggregate demand conditions over 2018–19. Hence our baseline forecast for 100bps of hikes between now and the end of 2019. Over time, however, the fiscal impulse will drop out and expose softer underlying growth that may well fall back to potential growth if not undershoot. Fed policy today has to be mindful of such risks in light of long and variable monetary policy lags.

While spare capacity considerations lean toward higher inflation over time, there are also transitory developments that could prove offsetting over time. A key one is the USD's influence. Prior Fed research ([here](#)) has indicated that a 10% trade-weighted appreciation/depreciation in the broad dollar drives core PCE inflation lower/higher by

Chart 16

#### The US Gap Is Gone

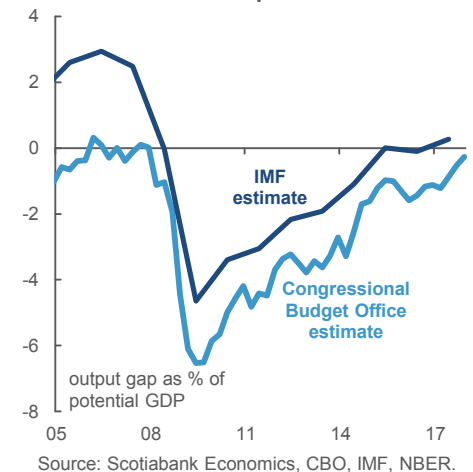


Chart 17

#### Muted US Wage Growth

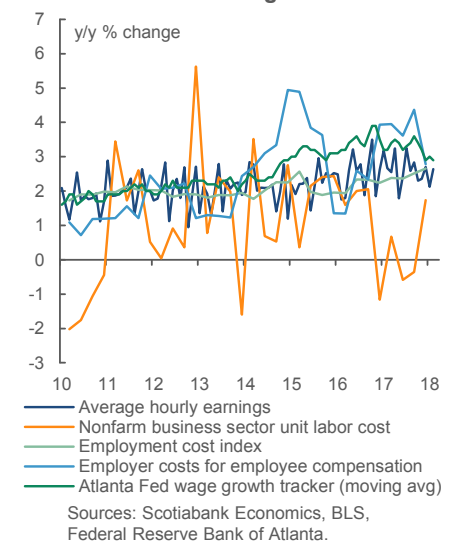
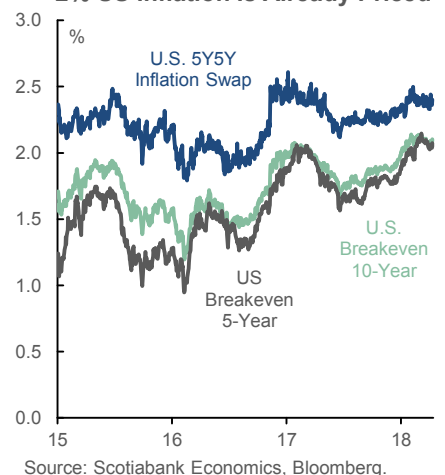


Chart 18

#### 2% US Inflation Is Already Priced



0.5% within two quarters that dissipates to 0.3% within a year. The USD's rise until early last year likely played a contributing role in terms of the softening inflation picture while the mild rise in core PCE of late may be reflecting a softer dollar.

Wage growth developments are uncertain but a variety of measures needs to be considered. Chart 17 shows multiple wage growth measures and I don't see any obvious or durable break-outs in recent trends. Average hourly earnings can be swung by skewed changes in income distribution in any particular period. At 2.6% y/y, this measure has been trendless after a brief acceleration in 2015. Another measure is the Atlanta Fed's wage metric that tracks median wages from constructed sources and it is higher than the average wage growth measure but has decelerated somewhat over the past 12–18 months. Another is the BLS's employment cost index that adjusts for compositional shifts across wage earners but is available only quarterly; it has mildly accelerated. Pure employer costs for employee compensation that are drawn from the same BLS report do not make adjustments for compositional shifts and were accelerating more rapidly until growth eased over 2017H2. Unit labour costs that essentially adjust compensation for productivity growth have recently accelerated but at just 1.7% y/y they remain soft, were falling for about four quarters previously and there have been many short-lived false starts in this measure over the post-Global Financial Crisis (GFC) period. In short, mixed measures over relatively short periods in the context of many false starts require much more data to consistently show accelerating wage pressures. No one is perhaps more aware of this than the Federal Reserve given that FOMC officials have falsely flagged progress on wages in the post-GFC period only to witness no follow-through.

### YIELD CURVES — LITTLE NEW INFO TO INFLUENCE FLATTENING FORECAST

Our forecasts continue to anticipate bear flattening of the 2s10s curves in the US and Canada over the duration of the forecast horizon and tracked reasonably well over the first quarter of this year. Very flat curves are expected to emerge but not invert, though curve inversion must be viewed through a different lens today anyway. For instance, it's plausible that the roughly 100bps reduction of the term premium in Treasuries due to QE policies—though slowly unwinding—makes today's slope incomparable to the curve slopes of cycles past and implies more room for curve inversion to a deeper negative 2s10s spread before worrying about potential growth signals. Many of the key drivers of the bond market outlook are unchanged now relative to our prior forecast round and are repeated with updates below.

1. **Inflation:** Market-based measures peaked if not eased earlier this year and are generally in line with a stable longer-run inflation rate of around 2% (chart 18). More of our forecast rise in US PCE inflation and Canadian CPI inflation is expected to influence short-term policy rates rather than longer-term nominal bond yields. The inflation trading market is braced for higher expected inflation readings but is sensitive to upside and downside risks, but real implied yields are depressed for other reasons.
2. **Risk aversion:** It is prudent to continue to caution against historically elevated stock market valuations (chart 19), but not to do so stridently. It's possible that a soft tone in equity markets so far this year and limited pressure on yields reflects portfolio rebalancing efforts that may continue to support sovereign debt instruments and retain appetite for safe-haven assets within diversified portfolios.

Chart 19



Chart 20

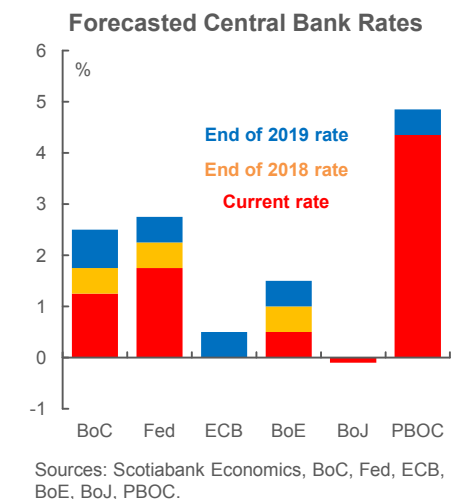
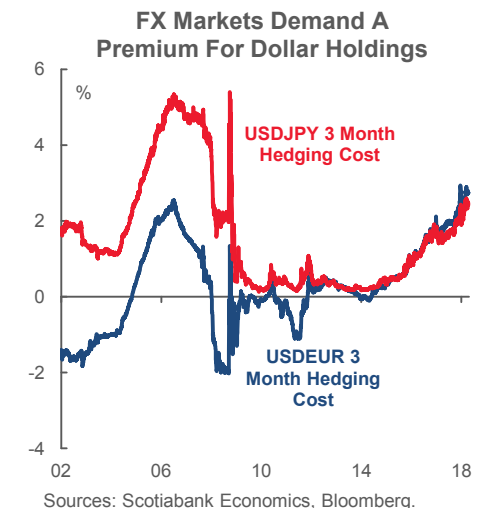


Chart 21



3. **Policy rate influences upon global carry:** The central banks in Anglo-American economies are forecast to remain in tightening mode, particularly in the US and Canada with the BoE likely to hike again in May. The outlook for other major central banks' policy rates is comparatively sanguine (chart 20). Zero or negative policy rates are generally expected to hold at the ECB and BoJ throughout this year and quite possibly next year. Informing this view is that Japan is expected to make little headway on its 2% inflation target, Governor Kuroda has been reappointed to another term, and policy accommodation will be required to prepare for an expected sales tax increase next year. Also informing this view is that Euro strength continues to restrain 'supercore' inflation readings around 1% y/y just as growth signals may have already peaked. After peaking in February, the German 10 year yield has dropped back toward where it was in early January perhaps in recognition of the challenges facing ECB policy. A taper decision may unfold later this year but *tightened* monetary policy would require much greater evidence of progress to the under 2% inflation target. By corollary, this assumption of little policy rate risk outside of Anglo-American economies limits the potential for a rise in term premia in JGBs and EGBs. By further corollary, this may limit the extent to which other sovereign bond markets can sell off, including Treasuries, without inducing arbitrage through currency hedged carry trades.
4. **Currency arbitrage:** Building further upon this latter point, a limiting present consideration to gauging foreign appetite for US Treasuries has been a sharp rise in FX hedging costs (chart 21). A material rise in Treasury yields could exceed FX hedging costs and induce renewed buying above a certain rate threshold that we view as not terribly above 3%.
5. **Unwinding quantitative easing:** Only the Fed's balance sheet is projected to dwindle over our forecast horizon and this is information that is already known to the market through the Fed's well communicated reinvestment plans (chart 22). The BoJ's reduced buying is often misinterpreted as a signal of waning policy resolve without controlling for the substitution toward an 'around 0%' nominal 10 year JGB yield target that introduces a credible threat against short sellers. I don't see that target changing at all, and not materially if at all. The ECB's buying has been reduced to the €30 billion per month pace this year until at least next September. Limits to further bond buying posed by the capital key and various limits to altering it probably mean incremental buying is coming to a close later this year or soon thereafter. A prolonged period of balance sheet reinvestment is then likely as the ECB probably follows the Fed's playbook of reducing reinvestment and then eliminating it only when policy rate normalization is well underway through a series of rate hikes. We don't expect this reinvestment change to occur until late decade at the earliest.
6. **The global saving–investment imbalance:** The imbalances that drove a glut of global savings have been cited as a factor behind low bond yields over the pre- and post-crisis era (like [here](#)). In the lead-up to the crisis, the current account surpluses of emerging markets resulted in exporting hoarded capital to countries like the US and played a major role in the excesses of US financial markets at the time, including China's buying of what turned out to be low-quality mortgage instruments. Insofar as the US Treasury market's connection with the rest of the world is concerned today, said imbalances stopped

Chart 22

### Combined QE Central Banks Won't Materially Shrink For Years

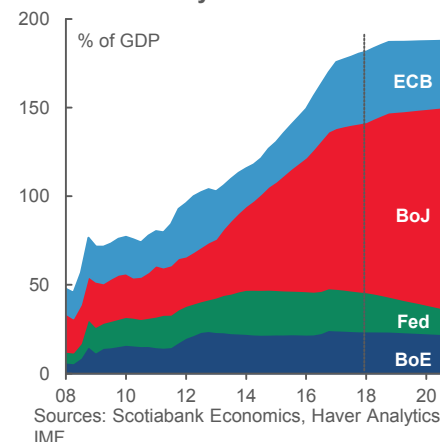


Chart 23

### Europe is Healing Current Account Deficits, US is Not

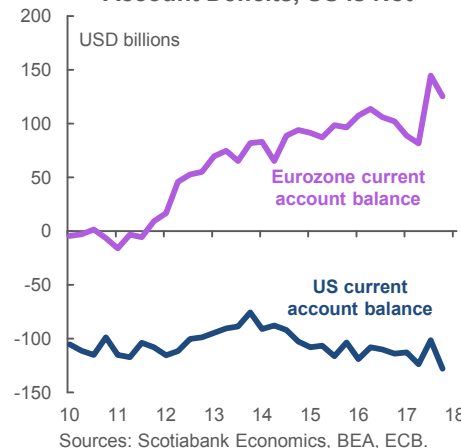
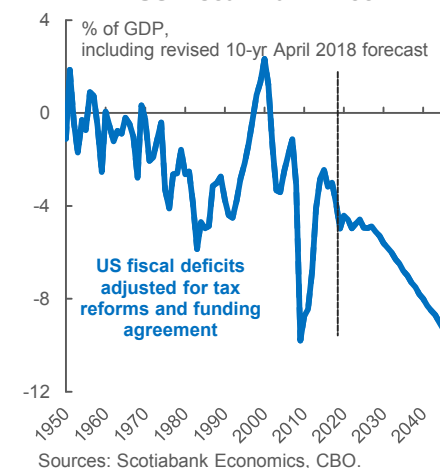


Chart 24

### US Fiscal Train Wreck



improving in the immediate aftermath of the crisis (chart 23). To fund a US current account deficit, the US remains dependent upon large capital account inflows from the rest of the world. More of that inflow today, however, is derived from large capital account surpluses of other advanced economies—notably the Euro-area and particularly Germany, plus Japan. This effect should reinforce the carry trade's appetite for US financial instruments including Treasuries. A key risk, however, is that if the US turns more protectionist against China despite the decline of China's current account surpluses from 10% of its economy a decade ago to about 1% today, then by corollary any damage to China's trade position translates into lower net foreign currency receipts and hence less to invest abroad including in US Treasuries. There is, however, a limit to this logic in that any selling by China would impair the value of its own US\$1.2 trillion worth of Treasury holdings that peaked last August. Canada also has relatively wide current account deficits versus pre-crisis surpluses. Also note that the sum total of the past decade's realignment of global savings has parked US\$11.5 trillion in global foreign exchange reserves which is more than five times the Fed's SOMA Treasury holdings and about 70% higher than at the end of 2008. This stockpiled saving lends great market power to the nations where such savings are concentrated including China, Japan, about ten others with reserves in excess of US\$200 billion and other countries with smaller balances.

7. **Neutral policy rates:** Our estimates of the long-run potential growth rates of major advanced economies that tend to have the largest debt issuance markets have not materially changed over recent forecast updates. What we see in the US by way of tax reforms, for instance, does little to nothing positive to long-run growth. Somewhat by extension, our estimates for neutral policy rates also have not materially changed. We think both the US and Canadian neutral policy rates lie somewhere in the 2.5–3% range. Neutral policy rate estimates plus term premia assumptions anchor the curve's pricing of potential future Fed rate policy actions.
8. **Fiscal policy:** The US was already on a path toward high and rising fiscal deficits before the introduction of limited tax reforms. Unfunded social security obligations and health care expenditures were a major part of the concern. Adding an extra US\$1.5 trillion to cumulative deficits over the next decade further erodes the deficit outlook to what is shown in chart 24. This picture worsened moderately with the \$300 billion package of additional spending that was introduced in February and applied over 2018–19 but by design this is a transitory effect upon funding needs. The impact of deficits on bond yields is controversial and uncertain. For instance, the large deficits of the post-crisis era had little to no effect on bond yields because of other influences like safe-haven appetite and central bank policies. Most economists still subscribe to a long-run positive effect of deficits on bond yields but the estimates are all over the map. Two pre-crisis studies of the effects before other influences came to light ([here](#) and [here](#)) posited that every one percentage point rise in the deficit to GDP ratio could, over time, raise longer-term bond yields by 20–60bps. If the deficit projections remain generally intact as the long-run influence of other

**Table 1**
**Scotiabank Economics' Canada-US Yield Curve Forecast**

	2017		2018			2019			
						(end of quarter, %)			
Canada	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
BoC Overnight Target Rate	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.25	2.50
Prime Rate	3.20	3.45	3.45	3.70	3.95	4.20	4.45	4.45	4.70
3-month T-bill	1.06	1.15	1.25	1.55	1.80	2.05	2.30	2.30	2.50
2-year Canada	1.69	1.78	1.90	2.10	2.30	2.40	2.50	2.55	2.60
5-year Canada	1.87	1.97	2.10	2.25	2.45	2.55	2.60	2.65	2.70
10-year Canada	2.05	2.09	2.25	2.40	2.50	2.60	2.65	2.70	2.75
30-year Canada	2.27	2.23	2.40	2.60	2.70	2.80	2.85	2.90	2.95
United States	Q4f	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Fed Funds Target Rate	1.50	1.75	1.75	2.00	2.25	2.25	2.50	2.50	2.75
Prime Rate	4.50	4.75	4.75	5.00	5.25	5.25	5.50	5.50	5.75
3-month T-bill	1.38	1.70	1.85	2.05	2.30	2.30	2.55	2.60	2.80
2-year Treasury	1.88	2.27	2.40	2.55	2.70	2.80	2.95	3.00	3.05
5-year Treasury	2.21	2.56	2.65	2.75	2.90	2.95	3.00	3.10	3.15
10-year Treasury	2.40	2.74	2.85	2.95	3.00	3.05	3.10	3.15	3.25
30-year Treasury	2.74	2.97	3.00	3.15	3.20	3.25	3.30	3.35	3.40

Sources: Scotiabank Economics, Bloomberg.



considerations such as central bank policies abate, then the future may bring to light a very negative bond market outlook given the magnitude of the forecast deterioration in US deficits. Nevertheless, the deficit to GDP ratio remains fairly constant in the 4½% to 5% range from 2019 through to the end of the 2020s from 3½% last year and 4% this year. The US has been running deficits of that magnitude or more throughout much of the period since the 1980s. Most of the real blow-out in the CBO projections comes later in the forecast horizon when this ratio starts rising in the 2030s and hits 10% by the late 2040s. Of course, long-term CBO projections are to be accepted with a strong sense of humour given its past track record at forecasting longer run deficits and public debt, let alone their—or anyone's—ability to project interest rates and other variables over the long haul. In any event, scaled in relation to the ability of the US economy to grow, most of the deterioration in deficits that would potentially concern bond markets remains a long way off and will be driven by the long-term evolution of health care and social security costs. I don't think the nearer term bias of markets is likely to be overly rocked by what might happen to this ratio many projected years down the road. The deficit to GDP ratio increase from 3.5% in 2017 to 4.5% next year is incrementally negative to bond markets, but mildly so especially in the context of sundry other drivers.

9. **Term premium:** Research ([here](#)) suggests US 10 year Treasury yields are about 1% lower than where they would be otherwise in the absence of the Fed's balance sheet expansion and controlling for other influences. We don't expect this term premium to be suddenly restored as the Federal Reserve eliminates reinvestment and allows its balance sheet to begin to contract later next year and rely upon many of the other points provided in this section to inform this bias. Instead, a gradual re-pricing of the portion of the term premium that is driven by Fed balance sheet policy is likely and has already been modestly underway.
10. **Cycle maturity:** This is already the second longest US economic expansion on record. By early next year, continued growth would make the current cycle the longest in US history. Uncertainty over whether recession lurks is likely to retain appetites for safehavens like sovereign debt of mature economies. We think this risk is nevertheless often exaggerated. Not all major variables are suggesting late cycle risks. For instance, US household debt payments as a share of income sit at their lowest in three and a half decades and nominal wage growth looks mid-cycle at best to us. In that context, aided by wealth effects and limited albeit regressive tax reforms, US consumers could well have plenty left in the tank to drive future spending growth.
11. **Pensions and life cos:** It's not all about central banks. In fact pensions were a significant source of buying over 2017H2 partly to rebalance portfolios; otherwise the bond market would have been in worse shape as Chinese Treasury holdings gradually ebbed since peaking in August after rising over 2017H1. Private and public pensions own about US\$2¼ trillion worth of Treasuries and our belief is that a rise in US 10s to the 3% mark would bring forward aggressive buying to lock in returns for servicing pensioners. Indeed, asset allocation shifts within the existing stock of bonds and equities could easily swing relative pricing considerably more than, say, risks surrounding rising dependence upon foreign funding. US equity market capitalization stands at about US\$29 trillion and world equity market capitalization is US\$80 trillion. By comparison, US federal government public debt sits at about US\$21 trillion. Slower moving incremental changes in the public debt stock issue to foreign and domestic buyers can easily be swamped by asset allocation shifts.

## Mexico

- **Positive trends in several variables lead us to expect a gradual improvement in the Mexican economy for this year and the next.**
- **The most important factors to consider are the evolution of the NAFTA renegotiation process and the results of Mexico's July elections.**

### DEFINING MOMENTS AHEAD

Several recent indicators suggest that the Mexican economy is gaining traction. The Global Indicator of Real Economic Activity (IGAE) grew 2.1% y/y in January, which was the highest in the last four months, despite the chronic weakness in mining production (-5.0% real y/y) due to the particular problems affecting oil extraction. Construction, on the other hand, grew 4.0% y/y in January, following growth of 3.6% in December, returning to a stronger pace after negative readings during most of 2017. This rebound is especially relevant in the current highly uncertain environment in which we are living. Services sector grew 2.9% y/y in January, with positive performance of commerce (+5.4% y/y on the retail side), restaurants and hotels (+4.4% y/y) and transportation (+3.2% y/y).

Much in line with the economic activity, employment figures are showing good results: in the first two months of 2018, 278 thousand new jobs were created, 17% more than one year ago. The open unemployment rate reached 3.21% in February, the lowest level for a similar month since 2003. There is also a positive start to the year for inflation adjusted retail sales, which grew 0.5% y/y in January, after five months of contraction. Financial activity joined the train of positive news, with real deposits growing 4.8% y/y in February, accelerating from the previous four months, while banking credit to the private sector grew 6.3% y/y, the fastest pace in eight months. Worth noting is that part of the improvement observed in real rates of growth is explained by a rapid descent in y/y inflation, that reached 5.55% in January and 5.34% in February after ending 2017 at 6.77%.

On the external front, and despite the negative rhetoric coming from the Trump administration, Mexican trade is booming, as can be seen in chart 2. In the first two months of the year, total exports grew 12.4% y/y, with oil exports expanding 30.4% and auto exports rebounding 13.9%. Total imports grew 12.9%, with capital goods imports showing a formidable increase of 19.4% y/y, which suggests that investment is on the rise. Total trade expanded by USD 75 bn in the last year to February. Export growth could be explained by the increasing strength of the US economy, higher oil prices and an undervalued peso, while import dynamism suggests there is also an ongoing recovery in the internal pace of economic activity. Additionally, remittances inflows keep growing at strong rates (+6.9% y/y in February), totaling USD 29.1 bn in the last 12 months until February.

Looking ahead, we are expecting a gradual improvement in the pace of economic activity, with real GDP growth of 2.4% in 2018. The internal market is expected to keep providing support to the economy, as private consumption remains growing at healthier rates (+3.1%) and investment manages to reach a modest but positive growth (+1.2%). Job creation is anticipated to continue at a similar pace (+806 K)

### CONTACTS

#### Mario Correa

52.55.5123.2683 (Mexico)

Scotiabank Mexico

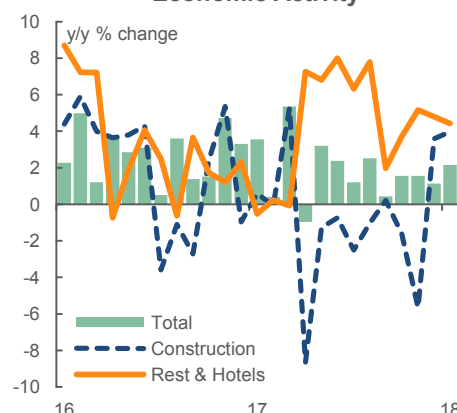
[mcorrea@scotiabank.com.mx](mailto:mcorrea@scotiabank.com.mx)

Mexico	2017	2018f	2019f
Real GDP (annual % change)	2.0	2.4	2.8
CPI (y/y %, eop)	6.8	4.3	3.8
Central bank policy rate (% eop)	7.25	7.75	7.00
Mexican peso (USDMXN, eop)	19.66	19.46	19.71

Source: Scotiabank Economics.

Chart 1

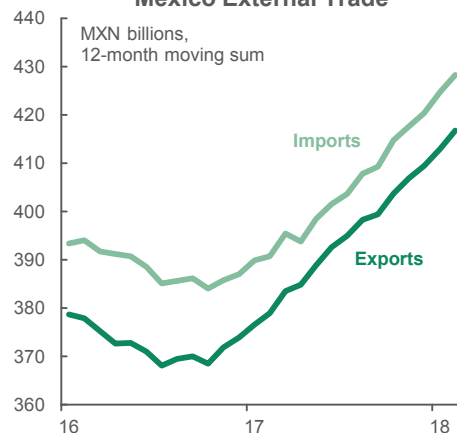
#### Global Indicator of Real Economic Activity



Source: INEGI.

Chart 2

#### Mexico External Trade



Source: INEGI.

while remittances are forecast slightly above USD 30 bn). Inflation will descend in our base scenario to 4.3% by the end of the year, and Banco de Mexico is expected to deliver one more hike to the monetary policy interest rate by the middle of the year.

If we consider only the current economic trends, things look relatively good for the future ahead. However, there are many other factors that will have a significant impact on the performance of the Mexican economy and provide a great deal of uncertainty regarding the forecasts. The first and perhaps more relevant factor is the NAFTA renegotiation process, which has been subject to many ups and downs and different points of view. Our base scenario has been constructed under the assumption that the renegotiation process will go until 2019, and then we will end up with a modestly better agreement. If NAFTA is either ended abruptly by Trump or a NAFTA 2.0 is reached, our economic forecast may change materially.

The second factor of increasing relevance are the elections in Mexico, with Lopez Obrador leading all the recent polls. There have been many controversial pronouncements from the leading candidate, who is talking about significantly changing economic policies to return to a more centralized model where the government has the leading role in shaping the economy, and also indicated he may suspend the ongoing construction of the new Mexico City airport. One of the key assumptions of our base scenario is that sound economic policy continues, no matter who wins the election. If there are significant changes and the consistency of economic policy is weakened by the next administration, there could be material changes to the economic outlook.

## Brazil

- **Politics on both the reform and Presidential election front are likely to remain a source of volatility for both FX and rates markets. Major reforms look unlikely at least until 2019, and at the moment, it's not even clear who the presidential election contenders will be—or what their reform and fiscal adjustment plans will be.**
- **Growth remains the likely main source of good news, with base effects, lower rates, and rebounding commodity prices all providing tailwinds to the Brazilian economy. With lower rates and inflation, households are becoming stronger contributors to domestic demand. Industrial production disappointed in February, but remains on the right path.**
- **On monetary policy, like most market players we expect another 25bps cut by the BCB in the upcoming May meeting, but we also expect the policy normalization cycle to begin earlier than most, possibly late 2018, or early 2019.**

### REFORMS SEEM AT BEST A 2019 STORY NOW—MARKETS REFLECTING IT

With expectations being that pension reform is now at best a 2019 story after the failed bid to approve the reform in February, and elections painting a very hard-to-read picture, there are mounting concerns that the fiscal improvement markets have been anticipating will remain elusive. It is not at this point clear who the main contenders in October's presidential election will be, but recent polls have consistently put candidates that market players see as right- or left-leaning populists consistently near the top. With major candidates not clear at this point, we can't even begin to guess what their government plans will look like—including plans for reforms or fiscal adjustment. Hence, for now, the good news hitting Brazil in 2018 is likely to come from the macro data front—and so far, it has been solid. Reform disappointment, alongside political uncertainty, has made the BRL (-0.1%) the worst-performing major LATAM FX not called VEF or ARS. On credit, the story is similar. After trading at lows around 140 bps, Brazil's 5yr CDS is now back above 160 bps, nearer those of countries like Russia, Turkey and South Africa—all of which face important challenges.

### GROWTH AND INFLATION BOTH PROVIDING POSITIVE NEWS

Brazil's economy kicked-off 2018 on solid footing, with the monthly GDP proxy coming in at +3.0% y/y in January. Overall, the data by sector seem to suggest a fairly broad-based rebound, with domestic demand, exports and industrial production showing there may finally be light at the end of the tunnel. January's retail sales were a slight disappointment with their +3.2% y/y print (vs consensus +3.5% y/y), but continued to show that consumers are finally making a stronger contribution, which likely comes from favorable inflation (IPCA has been printing sub-3.0%) as well as lower interest rates which are providing some relief to still quite-levered households.

## CONTACTS

**Eduardo Suárez, VP, Latin America Economics**  
52.55.9179.5174 (Mexico)  
Scotiabank Economics  
[eduardo.suarez@scotiabank.com](mailto:eduardo.suarez@scotiabank.com)

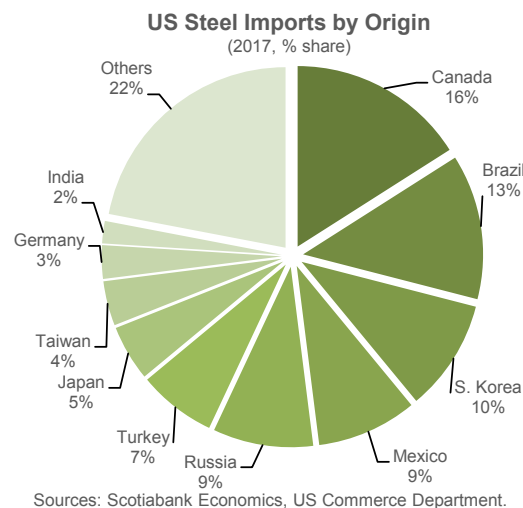
Brazil	2017	2018f	2019f
Real GDP (annual % change)	1.0	2.5	2.7
CPI (y/y %, eop)	2.9	4.1	2.6
Central bank policy rate (% , eop)	7.00	6.75	8.50
Brazilian real (USDBRL, eop)	3.31	3.25	3.35

Source: Scotiabank Economics.

Chart 1



Chart 2



On the industrial production front, the gradual upswing remains true, even if the last print was a disappointment. Industrial production was expected at +3.9% y/y in February, and instead came in at +2.8%. It was a moderate disappointment after the strong +5.8% y/y print we got to kick off 2018, but the story remains that after constant contraction in 2014–2016, the industrial sector seems to be coming alive. On the trade front, the improvement in commodity prices is giving Brazil's economy a boost, lifting exports about 15% in y/y terms during 2017. This impulse may fade in 2018, given commodity prices seem to have stabilized, but the volume improvement in global trade should still be positive. A risk to consider is that, outside of Mercosur, Brazil does not currently have any major trade agreements, which could make it more vulnerable than most if a global trade war does indeed ensue. We don't see a global trade war as a base case by any means, but it's still a risk. During the recent discussion of steel tariffs in the US, Brazil emerged as one of the countries potentially most affected. Brazil was subsequently exempted from the potential tariff (see chart 2), but it was nonetheless a relevant scare to keep in mind.

### **MONETARY POLICY MORE DOVISH WITH LOW INFLATION SURPRISE**

The Brazilian Central Bank (BCB) delivered a 25bps cut at its last Copom meeting, and seemed to signal that going forward, we are likely to get one more 25bps cut, and after that the main courses it sees are either an interruption of the easing cycle, or some moderate additional end-of-cycle easing. The final paragraph in the [latest minutes](#) said: *"The evolution of the baseline scenario made it appropriate to reduce the Selic rate by 0.25 percentage point at this Copom meeting. **Regarding the next meeting, at this time the Copom views an additional moderate monetary easing as appropriate.** The Committee judges that this additional stimulus mitigates the risk of delayed convergence of inflation toward the targets. This view regarding the next Copom meeting might change in favor of the interruption of the monetary easing process, if risk mitigation proves unnecessary. Beyond the next meeting, absent relevant additional changes to the baseline scenario and balance of risks, the Copom deems appropriate to interrupt the monetary easing process, with the aim of evaluating next steps, in light of the relevant horizon for monetary policy at that time."*

Basically, our take is that the BCB saw it necessary to deliver a couple of additional cuts to avoid deflationary risks given consistent low inflation surprises, but by now, the DI (the local interest rate swaps market) curve seems to be in line with the BCB's guidance, pricing in the additional 25bps cut the Copom signaled, and a pause beyond. Consistent with the BCB's guidance, we also expect a 25bps cut next meeting, and a pause beyond. However, we are a tad earlier than most in when we think the tightening cycle will begin, seeing a cut to 6.25% in the SELIC next meeting (May 16th), rates staying put till the end of the year, and a 25bps hike taking place at either the December 12<sup>th</sup> meeting, or the first meeting of 2019. Why do we expect an earlier start to the policy normalization cycle? There are a number of factors:

- 1) Growth is gaining traction quickly, and if inflation normalizes to levels nearer 3.5%–4.0%, current SELIC rate settings will quickly become "quite loose". Given the country's highly volatile inflation, and indexation effects, it would be risky to once again fall behind the curve. We expect the BCB to have learned its lesson from the last cycle. It would also be prudent to leave the ship sailing tight heading into a change in government.
- 2) With the fiscal adjustment likely to remain elusive at least for all of 2018, the BCB may be forced to start offsetting the loose fiscal stance with higher rates as the economy swings back to near potential growth, to which we are getting closer.
- 3) How much slack is there? We are not quite convinced that slack is as large as current production levels imply. Even though industrial production in volume terms currently sits at 2005 levels, when capacity sits idle so long, it tends to deteriorate.
- 4) Uncertainty is high and, with a high FX-inflation pass-through, inflation risks are not immaterial: Brazil has among the higher FX-inflation pass-through in LATAM, sitting closer to 20%. Hence, if a combination of political uncertainty, and global trade risks materializes, we could see the BRL weaken significantly. Brazil's lack of free trade agreements could make it particularly vulnerable to a deterioration in the global trade environment...which we don't see as a "base case", but we do see as a risk.

### **MARKET OUTLOOK**

We are somewhat concerned that recent polls don't seem to support what we think the consensus view is, that a reformist candidate is likely to win the upcoming presidential elections, and do so with a mandate to push through reforms and fiscal adjustment. A large share of players are of the view that with Lula potentially out of the race, due to his prison sentence, moderate



candidates will get a larger share of the vote. We think there is at least the potential that Lula and Bolsonaro's voters may be compatible, despite one being on the right and one on the left as they are both anti-establishment. We could also see angry Lula supporters rally behind the candidate they see as most against the current government, despite ideological differences.

We are early in the electoral process and polls are likely to change, but until very recently we think markets were being too complacent on political risk. Hence, with higher political and reform risks we have a somewhat less optimistic forecast for the BRL, based in part on assigning a higher probability to the fiscal story not getting better in 2019, souring sentiment. This is also in part the reason why we have pushed forward our expected kick-off for the BCB's interest rate normalization process as, given a relatively high FX-inflation pass-through, the BCB may have to be cautious.

## Colombia

- Elections are arguably the main source of uncertainty hanging over Colombia, with recent polls, as well as the results of the primaries, suggesting we are likely to see a second round run-off between Ivan Duque (supported by former President Uribe), and Gustavo Petro—the former Mayor of Bogotá, who is seen as “left-leaning”. Results in the primaries held March 11th are seen as suggesting Duque currently has stronger backing, and has momentum on his side (he received about 1/3 more votes than Petro in the primaries).
- On the growth front, activity remains slow (+1.3% y/y for December), but is showing signs of improvement. We expect stronger global trade and higher oil prices to help boost growth to 2.5% in 2018 and 3.5% in 2019. Our forecasts are 50bps on the “bullish side” for 2019.
- Local markets in Colombia have been firm, with COP being the second strongest currency in LATAM so far this year (+7.0%). In bond markets, the fact that Colombia (BBB-) continues to trade tight to Mexico (BBB+) suggests that markets are more uncertain over the Mexican elections and NAFTA's renegotiation than they are about the political process in Colombia.

### ELECTIONS ARGUABLY TOP UNCERTAINTY IN COMING QUARTER

Elections have kicked off with a fair bit of turbulence in Colombia. The first week of March saw violent attacks on both Gustavo Petro (former Mayor of Bogotá and current candidate), as well as aimed at former President Alvaro Uribe, the sponsor of current contender Ivan Duque. If the elections do indeed prove to be a contest between Duque and Petro, we are likely to see a very polarizing election process—with fairly important differences in the economic and political platforms of the current front-runners: Ivan Duque and Gustavo Petro. An early indication of how polarizing this contest is likely to be was the result of the primaries, where we saw a record-breaking over 9 mn votes cast to select candidates, suggesting voters are taking the contest seriously. To avoid a run-off, a candidate must secure on vote more than half the total of votes cast, which looks possible, but unlikely given recent polls.

At the moment, the results of the primaries that took place in March are being taken as an indication of both momentum and support being in Ivan Duque's favor, as he received the backing of 4.0 mn votes, versus Gustavo Petro, who got 2.8 mn votes in the left's coalition primary. Overall, the right got almost twice as many votes as the left in the primary elections.

Gran Consulta Colombia, the right-leaning coalition, tallied 5.9 mn votes, and left Ivan Duque as the candidate for the right:

- Ivan Duque 4.0mn
- Marta L. Ramirez: 1.5mn
- A. Ordoñez: 0.4mn

### CONTACTS

Eduardo Suárez, VP, Latin America Economics  
52.55.9179.5174 (Mexico)  
Scotiabank Economics  
[eduardo.suarez@scotiabank.com](mailto:eduardo.suarez@scotiabank.com)

Colombia	2017	2018f	2019f
Real GDP (annual % change)	1.8	2.5	3.5
CPI (y/y %, eop)	4.1	3.3	3.1
Central bank policy rate (% , eop)	4.75	4.25	5.00
Colombian peso (USDCOP, eop)	2,986	2,900	3,050

Source: Scotiabank Economics.

Chart 1

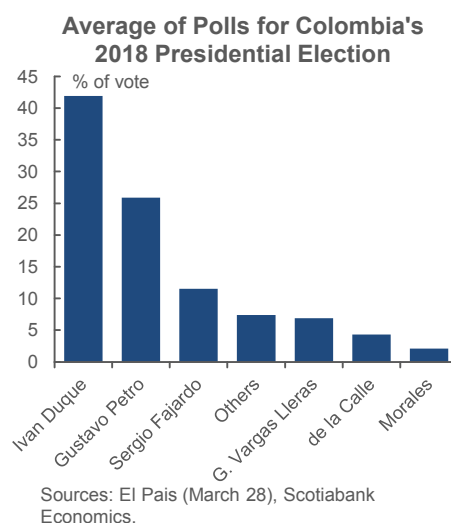
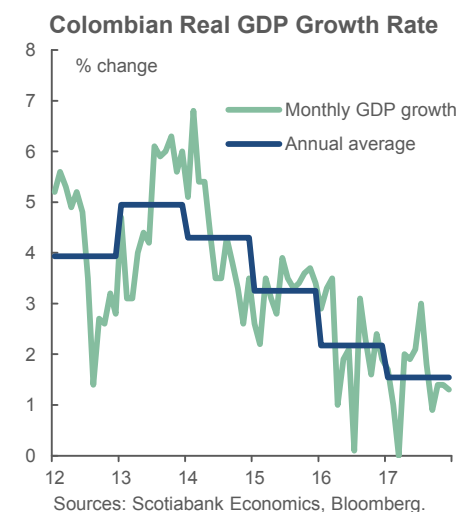


Chart 2



Inclusion Social por la Paz, the left-leaning coalition, garnered 3.3mn votes, and saw Gustavo Petro as the strong contender:

- Gustavo Petro: 2.8mn
- C. Caicedo: 0.5mn

Who are the contenders?

- **Gustavo Petro** (polling in the low 20% to high 20% range—but appears to have found a ceiling): A former M-19 Guerrilla member as well as Mayor of Bogota, Petro is the left-most contender now that Rodrigo Londoño (the former FARC leader) bowed out for health reasons. The former Mayor was stripped of his office due to corruption and mismanagement allegations. However, his political rights were re-instated in International courts. Petro has pledged to increase taxes on multinationals, and to strengthen the public sector's role in both the pension and banking sectors. Some of his proposals are seen as a break from the status-quo. Petro is aiming to position himself as an anti-establishment candidate to capitalize on low approval ratings of President Santos.
- **Ivan Duque** (polling around 40%, with a rising trend): The former Senator is widely seen as former President Alvaro Uribe's protégé. He is arguably the most right right-leaning of the main four contenders, and has been gaining traction lately. A polarizing element of Mr. Duque plans could end up being his posture on the Peace Process. Former President Uribe was highly critical of Santos' peace process, and this could be a differentiating factor for Duque from the current governor if he carries on with Uribe's torch. So far, his posture seems to be that Santos' agreements will not be torn up, but could see some modifications. In economic terms, he is expected to be prudent, and status-quo.
- **German Vargas Lleras**: He ran for the Presidency in 2010, and was formerly a Senator. The center-right leaning candidate was VP under President Santos, but quit his job in 2017.
- **Sergio Fajardo**: Arguably the centrist contender among the top-4, the former Governor of Antioquia, and Mayor of Medellin was also a former running mate of Antanas Mockus. He is arguably the candidate with the strongest claim to being a "true independent", and is seen as pragmatic, rather than ideology-driven. He pledged to focus his presidency on institution building, education (he pledged a 10% annual increase in education spending), and employment creation.

## GROWTH AND INFLATION

BanRep has reacted quite aggressively to the economic slowdown, by cutting the overnight rate from 7.75% in 2016, to 4.50% at the moment, with another 25 bps cut not being ruled out over the coming few meetings as growth remains subdued in an environment of improving inflation. In the last print we saw, inflation dropped from 3.68% to 3.37%, and members of the board have suggested they could support additional easing if inflation drops to target (so we need another 40 bps or so of lower CPI). Economic activity closed 2017 very weak (the economic activity index for December printed at 1.3%), but is expected to start gaining traction gradually this year due to returning confidence, as well as to lower interest rates and higher oil prices. The first print of the year (January) came in at a stronger 2.2% y/y.

We expect growth to improve over the coming two years, going up to 2.5% y/y in 2018 (it was 1.8% in 2017), and to get back to potential (3.5%) in 2019. Our forecasts are exactly in line with the Bloomberg consensus for 2018, and 50bps on the bullish side of consensus for 2019. The reason why we are more constructive is a combination of a positive trend for global trade—on which trade war risks need to be monitored, relatively low levels of uncertainty which should help investment, and commodity prices. We are also on the side of the market that expects BanRep to ease its monetary policy a little bit further, to help prop up growth, given still-sluggish activity.

## MARKETS: STILL STEADY, BUT JITTERINESS RISING

Foreign holdings in TES do not seem to have been affected by election uncertainty so far, staying fairly steady at 26.2% in February, marginally down from the 26.46% we saw the previous month. The yield gap between Mexico and Colombia has narrowed substantially over the past month, going from around 120–130 bps a month ago, to around 60 bps on April 2<sup>nd</sup>. With Colombia rated BBB-, and Mexico rated BBB+, this yield difference suggests investors still see a higher degree of uncertainty in Mexico—likely driven by the looming elections as well as NAFTA. From the start of the year, until March 8th, the Colombian peso has been the second best performing LATAM FX (+7.0%), following MXN (+7.2%).

## Peru

### GETTING GROWTH BACK ON TRACK

- We have lowered our GDP growth forecast for 2018 to 3.3% from 3.7%, as political turbulence has affected the government's investment schedule.
- Market reaction to the change in government was mild and short-lived.
- Over the past few months, growth has been fairly stable at around 3.0%. The main issue going forward is how quickly the government can get investment back on schedule.
- With inflation well below the CB target floor, the CB may lower its reference rate one last time to 2.50% in May.

We have lowered our GDP growth forecast for 2018 to 3.3% from 3.7%. We already had a downward bias on growth, but had been waiting for the political air to clear and the change in government and cabinet to take place. Our lower growth figure takes into account delays in fiscal stimulus as political turbulence and changes in the cabinet have affected the government's investment schedule.

With two impeachment attempts, one new President, two new cabinets, five ousted cabinet members, and prominent construction companies, businessmen and political party leaders under investigation for corruption, all in under two years, the wonder might be not why GDP growth has slowed, but, rather how the country has been able to grow at all. However, political change never really posed a threat to economic management, and turbulence has occurred in an environment of improving terms of trade, and robust macro balances. As a result, negative market reaction was mild and short-lived. The PEN did not really move much, the bond and equity markets reacted little, and Rating Agencies have mostly ratified Peru's rating and outlook.

The year began modestly in terms of GDP growth: 2.8%, YoY, in January. Over the past few months, and leaving aside short-term volatility in fishing, growth has been fairly stable at around 3.0%. The main issue going forward is how quickly the government can get investment back on schedule. Despite the damage done, (March and April GDP will be telling in this regard) growth may begin to pick up under the Vizcarra regime, as the opposition-dominated Congress seems more willing to work with the new government. Peru's new cabinet is market friendly. Although many members are experienced in public administration, the cabinet will need to prove itself in terms of managing the State and overcoming obstacles to infrastructure investment.

Yearly inflation fell to 0.4% in March, well below the Central Bank's target range floor of 1.0%. March is likely to be the last month of declining inflation, resulting from the base effect of high El Niño inflation in 2017. Inflation should rebound henceforth, most likely returning to the Central Bank target range. The CB lowered its reference rate from 3.0% to 2.75% in March, and seemed to signal the

### CONTACTS

**Guillermo Arbe**  
511.211.6052 (Peru)  
Scotiabank Peru  
[guillermo.arbe@scotiabank.com.pe](mailto:guillermo.arbe@scotiabank.com.pe)

Peru	2017	2018f	2019f
Real GDP (annual % change)	2.5	3.3	3.7
CPI (y/y %, eop)	1.4	2.0	2.5
Central bank policy rate (% , eop)	3.25	2.75	3.25
Peruvian sol (USDPEN, eop)	3.24	3.18	3.12

Source: Scotiabank Economics.

Table 1

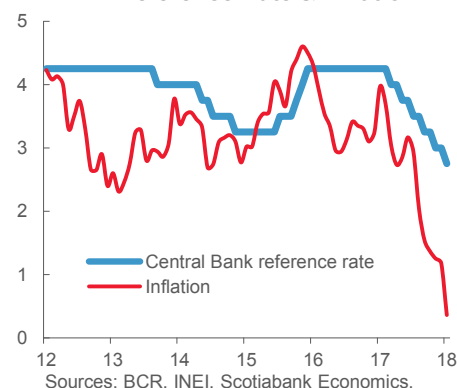
### GDP Growth - Demand Components

	2017	2018f
<b>GDP</b>	<b>2.5</b>	<b>3.3</b>
<b>Domestic Demand 1/</b>	<b>1.8</b>	<b>3.3</b>
Private Sector Consumption	2.5	2.8
Public Sector Consumption	1.6	4.0
Total Fixed Investment	0.0	4.6
Private Sector	0.1	3.7
Public Sector	-0.1	8.4
<b>Exports</b>	<b>8.5</b>	<b>3.3</b>

F: Forecast. 1/ Excluding inventories  
Source: Scotiabank Economics.

Chart 1

### CB Reference Rate & Inflation



possibility that it would lower again in May to 2.50%. If it does, it is likely to be the last time. The CB is aware that inflation will rebound soon, and must also be growing concerned over the narrowing spread with the Fed rate.

The fiscal deficit in the past 12 months to February came in at 3.3% of GDP, slightly above the 3.2% at the close of 2017 and broadly in line with expectations. Both revenue and spending were up significantly—8.7% and 17.1%, YoY, respectively—reflecting higher metal prices on the one hand, and the fiscal stimulus policy on the other. It's early for a full-year picture, which will depend crucially on the increase in revenue in the March–April income tax period. However, concern over fiscal accounts is on the rise, which may affect government policy at some point, although 2019 is likely to be the key year, rather than 2018.

After rising to 3.22–3.27 during most of the February/March period of political turbulence, the PEN appears to have returned to the 3.20–3.23 range of before. We see no reason to alter our year-end forecast of 3.18. Peru's external accounts are improving significantly. The heavy volume of USD sales by mining companies to pay domestic income taxes has been compensating political events, and will continue weighing on the FX rate, especially, but not exclusively, in April. Fundamentals continue to favor a mildly stronger PEN going forward, even after the recent correction in base metal prices. The Central Bank has largely stayed out of the market except for sending signals of intent that have effectively acted as USD buy stops at 3.27 and sell stops at 3.20–3.21.



## Chile

### SOME TURBULENCE, BUT READY FOR THE TAKEOFF

- Once again, growth forecasts for the current year are being revised up, this time to 3.6%, confirming the strong upward bias we saw three months ago. Most of the improvement should come from sectors linked to investment and exports. Consumption should gather momentum at a slower pace.
- Policymakers will not be applying brakes, as the Central Bank thinks there are no signs of a normalization of inflation in the near term. Monetary policy will likely remain supportive for longer than earlier thought. Fiscal policy should not be a hurdle, but not provide a boost either.
- Foreign conditions are more turbulent than in January, and potential risks for the Chilean economy increased, but do not seem strong enough to jeopardize the acceleration in coming quarters.

### MACRO UPDATE: HOPING THAT EXPECTATIONS BECOME ACTUAL RESULTS

In the last three months, expectations strongly improved as the political outlook became much more business-friendly and copper price forecasts became more solid (above US\$3.00/lb for current year). Despite the fact that most of this new paradigm has yet to be realized, our forecast for growth for the current year rose from 3.1% to 3.6%, with risks tilted to the upside. For 2019, growth is set to accelerate to 3.9%.

Despite this generally bullish environment, risks remain. Copper prices have been declining from their peak, and there has been a resurgence of protectionist risks coming from the US. Additionally, the political situation in the region became riskier (which will continue in the current year). Finally, although we are seeing stronger data for investment, it will become clearer in coming months that a huge part of the pent-up investment will not start in 2018, but next year. Some indicators, like business confidence, are already moderating, though we expect that a widely upbeat tone will prevail.

The economy will reach its potential growth, estimated around 3.5%, this year and will be above it next year, as also laid out in the Central Bank's forecast. This critical fact allows us to keep our forecast of inflation around 2.8%, despite market expectations up to a half percentage point below that. Of course, the exchange rate is the wildcard in the very short term, but a dramatic slide is just a possibility so far, while part of the last correction seems to be already in prices. Accordingly, the monetary policy rate will likely stay at the current level (2.5%) for longer than expected. Although most of the market thinks the start of the normalization will be towards year-end, a move in September is likely as evidence of recovery becomes more intense and definitive and effectiveness of political actions becomes clearer. It must be said that though the exchange rate can help to contain inflation, in the Chilean economy long-term effects linked to the productive gaps (potential growth vs. actual growth) are slower but much more powerful.

### CONTACTS

**Benjamin Sierra**  
56.2.2619.4974 (Chile)  
Scotiabank Chile  
[benjamin.sierra@scotiabank.cl](mailto:benjamin.sierra@scotiabank.cl)

Chile	2017	2018f	2019f
Real GDP (annual % change)	1.5	3.6	3.9
CPI (y/y %, eop)	2.3	2.8	3.0
Central bank policy rate (% eop)	2.50	3.00	3.50
Chilean peso (USDCLP, eop)	615	595	584

Source: Scotiabank Economics.

Chart 1

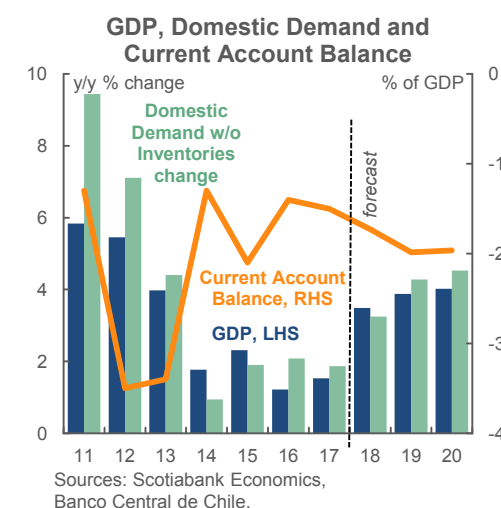
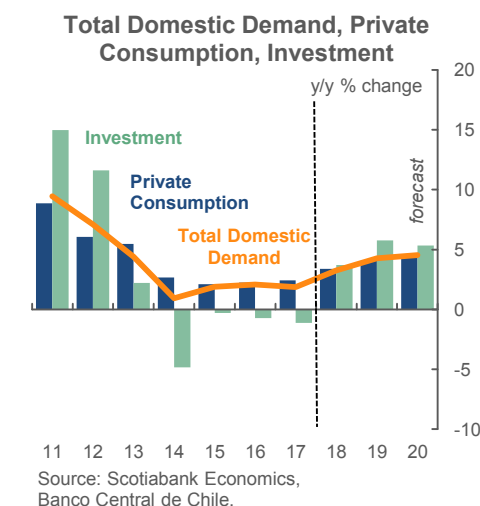


Chart 2



## POLITICAL PANORAMA: ENTERING IN THE DECISIVE STAGE

The political front seems promising, but the process is still in the first or, at most, second stage. Most of the new Government's key appointments have been completed (just a few public services appointments must be confirmed or changed), but now begins a more decisive test for the Government: its ability to negotiate with opposition to reach agreements to improve economic conditions, among other things. The discourse thus far has been aimed toward the widest possible agreements, not just enough to get the approval but to give stability to new policies in the very long run. The President is very committed to the process, which underlines the high importance attributed to it. Moreover, the less traditional leftist opposition seems divided about reaching agreements with the Government. We believe the Government will successfully navigate these challenges, but there are risks that it will not.

## MAIN RISKS ARE THE SAME...WITH A DIFFERENT FACE

Risk of potential deterioration of the international trade, especially between the two major commercial partners of Chile, has surged and this would be, no doubt, negative. Though the very early effects may be positive in some areas (new markets for some exports and lower prices for some imports), it would be very shortsighted to think that will be the bottom line. The second round of effects for the Chilean economy would be related with higher probability of problems in some markets due to extreme concern resulting from a new era of protectionism.

Other risks are related to domestic political conditions. The most obvious is the possibility of a failure of the Government to reach minimal agreements with the opposition on economic issues. It would mean a delay or the cancelation of a significant part of the productive agenda and would force revised forecasts of growth.

Chart 3

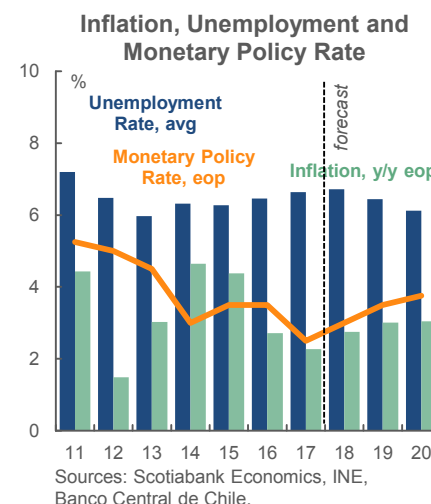
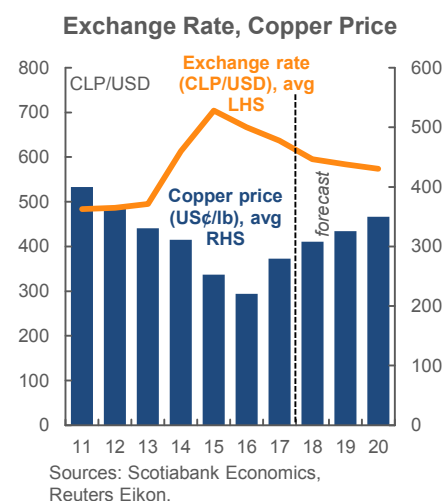


Chart 4



## United Kingdom

- **The Bank of England looks very likely to raise Bank Rate at the May meeting, in line with our long-held view.**
- **Notwithstanding a number of one-off disturbances, the fundamentals facing output are improving and we expect an upwards trend for GDP growth this year.**
- **Inflation has begun to slow and we expect plenty more downside from here.**

The Bank of England looks very likely to hike Bank Rate at the mid-May Monetary Policy Committee (MPC) meeting—in line with our long-held view. Thereafter, our view is that the MPC will hike rates again in November, though we expect it to be a bumpy ride between then and now. In terms of the May MPC, enough boxes have been ticked for an immediate rate hike. In particular, signs of accelerating wage inflation, further tightening in the labour market and solid GDP growth all support the case for the second rate hike in this cycle. We expect further acceleration in GDP growth and wage inflation to support the case for a hike in November. However, we fully expect this view to be challenged over the coming months if our view that inflation will fall sharply comes good.

### GROWTH

Recent output data have suffered from one-off shocks and noise and that is set to continue for the time being. For example, an outage in a major North Sea oil pipeline subtracted almost 0.1% point from GDP growth during Q4; it is now back in service and this should add a similar amount back onto growth during Q1-2018. Adverse weather conditions could offset this boost to Q1, though we have our doubts.

These shocks are pure noise and we suspect that the BoE will look through them. Indeed, under the surface, the fundamentals facing growth are improving. In particular, CPI inflation has started to slow and wage inflation is accelerating and both are likely to continue doing so over the remainder of the year. In turn, that points to faster real disposable income growth, which should translate into faster household consumption and overall GDP growth. Essentially, we expect 2018 to be the reverse of 2017. We are starting to see the earliest tentative signs that this view is beginning to crystallise via firmer consumer confidence. However, it is likely to be several months before there is concrete evidence of this embodied in the official retail sales or GDP data.

In the near term, media coverage has highlighted troubles in the retail and restaurant sectors. We view this as a legacy of last year's slump in real household disposable income growth, which should soon pass. This is backwards-looking and should not obstruct a near-term BoE rate hike.

Overall, we expect UK GDP growth to be on a rising trajectory throughout this year. While our full year 2018 growth forecast of 1¾% y/y suggests a similar pace of growth to 2017, that masks the underlying picture. Growth was trending downwards through 2017; we expect an upwards trend this year. We expect slightly faster growth (just under 2% y/y) during 2019.

### CONTACTS

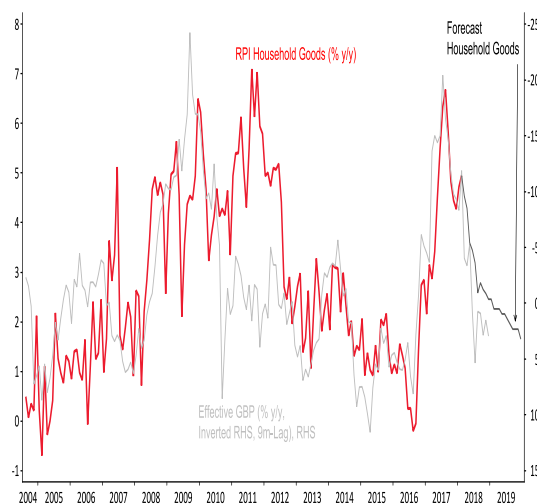
**Alan Clarke, Head of European Fixed Income Strategy**  
44.207.826.5986 (London)  
Fixed Income Strategy  
[alan.clarke@scotiabank.com](mailto:alan.clarke@scotiabank.com)

United Kingdom	2017	2018f	2019f
Real GDP (annual % change)	1.8	1.7	1.9
CPI (y/y %, eop)	3.0	1.9	1.9
Central bank policy rate (% eop)	0.50	1.00	1.50
UK pound (GBPUSD, eop)	1.35	1.47	1.50

Source: Scotiabank Economics.

Chart 1

**GBP exchange rate points to further slowdown in RPI household goods inflation**



Sources: Macrobond, Scotiabank FICC Strategy.

## INFLATION

In the context of inflation, the woes in the retail and restaurant sectors of late suggest to us that pricing power is lacking. For some time we have aimed low for inflation this year on the back of falling goods inflation. In turn, this is because we expect the uplift from imported inflation (on the back of the weakening in sterling following the Brexit vote) to fade increasingly throughout this year. Some components of inflation are already showing confirmation that this is happening (chart 1) and we expect plenty more where that came from.

Where our view diverges with that of the consensus and the Bank of England is the outlook for services inflation. Others take the view that faster services inflation will largely offset the effect of slowing goods inflation, leading to only a modest slowdown in overall inflation. In turn, this is based on the lazy assumption that just because wage inflation is accelerating, so too will services inflation. However, if you drill down into exactly what makes up services inflation, it is less compelling to assume that wages will drive services inflation higher—at least this year. In particular, there are a number of pre-programmed price cuts or known knowns that we expect to keep services inflation relatively muted again this year.

As a result, our forecast for inflation is between  $\frac{1}{4}$  and  $\frac{1}{2}$  percentage points below most other forecasts. We expect CPI inflation to slow to  $1\frac{3}{4}\%$  by the end of 2018—a small margin below the BoE's 2% target and around  $\frac{3}{4}\%$  percentage points below the Bank's forecast. We expect inflation to drift broadly sideways during 2019.

In turn, that circles back to why we expect a bumpy ride between now and the November BoE decision. On paper, lower-than-expected CPI inflation argues for no further BoE rate hikes after the May meeting. However, there are a number of reasons why the Bank should hike. We expect the Bank to look through the components that artificially hold inflation lower (government implemented cuts in rent, the unwind of last year's rise in fx-sensitive components, etc.). Moreover, higher inflation killed growth last year, holding back BoE rate hikes. We expect the opposite this year; lower inflation leading to faster growth and boosting the case for higher rates.

## BREXIT / PUBLIC FINANCES / POLITICS

The UK and EU have reached an agreement for a 'transition deal'. This essentially means that the UK's trading and legal arrangements with the rest of the EU will stay largely the same for the first 2 years after the UK has formally left the EU in March 2019. While it has been labelled a 'transition deal', we do not yet know the end-point that we are transitioning towards. We still do not know what kind of trading relationship the UK will have with the rest of the EU after that transition deal has expired. Our assumption is that there will be a relatively smooth exit from the EU, with a bespoke trade deal covering both goods and services between the two economies. Compromises are likely (such as fish for finance) and we also suspect that the UK will agree to pay money into the EU budget to help secure access to EU markets.

Overall, we suspect that UK growth will suffer in light of its departure from the EU, at least initially. Thus far the economy has been dealing with the indirect consequences of Brexit, namely the squeeze on real incomes as inflation surged on the back of the weaker GBP. This should ultimately prove transitory. Meanwhile, the more direct consequences of Brexit are yet to materialise fully since the UK hasn't left the EU yet. As much as the UK Government aspires to a frictionless border with the rest of the EU, there are likely to be logjams and administrative barriers which prove to be an impediment to output. Investment is likely to be a double edged sword. Outward facing companies could relocate away from the UK, damaging growth. Meanwhile, it is also possible that inward facing companies invest more as the UK has to become more self-sufficient in certain industries as sources of goods from abroad prove less plentiful. Overall, we suspect that trend output in the UK has been reduced to around 1.6% y/y from close to 2% y/y previously.

While the advocates of a hard Brexit will be disappointed at the extent of the concessions offered to the EU, we doubt whether there will be a leadership challenge or (another) General Election in the immediate year or two. While there is a risk of a leadership contest (October being most likely) this is not our base case. Nonetheless, we fully expect media coverage to fan the flames of market uncertainty.

The public finances have continued to perform better than expected. If this trend continues throughout 2018, the Chancellor has pledged to use any windfall to increase public spending. The pace of tightening in the public finances is already projected to be relatively mild over the coming years and the drag on growth is negligible.

## Eurozone

- Eurozone GDP growth should outperform the cautious consensus expectations, despite some softening in upstream indicators.
- Core inflation has been stubbornly muted; though narrowing in slack suggests that underlying inflation should accelerate over the course of this year.
- We expect the ECB to terminate its asset purchase programme at the end of the current instalment which is scheduled to run until September.

## GROWTH

There has been some moderation in upstream indicators of eurozone growth of late. However, we believe that the emphasis should be “less hot” not “cooling off”. In particular, while surveys such as the Ifo have lost altitude in recent months, the declines have been from multi-decade highs. That said, while the consensus outlook for growth has risen towards our upbeat forecast, we have been a little disappointed by the % q/q pace of GDP growth readings of late. The relationships between growth and the upstream survey indicators point to q/q growth readings of close to 1% q/q, yet the actual readings have been just above 0.5% q/q. That is still a very respectable pace of growth, just a little short of what the survey had suggested was possible.

One positive development in recent months has been the improvement in the CPB world trade volumes index. Despite gloomy headlines regarding trade wars, etc., the CPB index has risen abruptly, pointing to stronger export growth, at least temporarily (chart 2). Meanwhile, the manufacturing PMI remains very elevated, pointing to ongoing strength in investment. Likewise, strong consumer confidence coupled with falling inflation (which should have boosted real incomes) bodes well for household consumption.

By country, Germany continues to lead the charge, with growth of almost 3% y/y by the end of 2017. Spain grew fractionally faster, but accounts for a smaller share of overall eurozone GDP. The main laggard seems to be Italy, with growth of just 1.5% y/y during 2017.

Overall, we expect GDP growth of 2½% y/y this year, slightly faster than the latest ECB projection. We expect a slight moderation next year down to 2¼% y/y. While growth is good, there is still a sizeable margin of spare capacity to make up for years of sub-par output. Hence robust growth represents making up for lost time rather than posing a risk of overheating.

## INFLATION

Headline inflation slowed largely as expected over the past 12 months, hitting a low-point of 1.1% y/y in February. In turn, much of the slowdown has been related to base effects—which are now largely exhausted. Petrol price base effects should help to boost headline inflation between now and July, while food price base effects should be a small drag.

## CONTACTS

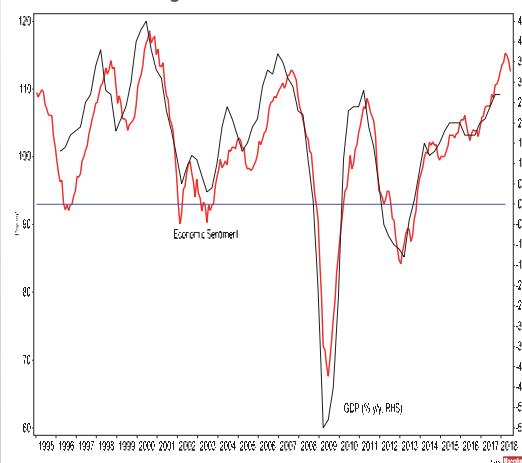
**Alan Clarke, Head of European Fixed Income Strategy**  
 44.207.826.5986 (London)  
 Fixed Income Strategy  
[alan.clarke@scotiabank.com](mailto:alan.clarke@scotiabank.com)

Eurozone	2017	2018f	2019f
Real GDP (annual % change)	2.5	2.5	2.3
CPI (y/y %, eop)	1.4	1.5	1.5
Central bank policy rate (% , eop)	0.00	0.00	0.50
Euro (EURUSD, eop)	1.20	1.30	1.35

Source: Scotiabank Economics.

Chart 1

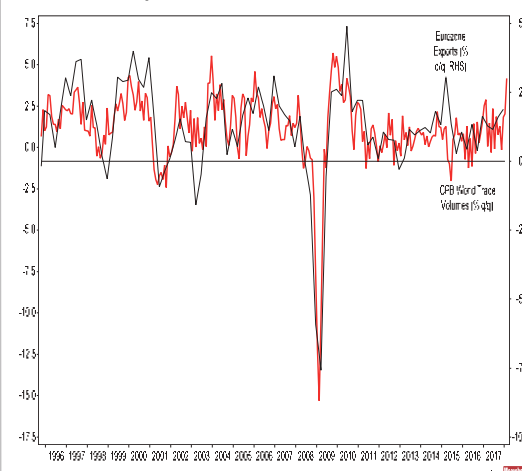
Eurozone GDP growth vs economic sentiment



Sources: Macrobond, Scotiabank.

Chart 2

Eurozone exports vs CPB world trade volumes



Sources: Macrobond, Scotiabank.



Essentially, the above is largely noise, and the ECB should care more about what is happening to underlying inflation. In this context, there is relatively little new news. Core inflation 'should' drift higher over the coming year, thanks to the fall in the unemployment relative to the NAIRU (chart 3) and the more generalised erosion of slack. However, thus far there has been precious little evidence that core inflation is gaining traction, currently standing at 1% y/y.

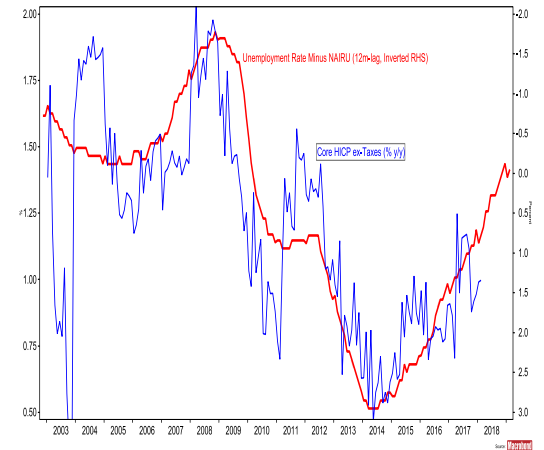
Overall, we expect headline CPI inflation to reside between 1½ and 1¾ by end-2018, with further gradual upside during 2019. Most of the acceleration in inflation is likely to be due to non-core components, with underlying inflation gaining only around ¼% over the course of this year to hit 1¼% by end-year.

### MONETARY POLICY

The main dilemma on the monetary policy front is whether the ECB makes no further asset purchases once the current round of QE comes to an end in September, or whether the programme is phased out more gradually. While continued muted underlying inflation does provide some support for a further expansion in asset purchases, we doubt that the ECB can continue to loosen monetary policy against a backdrop where the Fed and BoE are firmly in hiking mode. Hence we expect the ECB asset purchases to come to an end in September when this latest instalment has been exhausted.

Chart 3

Eurozone core inflation vs unemployment relative to the NAIRU



Sources: Macrobond, Scotiabank.

## China

- Chinese leadership signals further structural reforms and economic liberalization in the near term.
- Economic prospects are underpinned by services sector momentum and the Chinese consumer as credit-fuelled investment slows down; the US–China trade dispute poses a downside risk to growth.
- Prudent and neutral monetary policy remains the foundation for stable financial conditions.

### POLICY OUTLOOK

The Chinese society and the economy will evolve according to President Xi Jinping's vision for years to come. The National People's Congress, China's annual parliament held in March, removed the two-term limit for the country's president and vice president, allowing President Xi Jinping to stay in power indefinitely. Meanwhile, the parliament named the former leader of China's rigorous anti-corruption campaign, Wang Qishan, as Vice President. While we assess that President Xi's structural reform agenda and his achievements so far are encouraging and point to further modernization and opening up of the economy, we cautiously note that generally speaking authoritarianism rarely leads to higher-quality policymaking over the longer term.

We expect broad policy continuity over the coming months and years, with the Chinese leadership's agenda centered on structural reforms, preserving the socialist thought, and strengthening China's global role. The March appointment of President Xi's top economic adviser Liu He as one of the four Vice Premiers to Premier Li Keqiang implies a strong near-term focus on the first objective. Mr. Liu—who is responsible for overseeing the economy and the financial sector—has implied that significant market liberalization measures will be implemented in the near term. We believe that Mr. Liu will prioritize financial sector reforms to reduce systemic risks given that a solid banking system is a prerequisite for further successful economic liberalization. In addition, he will likely pay particular attention to reforming inefficient state-owned enterprises (SOEs) as well as to advancing China's industrial policies with further reductions in overcapacity. Beyond these domestic responsibilities, Mr. Liu will also look after China's relations with the US, a key task that will have significant implications worldwide, both in the very near term due to ongoing trade tensions and for years to come as China's economic might continues to approach that of the US (chart 1).

### ECONOMIC GROWTH OUTLOOK

China's economic outlook is rather favourable. While growth will decelerate gradually in 2018–19, we expect to see higher-quality and more sustainable rates of expansion. The 2018 real GDP growth target was unveiled during the National People's Congress in March; China will aim for 6.5% expansion this year. While the goal remained unchanged from last year, this time around the government's intention to exceed the target if possible was removed. We maintain our forecast that China's real GDP gains will meet the official target this year, with growth decelerating further to 6.2% next year. Last year, output increased by 6.9%.

### CONTACTS

**Tuuli McCully**  
65.6305.8313 (Singapore)  
Scotiabank Economics  
[tuuli.mccully@scotiabank.com](mailto:tuuli.mccully@scotiabank.com)

China	2017	2018f	2019f
Real GDP (annual % change)	6.9	6.5	6.2
CPI (y/y %, eop)	1.8	2.3	2.5
Central bank policy rate (% , eop)	4.35	4.35	4.85
Chinese yuan (USDCNY, eop)	6.51	6.30	6.10

Source: Scotiabank Economics.

Chart 1

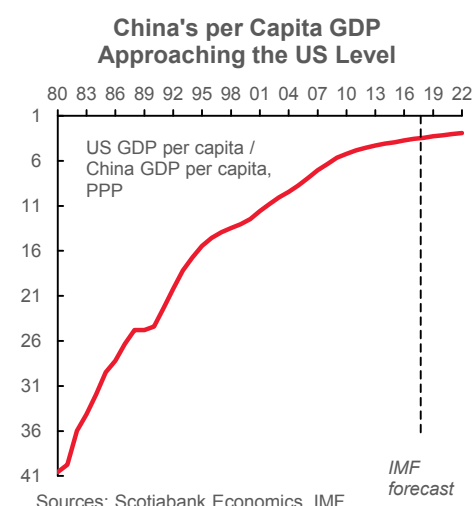
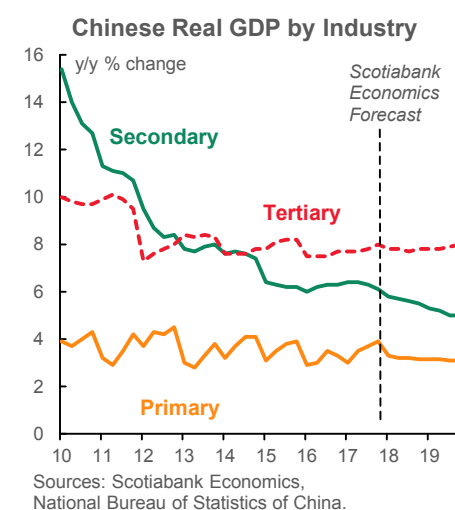


Chart 2



Meanwhile, the Chinese economy's structural transition continues, with the services sector becoming an increasingly important source of growth (chart 2). Indeed in 2017, services accounted for 52% of the economy while the industrial sector's share declined to 40%. On the back of continued economic development, we expect the former to maintain close to 8% y/y expansion over the next two years while the latter's annual output gains are set to decelerate toward 5% by the end of 2019.

The key forces behind China's economic growth deceleration are less fiscal stimulus and weaker credit-fueled investment momentum. In March, the country's legislature announced a reduction in China's 2018 fiscal deficit target to 2.6% of GDP from 3.0% last year, implying that public spending will not contribute to growth as much as before. Meanwhile, Chinese policymakers will continue to focus on gradually deleveraging the domestic economy, which has led to slower growth in fixed capital investment (chart 3). Indeed, the country's credit impulse—the change in new credit issued as % of GDP—has been negative in recent months, which will translate to smaller real GDP gains in the near term. Despite the aforementioned brakes in China's economic momentum, household spending growth will remain robust on the back of rising incomes and an expanding middle class. Indeed, the economy is shifting away from the investment-driven growth model to one powered by the consumer.

Solid global demand is supporting Chinese exporters and the overall growth outlook. Favourable external sector performance is providing Chinese policymakers with elbow room to focus on addressing domestic imbalances—such as excess credit growth—without real GDP growth slowing dramatically. However, we acknowledge the downside risk to economic growth stemming from ongoing trade tensions between the US and China. Following the implementation of tariffs on imported steel and aluminum—and the Chinese retaliation—the US administration has indicated that it is considering adding 25% duties on up to USD150 bn worth of imports from China. Should such tariffs be truly applied, they would affect a third of all Chinese shipments to the US (and 6.2% of China's global exports). Nevertheless, the relative impact on the US would be more significant if China retaliated in kind: an implementation of additional levies on USD150 bn worth of US exports to China would virtually cover all US merchandise sales to China—which totalled USD155 bn in 2017—and 10% of the US's global exports. With its centrally-planned economy, China could retaliate in other ways as well, including via foreign exchange intervention, SOE guidelines for doing business with US companies, or additional direct regulations for American firms operating in China. Given that there are no winners in a trade war, we assess that policymakers on both sides will have a strong incentive for solving the trade dispute through dialogue over the coming months.

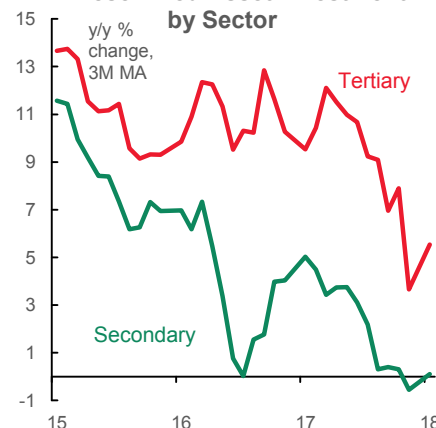
## INFLATION AND MONETARY POLICY OUTLOOK

The People's Bank of China (PBoC) has a new leader; former Vice Governor Yi Gang replaced retiring Governor Zhou Xiaochuan in March. Governor Yi is known as a proponent of the PBoC's efforts to reduce financial risks; accordingly, monetary policy continuity and sustained deleveraging efforts can be expected. Since taking office, Governor Yi has re-emphasized that the central bank's monetary policy stance will remain "prudent and neutral". The PBoC will avoid any sudden changes in monetary conditions, intending to maintain a favourable and stable financial environment that will allow Chinese authorities to push ahead with structural reforms. Indeed, Governor Yi has promised a further opening of the financial sector.

China's consumer price inflation jumped in early 2018 (chart 4) reflecting the changing timing of the Chinese New Year, but has since eased to slightly above 2% y/y. We expect inflation to close the year at 2½% y/y. The PBoC is expected to leave the official benchmark one-year loan and deposit rates unchanged in 2018 (at 4.35% and 1.50%, respectively), though the central bank will likely continue to raise the 7-day reverse repo rate—the PBoC's de-facto policy rate—cautiously over the coming months. The most recent hike of 5 basis points to 2.55% took place in March following the US Federal Reserve's policy rate increase. Despite gradual tightening, China's monetary conditions are set to remain relatively loose and growth-supportive overall through 2018.

Chart 3

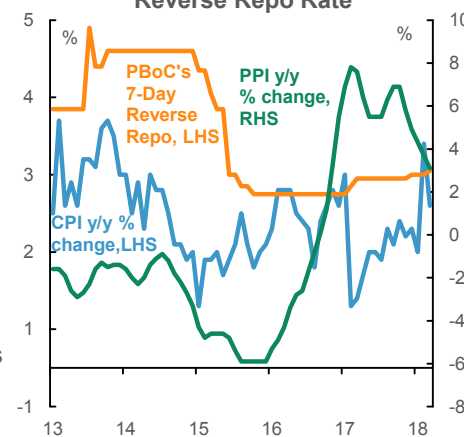
### Chinese Fixed Asset Investment by Sector



Sources: Scotiabank Economics, National Bureau of Statistics of China.

Chart 4

### Inflation and PBoC's 7-Day Reverse Repo Rate



Sources: Scotiabank Economics, Bloomberg.

## Japan

- Japan is enjoying broad-based economic growth momentum.
- Absent wage gains will keep inflation low and monetary policy loose.

### ECONOMIC GROWTH OUTLOOK

The Japanese economy is performing strongly by historical standards. Real GDP grew by 1.7% in 2017, buttressed by both domestic and external demand. In 2018–19, further labour market tightness (chart 1) will support consumer spending even though real wages have failed to nudge higher (chart 2). Meanwhile, output will be bolstered by growth-oriented fiscal policies and companies' healthy balance sheets that lift business investment prospects. The main downside risk to Japan's outlook is a further escalation of US-initiated trade tensions. Japan is the US's ally, yet it is not exempt from the US import tariffs on steel and aluminum. Moreover, Japan is deeply integrated into Asian supply chains—more than half of its exports consist of intermediates—hence it is also indirectly exposed to the US–China tensions. China and the US are Japan's most important export markets, together purchasing around 40% of the nation's shipments abroad, equivalent to almost 6% of Japanese GDP. While we continue to monitor the trade-related risks, we expect the country's real GDP to expand by 1.3% in 2018, faster than its potential. In 2019, growth will decelerate to a more sustainable level of 0.9% y/y reflecting cyclical factors and the scheduled consumption tax rate increase in October 2019.

### INFLATION AND MONETARY POLICY OUTLOOK

Japanese headline inflation has been on the rise in recent months, reaching 1.5% y/y in February. The pickup has been driven by higher food and fuel prices. The CPI excluding fresh food—the Bank of Japan's (BoJ) preferred measure—is currently at 1.0% y/y (chart 2) while the measure that leaves out both food and fuel remains low at 0.5% y/y, highlighting the absence of demand-driven inflation. We estimate that headline inflation will peak near the current level, before base effects will bring the rate lower in the second half of 2018. The recent strength of the Japanese yen is creating further headwinds for the inflation outlook. Hence, the BoJ's goal of reaching 2% y/y inflation in a sustainable manner is not expected to be met in 2018 unless wage gains—or global energy prices—pick up in a more notable fashion. We forecast the headline rate to close 2018 at 1.1% y/y. The hike in the consumption tax rate will temporarily take inflation above 2% in late 2019.

The BoJ will likely continue its “Quantitative and Qualitative Monetary Easing with Yield Curve Control” through 2019. Governor Kuroda had stated that the BoJ will start talking about policy exit in FY2019 (April 2019–March 2020), given that it forecasts inflation to reach the 2% target during that fiscal year. However, we note that a discussion regarding an exit may not result in actual policy tightening. Two factors underpin our view: 1) the consumption tax rate hike (from 8% to 10%) is planned for late-2019 and it will be the key reason for inflation reaching the 2% target—instead of stronger demand-driven price pressures; and 2) consumption will likely be severely hit by the rate hike, in line with developments in 2014 when the tax rate was raised from 5% to 8% and the economy dipped into a brief recession. Recessionary conditions do not form an environment where the BoJ would be tightening monetary policy.

### CONTACTS

**Tuuli McCully**  
65.6305.8313 (Singapore)  
Scotiabank Economics  
[tuuli.mccully@scotiabank.com](mailto:tuuli.mccully@scotiabank.com)

Japan	2017	2018f	2019f
Real GDP (annual % change)	1.7	1.3	0.9
CPI (y/y %, eop)	1.0	1.1	2.3
Central bank policy rate (% eop)	-0.10	-0.10	-0.10
Japanese yen (USDJPY, eop)	113	110	105

Source: Scotiabank Economics.

Chart 1

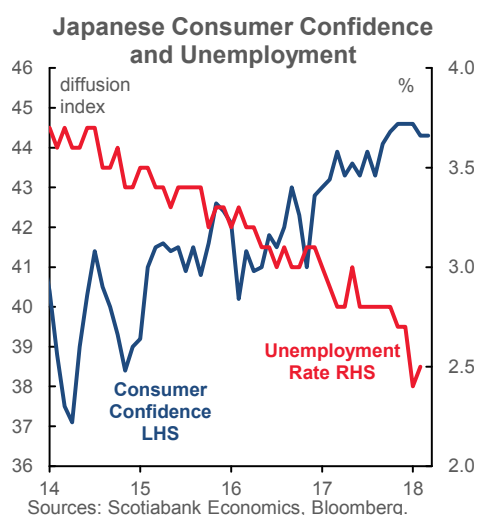
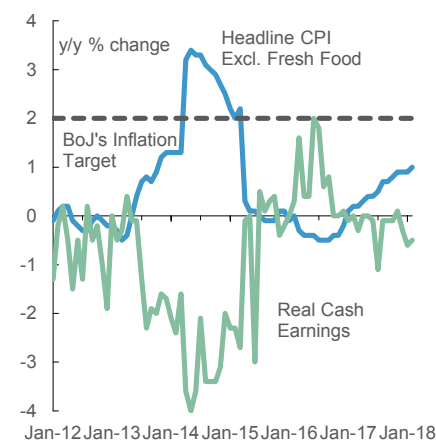


Chart 2

### Japan's Inflation and Wage Dynamics



## India

- **Economic momentum driven by strengthening domestic demand.**
- **Monetary policy to stay unchanged in 2018 with inflation within target.**

### ECONOMIC GROWTH OUTLOOK

The Indian economy is on the mend and it has emerged as the regional growth outperformer. Output grew by 7.2% y/y in the fourth quarter of 2017 following an average gain of 6.1% y/y in the first three quarters of the year (chart 1). Domestic demand is—and will continue to be—the key driver of activity. Meanwhile, the fact that the Indian economy is less export-oriented than its regional peers is sheltering it from rising US protectionism. We forecast India's real GDP to grow by 7½% y/y over the next two years following a 6.4% advance in 2017.

We assess that strengthening business conditions in India will support better income and employment prospects, underpinning household sentiment and spending over the coming quarters. Meanwhile, the country's fiscal policy stance remains growth-supportive with a focus on the rural economy and infrastructure. Indeed, some fiscal slippage is evident in the Union Budget for FY2018–19 (April–March), ahead of Indian general elections in 2019.

The Indian economy is well-positioned to benefit from the medium- to longer-term impacts of recently implemented reforms after the short-term adverse effects dissipate further. A tax reform, a new bankruptcy code, bank recapitalization, and efforts to formalize the economy are examples of the government's drive to improve the country's business environment. We assess that such efforts will translate to a sustained pick-up in fixed investment, improving the country's GDP growth prospects. Nevertheless, downside risks to the economy's outlook also lie within the realm of investment; the confidence shock stemming from recently discovered fraudulence in the public sector banking system may result in weaker credit growth, potentially constraining fixed capital formation.

### INFLATION AND MONETARY POLICY OUTLOOK

The Reserve Bank of India's (RBI) monetary policy stance will remain growth-supportive over the coming quarters; we expect the benchmark repurchase rate to be left unchanged at 6.0% through 2018 with a cautious tightening cycle likely to begin in the first quarter of 2019 (chart 2). India's headline inflation is currently hovering near 4½% y/y, while core inflation is stronger at slightly above 5% y/y; increasing housing costs are the key driver of core inflation, reflecting the impact of higher housing rent allowances given to government employees. We estimate that headline inflation will pick up slightly over the coming months—peaking at 5.8% in June 2018—before easing to 4.6% y/y by year-end. The RBI's Monetary Policy Committee has recently turned slightly more hawkish, highlighting various upside risks to inflation. While we acknowledge such risks—e.g. price pressures resulting from fiscal slippage or potentially higher food costs should rainfall during the approaching southwest monsoon (June–September) be below normal—we forecast India's headline inflation to remain within the RBI's medium-term target of 4% ±2% y/y through our forecast horizon.

### CONTACTS

**Tuuli McCully**  
65.6305.8313 (Singapore)  
Scotiabank Economics  
[tuuli.mccully@scotiabank.com](mailto:tuuli.mccully@scotiabank.com)

India	2017	2018f	2019f
Real GDP (annual % change)	6.4	7.4	7.5
CPI (y/y %, eop)	5.2	4.6	5.7
Central bank policy rate (% eop)	6.00	6.00	6.50
Indian rupee (USDINR, eop)	63.9	64.0	63.0

Source: Scotiabank Economics.

Chart 1

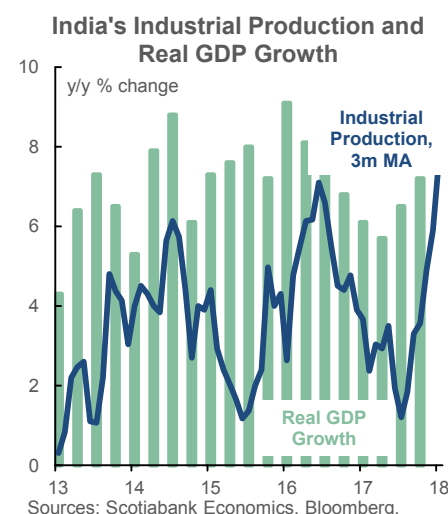
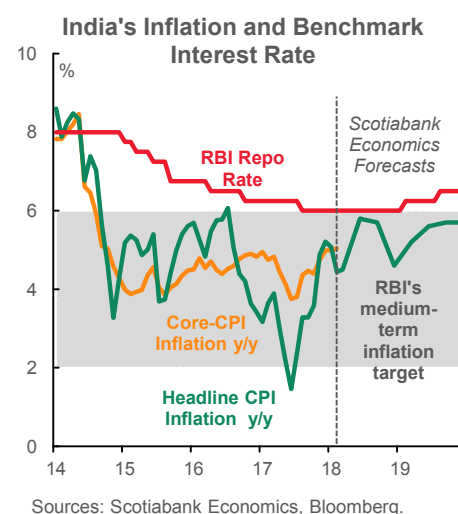


Chart 2





## South Korea

- **Global trade tensions cloud the South Korean outlook, yet domestic demand remains solid.**
- **Further cautious monetary tightening in sight on the back of gradually accelerating inflation.**

### ECONOMIC GROWTH OUTLOOK

Rising trade protectionism globally represents the main downside risk for the export-oriented South Korean economy, which is benefiting from robust global demand, particularly for semiconductors. The nation's exports were up by more than 14% y/y (in USD terms) over the past 12 months. Encouragingly, near-term uncertainties have eased somewhat as trade negotiators from the US and South Korea have agreed on the latter nation's exemption from US steel import tariffs as well as on an amendment of the KORUS FTA, the bilateral free trade agreement between the two countries. Over 13% of South Korea's goods exports are shipped to the US, equivalent to more than 5% of the country's GDP. In addition to the direct exposure to US demand, South Korean exports are tightly integrated into the global supply chains—including those with China and NAFTA—and they would be adversely affected should global trade tensions spread or intensify.

South Korean business confidence indicators remain robust, at least for the time being, despite elevated trade-related risks. Indeed, the economy is performing well with activity driven by domestic demand—consumer spending, fixed investment, and public spending. Rising incomes and sound consumer confidence point to maintained household spending growth over the coming quarters. Meanwhile, accommodative monetary conditions—despite gradual normalization—will underpin investment, which has been robust especially in the IT sector. Additionally, the government's 2018 budget maintains a supportive fiscal policy stance. We expect the nation's output to rise by around 2.8% y/y in 2018–19 following a 3.1% expansion in 2017 (chart 1).

### INFLATION AND MONETARY POLICY OUTLOOK

The Bank of Korea (BoK) will take a cautious approach to monetary tightening over the coming quarters as external risks—related to trade protectionism, geopolitics, and monetary policy changes in major economies—persist. The 7-Day Repo Rate was raised by 25 basis points (bps) to 1.50% in November 2017, marking the BoK's first rate hike in over six years. However, with domestic demand showing signs of strength, the economy's output gap having turned positive and inflationary pressures building, further gradual monetary tightening is in store.

South Korea's headline inflation is expected to climb gradually from the current level of 1½ y/y (chart 2) on the back of strong domestic demand. We expect it to reach the BoK's 2% inflation target in the second half of 2018. The rising inflation trajectory combined with the fact that BoK Governor Lee has been reappointed for a second term—which implies continuity of a cautious policy tightening bias—will likely prompt the BoK to raise the benchmark rate by 25 bps to 1.75% relatively soon, most likely in the third quarter of 2018.

### CONTACTS

**Tuuli McCully**  
65.6305.8313 (Singapore)  
Scotiabank Economics  
[tuuli.mccully@scotiabank.com](mailto:tuuli.mccully@scotiabank.com)

South Korea	2017	2018f	2019f
Real GDP (annual % change)	3.1	2.8	2.8
CPI (y/y %, eop)	1.5	2.1	2.5
Central bank policy rate (% , eop)	1.50	2.00	2.25
South Korean won (USDKRW, eop)	1,067	1,040	1,020

Source: Scotiabank Economics.

Chart 1

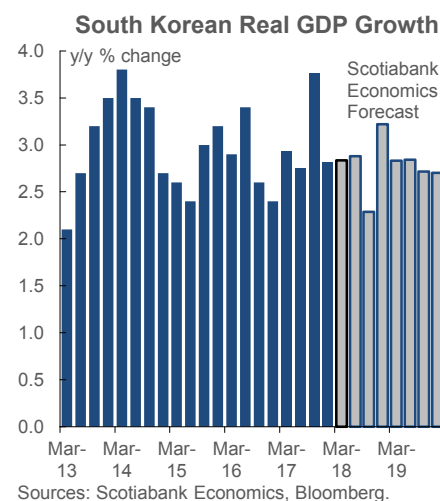
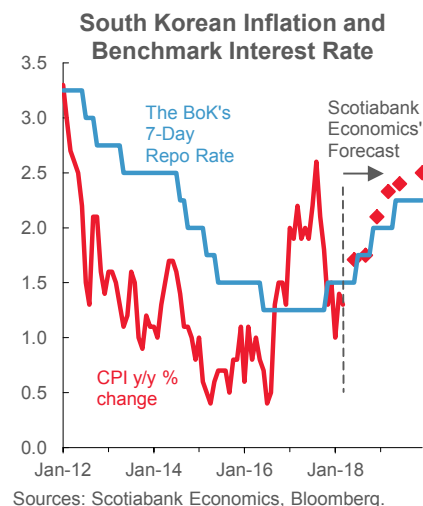


Chart 2



## Australia

- **Australia's domestic demand will be supported by rising non-mining investment, particularly infrastructure.**
- **The divergent trends of rising protectionism in the US and deeper regional integration will shape Australia's external sector outlook.**
- **Solid employment gains will eventually translate to higher wages and modest inflationary pressures, prompting the RBA to start tightening monetary policy towards the end of the year.**

### ECONOMIC GROWTH OUTLOOK

The Australian economy's prospects are sound for 2018–19. We expect the country's real GDP growth to average 2.6% y/y over the next two years, roughly in line with the nation's potential (chart 1). In 2017 as a whole, the economy expanded by 2.3%. On the domestic side of the economy, business activity and consumer confidence indicators are solid (chart 2), pointing to continued employment gains, business investment, and consumer spending. Public infrastructure investment projects will provide support to growth momentum while they further improve the economy's productivity and longer-term outlook.

The outlook for the external side of the Australian economy will be impacted by two prevalent trends in world trade: 1) rising protectionism in the US and 2) further integration efforts in the rest of the world. As for the former, Australia is not a major exporter of steel into the US yet it is currently except from the US steel import tariffs imposed on March 23. Nevertheless, Australia is an important exporter of iron ore—a key steel-making ingredient—to China, whose export products will be facing higher US duties. Nevertheless, given that around 85% of China's steel production is consumed domestically, e.g. in real estate and infrastructure, the secondary impact on Australia stemming from the US tariffs will likely be relatively small. The main impact on the Australian economy from an escalation in global trade frictions will likely come through financial markets and Australia's terms of trade as commodity prices and the Australian dollar react to protectionist policies. While we expect the prices of iron ore and coal to decline over our forecast horizon, higher resource export volumes will provide the economy some counterbalance.

As for the second trend in world trade—deeper integration—Australia will feel the impact of shifting global economic power from West to East as the US turns inwards and Asia-Pacific continues to promote freer international trade. Australia is part of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which was signed by the 11 participating countries in early March and is awaiting ratification by its members. Following the US withdrawal from the original pact, Australia was a strong supporter of reviving the agreement. Additionally, the country is part of the Regional Comprehensive Economic Partnership (RCEP), which includes ten Southeast Asian nations (that are part of the ASEAN), as well as China, Japan, India, South Korea, and New Zealand. The RCEP has yet to be signed. Given that Asia will continue to be the global

### CONTACTS

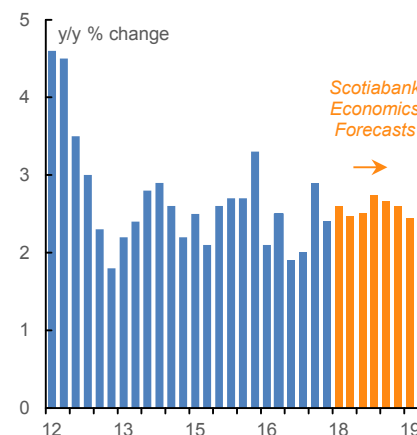
**Tuuli McCully**  
65.6305.8313 (Singapore)  
Scotiabank Economics  
[tuuli.mccully@scotiabank.com](mailto:tuuli.mccully@scotiabank.com)

Australia	2017	2018f	2019f
Real GDP (annual % change)	2.3	2.6	2.5
CPI (y/y %, eop)	1.9	2.2	2.6
Central bank policy rate (% eop)	1.50	1.75	2.25
Australian dollar (AUDUSD, eop)	0.78	0.80	0.82

Source: Scotiabank Economics.

Chart 1

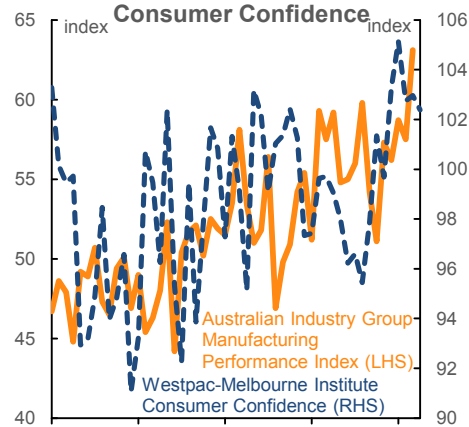
#### Australia's Real GDP Growth



Sources: Scotiabank Economics, Bloomberg.

Chart 2

#### Manufacturing Performance & Consumer Confidence



Sources: Scotiabank Economics, Bloomberg.

economic growth outperformer for years to come, we believe that deeper Asian integration will benefit the Australian economy over the coming years.

### INFLATION AND MONETARY POLICY OUTLOOK

Australian monetary conditions are expected to remain growth-supportive over the coming quarters. Following the Reserve Bank of Australia's (RBA) April 3 monetary policy meeting, the Cash Rate Target was left at 1.50%. The RBA's policymakers expect that headline inflation will accelerate gradually over the course of 2018 to slightly above 2% y/y; inflation picked up a notch to 1.9% y/y in the fourth quarter of 2017 from 1.8% in the third quarter. The RBA's authorities also assess that tighter credit conditions and recently implemented supervisory measures have eased the build-up of risks related to the housing market and households' financial vulnerabilities.

We maintain our forecast that the RBA will likely begin a cautious monetary normalization phase in the final quarter of 2018 on the back of expected gradual strengthening in wage pressures that will feed demand-driven inflation. Moreover, movements in commodity prices—particularly that of iron ore following the US steel tariff announcement—and their impact on the Australian dollar will influence Australia's inflationary developments over the coming quarters. While we estimate that price pressures will intensify somewhat, the inflation rate will likely hover below the mid-point of the RBA's 2–3% target range through 2018. Price gains will likely strengthen in 2019, reaching 2½% y/y by the end of the year (chart 3).

Australian wage inflation remains subdued; wages rose by 2.1% y/y in nominal terms in the fourth quarter of 2017, barely exceeding the nation's inflation rate. While we continue to monitor employment developments closely—and their impact on wages—over the coming months, we assess the Australian labour market is showing notable signs of strength. Full-time job gains over the preceding 12-month period exceeded 25,000 each month between September 2017 and February 2018 (chart 4), an advance that Australia has not witnessed since the beginning of the data series in 1978. Surveys on companies' hiring intentions and job advertisements point to further solid employment gains over the coming months, which should feed modest wage pressures in the economy.

Chart 3

#### Australia's Headline Inflation, Wage Inflation & Policy Interest Rate

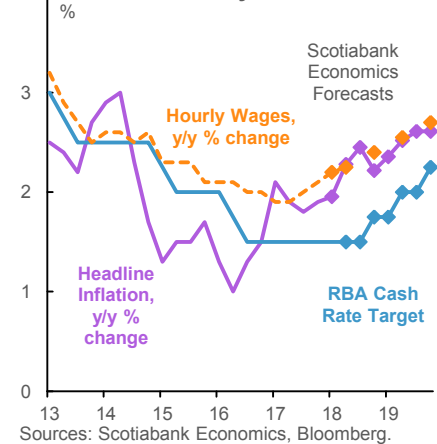
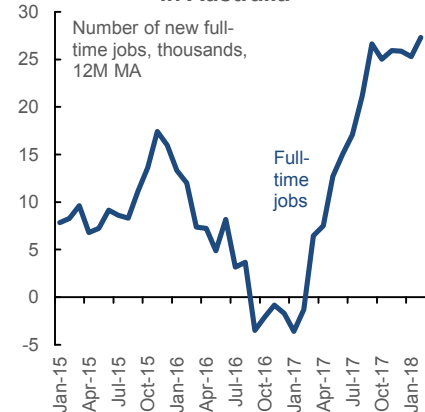


Chart 4

#### Full-Time Employment Change in Australia



## Commodities

- Commodities are enjoying the tailwinds of strong global economic growth and robust industrial demand for raw materials (chart 1).
- The oil outlook has firmed and WTI crude prices are now expected to average \$65/bbl in 2018 before rising to average \$68/bbl in 2019, a roughly 15% increase relative to our January outlook.
- Base metals are still anticipated to experience the strongest non-oil pricing environment on a combination of strong demand and increasingly tight mine supply.
- Bulk commodities are expected to weaken along with a slowing Chinese construction market, while gold remains range-bound, caught between rising rates and a weakening US dollar.

### OIL MARKET OUTLOOK TIGHTER, WTI SEEN ABOVE \$70 IN EARLY 2019

The oil market continues to tighten and WTI crude prices are now expected to average \$65/bbl in 2018 (up from \$57 in our January outlook) and \$68/bbl in 2019 (from \$60/bbl), with Brent maintaining a steady \$5/bbl premium to WTI. We are also now including a forecast for Western Canadian Select (WCS) crude, which is expected to see a wider discount of \$22/bbl and \$20/bbl under WTI in 2018 and 2019, respectively, given takeaway capacity constraints. Global crude balances are only expected to get tighter going forward and we anticipate supply deficits through the end of 2019 (chart 2) on the back of strong global demand and further production restraint from OPEC+, offsetting aggressive US supply growth. It is also important to note that while our near-term crude price forecast has risen by roughly 15%, our long-term price forecast remains unchanged at \$65/bbl WTI; prices are expected to gradually decline after peaking in early 2019 as supply becomes more readily available. Current physical market tightness is complemented by mounting supply-side risks including the potential reversal of the Iranian nuclear deal and sanctions-related instability in Venezuela.

### US Shale: Largest Source of Global Supply Growth (By Far) Going Forward

The United States is forecast to remain the single-largest source of global supply growth in 2018–19. Against strong global petroleum demand growth of 1.5–1.7 MMbpd y/y anticipated over the next two years, the US shale patch is expected to ratchet up production by 1.3 MMbpd y/y through 2018–2019, near-record growth relative to almost all historical comparisons. This feverish pace of growth will leave little room for other producers to increase supply, but virtually all other producing regions outside of the US, Canada, and OPEC+ are expected to experience flat-to-declining output through the end of our forecast horizon.

US crude output growth has averaged 1.1 MMbpd y/y year-to-date and WTI crude prices in excess of \$60/bbl are expected to stoke further investment—a survey conducted by the Dallas Federal Reserve indicates that most tight oil regions are currently breaking even between \$47–\$55/bbl WTI, well below where we expect prices to average over the coming years. However, the pace of US supply growth will be largely governed by the capacity of supporting industries and not simply the

## CONTACTS

Rory Johnston  
416.862.3908  
Scotiabank Economics  
rory.johnston@scotiabank.com

Chart 1

### Energy & Base Metals Leading Commodities Higher

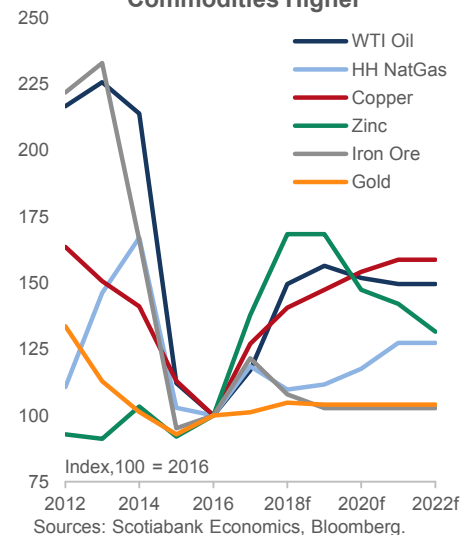
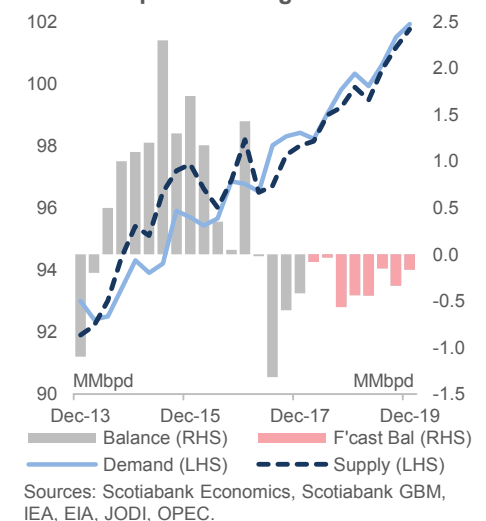


Chart 2

### Persistent Oil Supply Deficits Anticipated Through End-2019



technical capacity of upstream producers. The demand for labour, services such as pressure pumping to complete wells, as well as necessary materials like sand used as proppant have pushed input prices—and thus production costs—higher. While we anticipate moderate cost inflation in the US shale patch, there are also early signs that the US shale patch's "value over volume" and "fit for \$50" strategies have more staying power than many feared, with incremental 2018 cash flow estimates far outpacing anticipated capex growth as cash is routed to reward investors or pay off debt.

The breakneck pace of growth has also strained regional takeaway capacity, which has depressed netbacks for producers and limited the stimulus of higher global crude prices. The most visible instance of this infrastructure strain is the spread between WTI and Brent, which we anticipate to fluctuate between \$2–7/bbl as supply periodically overwhelms lagged pipeline capacity additions between Cushing, OK and the USGC. We also see discounts emerging between WTI (priced at Cushing) and Midland WTI contracts, which better reflect prices realized by producers in the prolific Permian basin (chart 3) and will add another hurdle to further production gains.

### **OPEC+ To Maintain Supply Discipline, Gradually Ease Output Caps Through '19**

The efforts of OPEC+ to accelerate the rebalancing of the global oil market appear largely successful, with OECD commercial petroleum inventories falling rapidly following start of combined production restraint in January 2017. OPEC+ compliance has been impressive by historical comparison and the group is already communicating that they intend to formally extend the agreement—currently scheduled to conclude in December—through at least mid-2019. OECD inventories are now largely in line with the 5-year average level mark first enumerated by OPEC+ as their measure for market balance, with current communication from the group indicating an appetite for further production restrictions—other "balanced market" measures have been suggested to adjust for the high-inventory period of 2015–17, including a 7-year average, excluding the latest glut period, or making an explicit link with global demand (i.e. demand days).

We believe that OPEC+ will maintain its current course of supply discipline well beyond 2019 and Riyadh and Moscow have been publicly discussing the possibility of extending formal OPEC+ cooperation for 10–20 years. However, cooperation doesn't necessarily mean maintaining current production caps—we expect that global consumption growth over the next 18 months will outstrip non-OPEC+ output gains and facilitate an easing of OPEC+ supply caps, likely lowering the volume of withheld barrels to 0.9 MMbpd by the end of 2019 from an initial level of 1.8 MMbpd (chart 4).

### **Canadian Crude Discounts Widen On Insufficient Pipeline Capacity**

While global crude benchmarks continue to move higher, the discount borne by Canada's Western Canadian Select (WCS) has widened significantly on the back of insufficient pipeline capacity (chart 5). **We expect that demand for takeaway capacity will outstrip supply through end-decade and that the WCS discount will remain wide at \$22/bbl under WTI in 2018 before narrowing slightly to \$20/bbl in 2019.**

The challenge facing the Western Canadian oil patch can be visualized as a tug-of-war between steadily rising production and lagged, jerky pipeline additions. Over the coming year we expect see further project ramp-ups (i.e. Fort Hills and Horizon) that will lift Canadian supply by 200–300 kbpd y/y through 2018–19. We anticipate that Line 3 will enter service in the latter half of 2019, but that it will require the completion of either the Trans Mountain Expansion (TMX) or Keystone XL pipelines—likely sometime in the early 2020s—

Chart 3

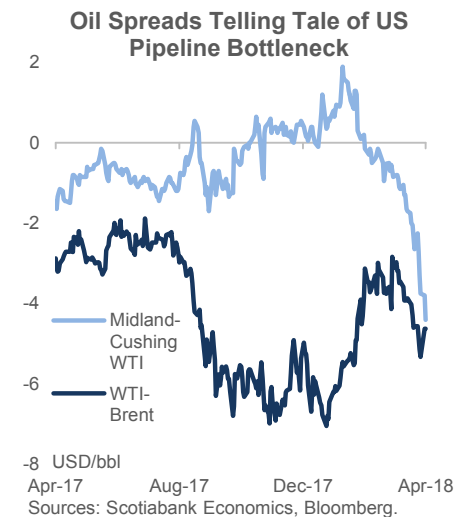


Chart 4

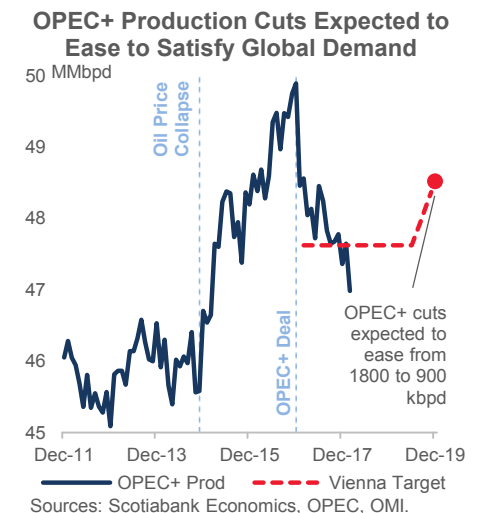
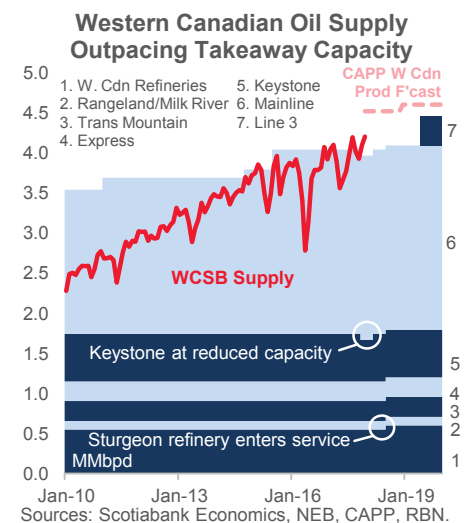


Chart 5





before WCS discounts will fall back from their current, artificially high level to the sub-\$15/bbl threshold reflective of adequate pipeline capacity. The latest news that Kinder Morgan is suspending non-essential spending on TMX until the investment climate becomes more certain complicates this longer-term outlook; if TMX is indeed shelved, it puts a lot of pressure on KXL, which would be the only remaining pipeline able to satisfy takeaway demand in the early 2020s. This situation is far from ideal and it continues to be in the national interest that TMX is built on schedule, in time to avert acute takeaway deficits by 2021–22.

## METALS & MATERIALS SUPPORTED BY STRONG INDUSTRIAL DEMAND

**Industrial metals are benefiting from strong industrial tailwinds as factories around the world demand more raw material inputs to satisfy booming economic growth.** Within the broadly buoyant metals complex, base metals are expected to experience the strongest fundamental support as advanced manufacturing picks up and mine supply becomes increasingly tight following years of mining industry belt-tightening. Bulk commodities underpinning the world's steel industry are experiencing periodic bouts of strength but are expected to gradually move lower on the back of slowing Chinese steel output and the need to rationalize some higher-cost mine supply (i.e. Chinese iron ore). Finally, precious metals are expected to remain range-bound between the headwinds of rising global rates and the tailwinds of a weakening dollar as well as perceptions of rising market risk.

**Copper prices have finally fallen back** from their recent peak of \$3.25/lb to around \$3.00/lb, which we have long-viewed as a level better reflecting current market fundamentals. Copper markets are expected to register a supply deficit in 2018 for the first time since 2010; while we believe that the market will require further years of deficits to burn through off-exchange inventories before prices rally further, our outlook sees steady supply shortfalls in each of the next 5 years that grow larger as the mine supply pipeline continues to empty (chart 6). Recently high prices have incentivized additional metal onto global exchanges and pushed inventories to their highest level since late-2013, spooking investors and sending net speculative positions to their lowest level since October 2016, when rising speculative interest first prompted copper to break higher. This rationalization of bullish sentiment was a necessary step before copper prices move sustainably higher over the coming years. **Copper prices are forecast to average \$3.10/lb in 2018 and rise to \$3.25 in 2019.**

**Zinc enjoys the strongest fundamental support within the metals complex** and rock-bottom refinery treatment charges of \$19/t as of March 2018 indicate continued and acute concentrate shortages (chart 7). The latest inflows into LME storage sheds have prompted some to question the ongoing zinc scarcity narrative, but we believe that these deliveries represent some of the final off-exchange tonnage and not any true uptick in supply. **We expect that zinc prices will average \$1.60/lb through 2018–19 before gradually falling back toward a long-term incentive price of \$1.00/lb** as the next wave of mine supply comes online, coaxed onto the market by the strongest zinc price environment since the last supply shortage in 2007.

Chart 6

### Copper Deficits Expected Going Forward As Mine Pipeline Empties

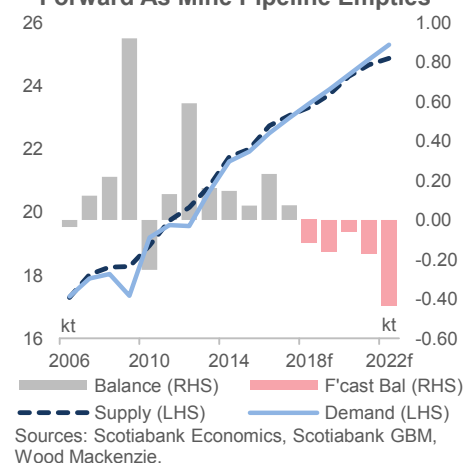


Chart 7

### Zinc Treatment Charges Indicate Acute Concentrate Tightness

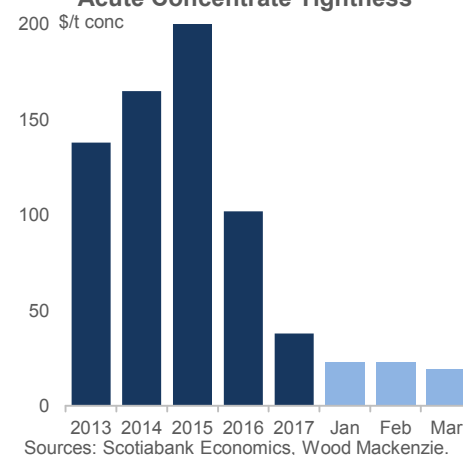


Table 1

Commodities	2000–2016			Annual Average			
	Low	Avg.	High	2016	2017	2018f	2019f
WTI Oil (USD/bbl)	17	63	145	43	51	65	68
Brent Oil (USD/bbl)	18	66	146	45	55	70	73
WCS - WTI Discount* (USD/bbl)	-43	-17	-6	-14	-13	-22	-20
Nymex Natural Gas (USD/mmbtu)	1.64	4.94	15.38	2.55	3.02	2.80	2.85
Copper (USD/lb)	0.60	2.35	4.60	2.21	2.80	3.10	3.25
Zinc (USD/lb)	0.33	0.81	2.10	0.95	1.31	1.60	1.60
Nickel (USD/lb)	2.00	7.26	24.58	4.36	4.72	6.00	6.50
Aluminium (USD/lb)	0.56	0.86	1.49	0.73	0.89	0.95	1.00
Iron Ore (USD/tonne)	17	67	187	58	72	63	60
Metallurgical Coal (USD/tonne)	39	127	330	114	187	182	160
Gold, London PM Fix (USD/oz)	256	869	1,895	1,251	1,257	1,310	1,300

\* 2008–16 average.

Sources: Scotiabank Economics, Bloomberg.

## Foreign Exchange

### US DOLLAR POISED TO WEAKEN AFTER CONSOLIDATION

The US dollar (USD) traded sideways for much of Q1 after falling heavily at the start of the year. Positive economic data helped steady USD losses through February and March and the US currency has also benefitted from some safe-haven demand related to the double-digit percentage point drop in the major US equity indices that developed from the end of January. The USD's liquidity premium remains intact at this point, even if at least some of the headwinds for equities have been fanned from within the US itself amid trade tensions and focus on the tech sector.

In the short-term, we note a general deterioration in USD sentiment reflected in a build-up of bearish positioning in the currency futures market and highlight that the USD is nearing a seasonally weak period of the year. April has delivered the worst returns for the US dollar index (DXY) of any month of the year since 1990 (-0.6% on average, according to Bloomberg data) and usually heralds a prolonged period of relative USD softness that only reverses late in the calendar year. Tighter Fed policy looks well discounted in the markets now and may not provide the USD with much support.

Our longer-run outlook for the USD is unchanged; we think improving growth, prospects for policy normalization and lessened political risks outside of the USA render other currencies more attractive for international investors who are perhaps somewhat over-exposed to a USD which remains close to a longer-run secular peak. Rising fiscal and current account imbalances represent another negative for the USD. The deteriorating outlook for US fiscal policy is coming at a time when traditionally active participants in the US Treasury market are showing signs of less appetite for US government debt which may add to USD headwinds going forward. China and Japan's combined ownership of total foreign holdings of US T-bonds slipped under 36% in January, down from a peak of 51% in 2004.

The Canadian dollar (CAD) was a significant under-achiever in Q1-2018, falling 2.6% against the USD, the worst performance amongst the major currencies. The Canadian economy continued to cool in Q1 and the lack of obvious progress on NAFTA talks generated more uncertainty around the outlook for the economy and monetary policy. At the same time, the domestic oil sector is awash with supply amid a dearth of pipeline capacity to export product. This has resulted in a significantly wider discount in Canadian heavy crude prices to the US WTI benchmark and a sustained disconnect between the CAD's performance and its usually strong, positive correlation with the energy complex.

We are cautiously positive on the outlook for the CAD over the balance of the year as we expect an end to the recent run of disappointing data and a modest tightening in BoC policy in the months ahead alongside the general softening in the USD. We also expect commodity prices to strengthen amid solid global growth momentum, which should add to general underpinning for the Australian and New Zealand dollars as well. A quick resolution to NAFTA renegotiations would

### CONTACTS

#### Shaun Osborne, Chief Currency Strategist

416.945.4538

Foreign Exchange Strategy

[shaun.osborne@scotiabank.com](mailto:shaun.osborne@scotiabank.com)

#### Eduardo Suárez, VP, Latin America Economics

52.55.9179.5174 (Mexico)

Scotiabank Economics

[eduardo.suarez@scotiabank.com](mailto:eduardo.suarez@scotiabank.com)

#### Qi Gao

65.6305.8396 (Singapore)

Foreign Exchange Strategy

[qi.gao@scotiabank.com](mailto:qi.gao@scotiabank.com)

#### Eric Theoret

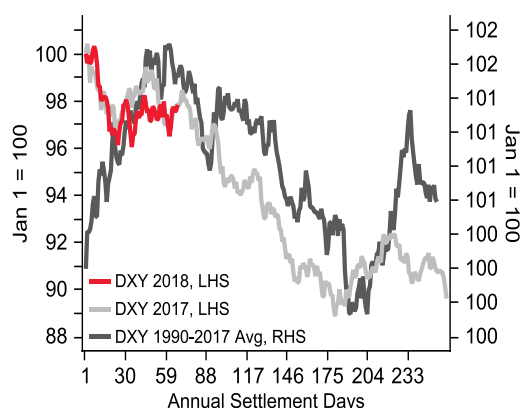
416.863.7030

Foreign Exchange Strategy

[eric.theoret@scotiabank.com](mailto:eric.theoret@scotiabank.com)

Chart 1

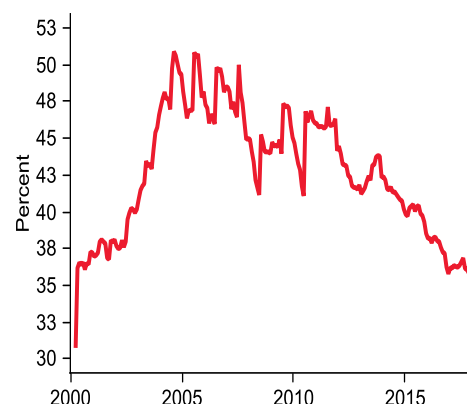
DXY Seasonal Trends Poised to Deteriorate



Sources: Macrobond, Scotiabank FICC Strategy.

Chart 2

China/Japan Share of Foreign UST Holdings



Sources: Macrobond, Scotiabank FICC Strategy.

represent an important, positive shock for the CAD as market expectations have been conditioned by Washington's belligerent posturing on trade. We retain a forecast of CAD1.25 for year end.

The euro (EUR) traded sideways for much of Q1, consolidating the strong gains seen through late 2017/early 2018. Eurozone growth momentum may moderate somewhat from the relatively elevated levels seen in the past few months and, although inflationary pressures remain subdued, European Central Bank (ECB) policy makers are clearing the path for a move away from policy accommodation later this year. The EUR has been largely insensitive to significantly adverse yield spreads versus the USD and we expect that trend to continue. A calmer political backdrop over the past year (ex-Italy, where a government remains elusive after last month's election) and generally underweight sovereign portfolios in EUR suggest to us that the EUR can benefit further from signs of improving capital inflows into the Eurozone in the months ahead. As a result of the more rapid and sustained EUR gains seen through the turn of the year and the still-constructive outlook, we have upgraded our forecast for EURUSD for the balance of the year and look for spot to end 2018 at USD1.30.

The pound sterling (GBP) has benefitted from some welcome clarity on the UK's Brexit arrangements as well as indications that the tight labour market is finally translating into higher wages that will ease pressure on domestic consumers who have been squeezed by weak real wage growth. The UK and its EU partners have made progress on the UK's terms of withdrawal from the EU which avoids the "cliff edge" risk for next year (and helps businesses plan ahead). There is an awful lot of work still to do but a calmer backdrop to Brexit for now and the steady gains in average weekly earnings over the past year provide a clearer backdrop for the Bank of England to nudge monetary policy a little tighter in May which should support the pound. We had expected a bumpier Brexit ride for the GBP and, while setbacks are still possible, we think the GBP can build on gains over the next few months. We now anticipate a year-end rate of USD1.47 for GBPUSD.

The yen (JPY) has traded strongly over the past few months in defiance of widening yield spreads versus the USD. Heightened equity market volatility has also supported the JPY amid safe-haven flows while the JPY has also strengthened in response to rising speculation regarding the position of Prime Minister Abe (if Mr. Abe is forced to resign as a result of his involvement in a local land sale scandal, markets reason that "Abenomics", which favours a softer yen, may go with him). The JPY's insensitivity to short-term rate spreads—and evidence that Japanese investors are shunning US Treasury bonds as rising US short-term rates and relatively low longer-term yields sink returns net of currency hedge costs—has forced us to reduce our bearish call on the JPY for the balance of the year. We now look for USDJPY to end this year at JPY110.

We retain a bearish outlook for the USD against the regional Asian currencies—but we also expect Asian FX to under-perform if risk aversion increases. We remain bullish on the outlook for the renminbi (CNY) despite concerns about slowing Chinese growth. We expect the USD to fall towards CNY6.20 this year. Easing tensions on the Korean peninsula, an improved trade relationship with the US and prospects for closer bilateral ties between China and South Korea are positive developments for the Korean won. The Indian rupee (INR) is expected to range trade between INR64.50–65.50 in the near-term but improved bond market sentiment amid easing inflation pressures may prompt more inflows from offshore, tilting risks towards a stronger currency. We think the Malaysian ringgit still looks somewhat undervalued prior to the upcoming 14<sup>th</sup> Malaysian General Election and we remain positive on the Thai baht and Taiwanese dollar due to sound fundamentals.

The Mexican peso (MXN) strengthened significantly in Q1, albeit from a record low against the USD, delivering the best spot returns (8.1%) against the USD of any of the majors in gross terms (and even more net of yields at 10.3%). The peso remains volatile, however, and subject to headline (US presidential tweets) and event risk (equity market volatility). Progress on NAFTA—and the sense that the US is pushing for a quick agreement now the Mexican presidential election is looming on the horizon—will add to near-term pro-MXN momentum though gains will perhaps be checked in the 17.00/50 range ahead of the July vote itself. The Peruvian sol has stabilized near its 2018 starting level versus the USD following the volatility around the presidential impeachment process. The transfer of power has been orderly and key cabinet appointments lean towards the "market friendly". The ordeal may curb public sector investment and weigh on growth prospects modestly, however. The Colombian (COP) and Chilean pesos remain influenced by global trade deliberations and risks around the near-term outlook for commodities. Mid/late cycle global economic activity should, however, support demand for commodities broadly. The emergence of a market-friendly candidate in polling ahead of Colombia's May presidential election has helped lift the COP in the past few weeks.

**APPENDIX 1**

International	2000–16	2016	2017	2018f	2019f	2000–16	2016	2017	2018f	2019f
	<b>Real GDP</b> (annual % change)					<b>Consumer Prices</b> (y/y % change, year-end)				
World (based on purchasing power parity)	3.9	3.2	3.7	3.8	3.7					
Canada	2.1	1.4	3.0	2.2	2.1	1.9	1.4	1.8	2.3	2.3
United States	1.9	1.5	2.3	2.6	2.4	2.2	1.8	2.1	2.4	2.4
Mexico	2.2	2.9	2.0	2.4	2.8	4.4	3.4	6.8	4.3	3.8
United Kingdom	1.8	1.9	1.8	1.7	1.9	2.0	1.6	3.0	1.9	1.9
Eurozone	1.3	1.8	2.5	2.5	2.3	1.7	1.1	1.4	1.5	1.5
Germany	1.3	1.9	2.6	3.0	3.0	1.5	1.7	1.6	1.6	1.9
France	1.3	1.2	1.9	2.5	2.0	1.6	0.8	1.2	1.5	1.5
China	9.4	6.7	6.9	6.5	6.2	2.3	2.1	1.8	2.3	2.5
India	7.1	7.9	6.4	7.4	7.5	6.9	3.4	5.2	4.6	5.7
Japan	0.9	0.9	1.7	1.3	0.9	0.1	0.3	1.0	1.1	2.3
South Korea	4.2	2.9	3.1	2.8	2.8	2.6	1.3	1.5	2.1	2.5
Australia	3.0	2.6	2.3	2.6	2.5	2.8	1.5	1.9	2.2	2.6
Thailand	4.0	3.3	3.9	3.5	3.4	2.0	1.1	0.8	1.2	2.0
Brazil	2.6	-3.5	1.0	2.5	2.7	6.7	6.3	2.9	4.1	2.6
Colombia	4.1	2.1	1.8	2.5	3.5	5.1	5.7	4.1	3.3	3.1
Peru	5.1	3.9	2.5	3.3	3.7	2.8	3.2	1.4	2.0	2.5
Chile	4.0	1.2	1.5	3.6	3.9	3.4	2.7	2.3	2.8	3.0
<b>Commodities</b>	(annual average)									
WTI Oil (USD/bbl)	63	43	51	65	68					
Brent Oil (USD/bbl)	66	45	55	70	73					
WCS - WTI Discount* (USD/bbl)	-17	-14	-13	-22	-20					
Nymex Natural Gas (USD/mmbtu)	4.94	2.55	3.02	2.80	2.85					
Copper (USD/lb)	2.35	2.21	2.80	3.10	3.25					
Zinc (USD/lb)	0.81	0.95	1.31	1.60	1.60					
Nickel (USD/lb)	7.26	4.36	4.72	6.00	6.50					
Aluminium (USD/lb)	0.86	0.73	0.89	0.95	1.00					
Iron Ore (USD/tonne)	67	58	72	63	60					
Metallurgical Coal (USD/tonne)	127	114	187	182	160					
Gold, London PM Fix (USD/oz)	869	1,251	1,257	1,310	1,300					

\* 2008-16 average.

Sources: Scotiabank Economics, Statistics Canada, BEA, BLS, IMF, Bloomberg.

**APPENDIX 2**

North America	2000–16	2016	2017	2018f	2019f	2000–16	2016	2017	2018f	2019f
	<b>Canada</b>					<b>United States</b>				
	(annual % change, unless noted)					(annual % change, unless noted)				
Real GDP	2.1	1.4	3.0	2.2	2.1	1.9	1.5	2.3	2.6	2.4
Consumer spending	2.9	2.3	3.4	2.6	2.0	2.4	2.7	2.8	2.6	2.4
Residential investment	3.7	3.4	3.0	1.2	0.4	-0.4	5.5	1.8	2.3	2.1
Business investment	2.2	-8.8	2.5	4.1	2.5	2.3	-0.6	4.7	5.1	2.8
Government	2.2	2.7	2.5	2.4	1.5	1.0	0.8	0.1	2.1	2.2
Exports	1.3	1.0	1.0	1.6	3.6	3.6	-0.3	3.4	3.3	2.5
Imports	2.9	-1.0	3.6	3.0	2.5	3.4	1.3	4.0	4.8	3.2
Nominal GDP	4.2	2.0	5.3	4.5	4.5	3.9	2.8	4.1	4.7	4.5
GDP deflator	2.1	0.6	2.3	2.2	2.4	2.0	1.3	1.8	2.0	2.1
Consumer price index (CPI)	1.9	1.4	1.6	2.2	2.3	2.2	1.3	2.1	2.4	2.4
CPI ex. food & energy	1.6	1.9	1.6	2.0	2.2	2.0	2.2	1.8	2.2	2.3
Pre-tax corporate profits	3.6	-1.9	20.2	6.0	1.0	5.5	-2.1	4.4	2.7	0.5
Employment	1.3	0.7	1.9	1.3	1.0	0.7	1.8	1.6	1.4	1.1
Unemployment rate (%)	7.1	7.0	6.3	5.8	5.7	6.2	4.9	4.4	4.0	3.9
Current account balance (CAD, USD bn)	-17.1	-65.4	-63.9	-58.6	-47.6	-507	-452	-466	-554	-612
Merchandise trade balance (CAD, USD bn)	25.1	-25.9	-23.9	-23.8	-16.0	-673	-753	-811	-908	-982
Federal budget balance* (FY, CAD, USD bn)	-2.8	-1.0	-17.8	-19.4	-15.1	-150	-585	-665	-812	-990
percent of GDP	-0.2	0.0	-0.9	-0.9	-0.7	-1.0	-3.1	-3.4	-4.0	-4.7
Housing starts (000s, mn)	199	198	220	208	196	1.27	1.17	1.20	1.26	1.30
Motor vehicle sales (000s, mn)	1,657	1,949	2,041	2,000	1,950	15.5	17.5	17.1	17.4	17.3
Industrial production	0.6	0.1	5.1	2.2	1.0	0.6	-2.0	1.6	2.8	1.1
	<b>Mexico</b>									
	(annual % change)									
Real GDP	2.2	2.9	2.0	2.4	2.8					
Consumer price index (year-end)	4.4	3.4	6.8	4.3	3.8					
Current account balance (USD bn)	-14.6	-22.8	-18.8	-27.4	-29.9					
Merchandise trade balance (USD bn)	-7.2	-13.1	-10.9	-13.0	-16.0					

Sources: Scotiabank Economics, Statistics Canada, CMHC, BEA, BLS, Bloomberg. \* Canada federal deficit ex risk adjustment of \$3.0bn for FY19.

Quarterly Forecasts	2017		2018				2019			
Canada	Q3	Q4	Q1e	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Real GDP (q/q ann. % change)	1.5	1.7	1.8	2.6	2.4	2.4	2.2	1.9	1.6	1.6
Real GDP (y/y % change)	3.0	2.9	2.4	1.9	2.1	2.3	2.4	2.2	2.0	1.8
Consumer prices (y/y % change)	1.4	1.8	2.0	2.2	2.3	2.3	2.3	2.3	2.3	2.3
Avg. of new core CPIs (y/y % change)	1.5	1.7	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.2
<b>United States</b>										
Real GDP (q/q ann. % change)	3.2	2.9	2.2	2.6	2.5	2.5	2.4	2.3	2.1	2.1
Real GDP (y/y % change)	2.3	2.6	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.2
Consumer prices (y/y % change)	2.0	2.1	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4
CPI ex. food & energy (y/y % change)	1.7	1.7	1.9	2.2	2.3	2.3	2.3	2.3	2.3	2.3

Sources: Scotiabank Economics, Statistics Canada, BEA, BLS, Bloomberg.



**APPENDIX 3**

	2017	2018				2019			
Central Bank Rates	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>Americas</b>									
				(% , end of period)					
Bank of Canada	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.25	2.50
US Federal Reserve (upper bound)	1.50	1.75	1.75	2.00	2.25	2.25	2.50	2.50	2.75
Bank of Mexico	7.25	7.50	7.50	7.50	7.75	7.75	7.50	7.25	7.00
Central Bank of Brazil	7.00	6.75	6.50	6.50	6.75	7.00	7.50	8.00	8.50
Bank of the Republic of Colombia	4.75	4.50	4.25	4.25	4.25	4.50	4.75	5.00	5.00
Central Reserve Bank of Peru	3.25	2.75	2.75	2.75	2.75	3.00	3.00	3.25	3.25
Central Bank of Chile	2.50	2.50	2.50	2.75	3.00	3.25	3.25	3.50	3.50
<b>Europe</b>									
European Central Bank	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.50
Bank of England	0.50	0.50	0.75	0.75	1.00	1.00	1.25	1.50	1.50
<b>Asia/Oceania</b>									
Reserve Bank of Australia	1.50	1.50	1.50	1.50	1.75	1.75	2.00	2.00	2.25
Bank of Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
People's Bank of China	4.35	4.35	4.35	4.35	4.35	4.60	4.60	4.85	4.85
Reserve Bank of India	6.00	6.00	6.00	6.00	6.00	6.25	6.25	6.50	6.50
Bank of Korea	1.50	1.50	1.50	1.75	2.00	2.00	2.25	2.25	2.25
Bank of Thailand	1.50	1.50	1.50	1.50	1.75	1.75	2.00	2.00	2.25
<b>Currencies and Interest Rates</b>									
<b>Americas</b>									
				(end of period)					
Canadian dollar (USDCAD)	1.26	1.29	1.27	1.26	1.25	1.25	1.22	1.22	1.25
Canadian dollar (CADUSD)	0.80	0.78	0.79	0.79	0.80	0.80	0.82	0.82	0.80
Mexican peso (USDMXN)	19.66	18.18	19.11	19.18	19.46	19.56	19.38	19.43	19.71
Brazilian real (USDBRL)	3.31	3.31	3.15	3.25	3.25	3.30	3.30	3.35	3.35
Colombian peso (USDCOP)	2,986	2,794	2,900	2,900	2,900	2,950	2,950	3,000	3,050
Peruvian sol (USDPEN)	3.24	3.23	3.19	3.20	3.18	3.18	3.14	3.15	3.12
Chilean peso (USDCLP)	615	604	608	602	595	592	589	587	584
<b>Europe</b>									
Euro (EURUSD)	1.20	1.23	1.25	1.28	1.30	1.30	1.33	1.35	1.35
UK pound (GBPUSD)	1.35	1.40	1.40	1.42	1.47	1.48	1.48	1.50	1.50
<b>Asia/Oceania</b>									
Japanese yen (USDJPY)	113	106	108	110	110	110	110	108	105
Australian dollar (AUDUSD)	0.78	0.77	0.79	0.80	0.80	0.81	0.81	0.82	0.82
Chinese yuan (USDCNY)	6.51	6.28	6.30	6.30	6.30	6.20	6.20	6.10	6.10
Indian rupee (USDINR)	63.9	65.2	64.5	64.0	64.0	63.5	63.5	63.0	63.0
South Korean won (USDKRW)	1,067	1,064	1,060	1,040	1,040	1,030	1,030	1,020	1,020
Thai baht (USDTHB)	32.6	31.2	31.0	31.0	31.0	30.5	30.5	30.0	30.0
<b>Canada (Yields, %)</b>									
3-month T-bill	1.06	1.15	1.25	1.55	1.80	2.05	2.30	2.30	2.50
2-year Canada	1.69	1.78	1.90	2.10	2.30	2.40	2.50	2.55	2.60
5-year Canada	1.87	1.97	2.10	2.25	2.45	2.55	2.60	2.65	2.70
10-year Canada	2.05	2.09	2.25	2.40	2.50	2.60	2.65	2.70	2.75
30-year Canada	2.27	2.23	2.40	2.60	2.70	2.80	2.85	2.90	2.95
<b>United States (Yields, %)</b>									
3-month T-bill	1.38	1.70	1.85	2.05	2.30	2.30	2.55	2.60	2.80
2-year Treasury	1.88	2.27	2.40	2.55	2.70	2.80	2.95	3.00	3.05
5-year Treasury	2.21	2.56	2.65	2.75	2.90	2.95	3.00	3.10	3.15
10-year Treasury	2.40	2.74	2.85	2.95	3.00	3.05	3.10	3.15	3.25
30-year Treasury	2.74	2.97	3.00	3.15	3.20	3.25	3.30	3.35	3.40

Sources: Scotiabank Economics, Bloomberg.

This report has been prepared by Scotiabank Economics as a resource for the clients of Scotiabank. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable but no representation or warranty, express or implied, is made as to their accuracy or completeness. Neither Scotiabank nor any of its officers, directors, partners, employees or affiliates accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

These reports are provided to you for informational purposes only. This report is not, and is not constructed as, an offer to sell or solicitation of any offer to buy any financial instrument, nor shall this report be construed as an opinion as to whether you should enter into any swap or trading strategy involving a swap or any other transaction. The information contained in this report is not intended to be, and does not constitute, a recommendation of a swap or trading strategy involving a swap within the meaning of U.S. Commodity Futures Trading Commission Regulation 23.434 and Appendix A thereto. This material is not intended to be individually tailored to your needs or characteristics and should not be viewed as a "call to action" or suggestion that you enter into a swap or trading strategy involving a swap or any other transaction. Scotiabank may engage in transactions in a manner inconsistent with the views discussed this report and may have positions, or be in the process of acquiring or disposing of positions, referred to in this report.

Scotiabank, its affiliates and any of their respective officers, directors and employees may from time to time take positions in currencies, act as managers, co-managers or underwriters of a public offering or act as principals or agents, deal in, own or act as market makers or advisors, brokers or commercial and/or investment bankers in relation to securities or related derivatives. As a result of these actions, Scotiabank may receive remuneration. All Scotiabank products and services are subject to the terms of applicable agreements and local regulations. Officers, directors and employees of Scotiabank and its affiliates may serve as directors of corporations.

Any securities discussed in this report may not be suitable for all investors. Scotiabank recommends that investors independently evaluate any issuer and security discussed in this report, and consult with any advisors they deem necessary prior to making any investment.

**This report and all information, opinions and conclusions contained in it are protected by copyright. This information may not be reproduced without the prior express written consent of Scotiabank.**

™ Trademark of The Bank of Nova Scotia. Used under license, where applicable.

Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including, Scotiabanc Inc.; Citadel Hill Advisors L.L.C.; The Bank of Nova Scotia Trust Company of New York; Scotiabank Europe plc; Scotiabank (Ireland) Limited; Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank group and authorized users of the Scotiabank mark. The Bank of Nova Scotia is incorporated in Canada with limited liability and is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. The Bank of Nova Scotia is authorised by the UK Prudential Regulation Authority and is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available from us on request. Scotiabank Europe plc is authorised by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority.

Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

Not all products and services are offered in all jurisdictions. Services described are available in jurisdictions where permitted by law.

**Fixed Income Strategy (London)**

[www.gbm.scotiabank.com](http://www.gbm.scotiabank.com)

© 2016, The Bank of Nova Scotia

**This material, its content, or any copy of it, may not be altered in any way, transmitted to, copied or distributed to any other party without the prior express written consent of Scotiabank™.** This material has not been prepared by a member of the research department of Scotiabank, it is solely for the use of sophisticated institutional investors, and this material does not constitute investment advice or any personal recommendation to invest in a financial instrument or "investment research" as defined by the UK Prudential Regulation Authority or UK Financial Conduct Authority. This material is provided for information and discussion purposes only. An investment decision should not be made solely on the basis of the contents of this publication. It is not to be construed as a solicitation or an offer to buy or sell any financial instruments and has no regard to the specific investment objectives, financial situation or particular needs of any recipient. It is not intended to provide legal, tax, accounting or other advice and recipients should obtain specific professional advice from their own legal, tax, accounting or other appropriate professional advisers before embarking on any course of action. The information in this material is based on publicly available information and although it has been compiled or obtained from sources believed to be reliable, such information has not been independently verified and no guarantee, representation or warranty, express or implied, is made as to its accuracy, completeness or correctness. Information included in this material related to comparison performance (whether past or future) or simulated performance (whether past or future) is not a reliable indicator of future returns.

This material is not directed to or intended for use by any person resident or located in any country where the distribution of such information is contrary to the laws of such country. Scotiabank, its directors, officers, employees or clients may currently or from time to time own or hold interests in long or short positions in any securities referred to herein, and may at any time make purchases or sales of these securities as principal or agent. Scotiabank may also have provided or may provide investment banking, capital markets or other services to the companies referred to in this communication.

™ Trademark of The Bank of Nova Scotia. Used under license, where applicable. The bank of Nova Scotia is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including Scotia Capital Inc., Scotia Capital (USA) Inc., Scotiabanc Inc.; Citadel Hill Advisors L.L.C.; The Bank of Nova Scotia Trust Company of New York; Scotiabank Europe plc; Scotiabank (Ireland) Limited; Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank Group and authorized users of the mark. The Bank of Nova Scotia is incorporated in Canada with limited liability. Scotia Capital Inc. is a member of CIPF. Scotia Capital (USA) Inc. is a registered broker-dealer with the SEC and is a member of the NASD and SIPC. The Bank of Nova Scotia, Scotia Capital Inc. and Scotiabank Europe plc are authorised by the UK Prudential Regulation Authority. The Bank of Nova Scotia and Scotia Capital Inc. are subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Scotiabank Europe plc is authorised by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia and Scotia Capital Inc.'s regulation by the UK Prudential Regulation Authority are available from us on request. Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

## Foreign Exchange Strategy

This publication has been prepared by The Bank of Nova Scotia (Scotiabank) for informational and marketing purposes only. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable, but no representation or warranty, express or implied, is made as to their accuracy or completeness and neither the information nor the forecast shall be taken as a representation for which Scotiabank, its affiliates or any of their employees incur any responsibility. Neither Scotiabank nor its affiliates accept any liability whatsoever for any loss arising from any use of this information. This publication is not, and is not constructed as, an offer to sell or solicitation of any offer to buy any of the currencies referred to herein, nor shall this publication be construed as an opinion as to whether you should enter into any swap or trading strategy involving a swap or any other transaction. The general transaction, financial, educational and market information contained herein is not intended to be, and does not constitute, a recommendation of a swap or trading strategy involving a swap within the meaning of U.S. Commodity Futures Trading Commission Regulation 23.434 and Appendix A thereto. This material is not intended to be individually tailored to your needs or characteristics and should not be viewed as a "call to action" or suggestion that you enter into a swap or trading strategy involving a swap or any other transaction. You should note that the manner in which you implement any of the strategies set out in this publication may expose you to significant risk and you should carefully consider your ability to bear such risks through consultation with your own independent financial, legal, accounting, tax and other professional advisors. Scotiabank, its affiliates and/or their respective officers, directors or employees may from time to time take positions in the currencies mentioned herein as principal or agent, and may have received remuneration as financial advisor and/or underwriter for certain of the corporations mentioned herein. Directors, officers or employees of Scotiabank and its affiliates may serve as directors of corporations referred to herein. All Scotiabank products and services are subject to the terms of applicable agreements and local regulations. This publication and all information, opinions and conclusions contained in it are protected by copyright. This information may not be reproduced in whole or in part, or referred to in any manner whatsoever nor may the information, opinions and conclusions contained in it be referred to without the prior express written consent of Scotiabank.

<sup>TM</sup>Trademark of The Bank of Nova Scotia. Used under license, where applicable. Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, all members of the Scotiabank group and authorized users of the mark. The Bank of Nova Scotia is incorporated in Canada with limited liability and is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. The Bank of Nova Scotia and Scotiabank Europe plc are authorised by the UK Prudential Regulation Authority. The Bank of Nova Scotia is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Scotiabank Europe plc is authorised by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available on request. Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Inverlat Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities. Not all products and services are offered in all jurisdictions. Services described are available in jurisdictions where permitted by law.