

### Craig Wright

Chief Economist 416-974-7457 craig.wright@rbc.com **Dawn Desiardins Deputy Chief Economist** 416-974-6919 dawn.desjardins@rbc.com

Paul Ferley

Assistant Chief Economist Senior Economist 416-974-7231 paul.ferley@rbc.com

Nathan Janzen 416-974-0579 nathan.janzen@rbc.com

### RBC ECONOMICS | RESEARCH

## December 2016 AFTER THE FIREWORKS: HIGHER RATES IN THE

ECONOMIC AND FINANCIAL MARKET OUTLOOK

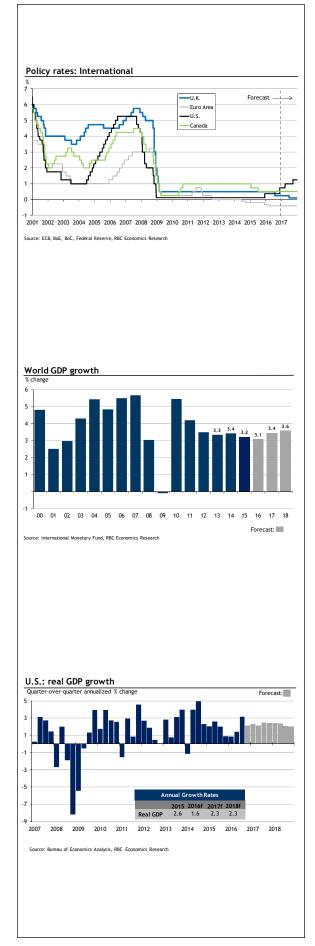
# U.S. AND MODERATE GLOBAL GROWTH

2016 was a year of surprises-the UK decided to leave the European Union and Donald Trump was elected President of the United States. These developments-and the elevated levels of uncertainty they bring-will shape 2017. For the global economy, the challenge will be expanding in an environment of uncertainty and rising interest rates. In the US, growth could get a boost if the government, as promised, implements stimulative fiscal policies. While specific announcements will have to wait until the Trump Administration takes office, our working assumption is that stimulus measures introduced in 2017 will boost US growth by 0.5 ppt starting in second half of 2017. For Canada, the spectre of rising U.S. protectionism may temporarily weigh on business investment, though stronger U.S. growth could spur exports. Meanwhile, the housing market—long a growth driver—is expected to slow markedly in 2017. In the UK, we expect weaker growth, with the government slated to start the process of withdrawing from the EU early in the year. The Brexit negotiation process, combined with question marks related to some key election outcomes on the continent, will likely temper growth in the European Union as well.

Financial markets interpreted Trump's election, combined with a Republicancontrolled Congress, as opening the door to tax cuts and spending increases. The prospect of more stimulative U.S. fiscal policy underpinned a rally in stocks and a rise in US Treasury yields towards the end of 2016. Stimulus is also anticipated to fuel a pickup in inflation, resulting in a more aggressive tightening by the Federal Reserve. The as-expected 25 bps hike by the Fed on December 14, 2016 is expected to be followed with two more rate hikes in 2017. Rising U.S. rates will pressure market rates higher in other G7 countries and support a strengthening in the US dollar.

#### Global economy to accelerate modestly in 2017

While policy shifts in the UK and US bring uncertainty that could affect confidence, our baseline forecast assumes that the global economy will gain momentum in 2017. Our view reflects the following assumptions: even though interest rates will rise, they will remain historically low; commodity prices will increase but remain below recent highs; and fiscal policy will be more stimulative than in previous years. Of the major markets we monitor, only the US is expected to raise interest rates next year, with risks favouring rate cuts in the UK, Australia and New Zealand, and no change to official policy rates in Canada and the Euro area. Fiscal stimulus is on tap in Canada and is likely to be a factor in the US as well. Against this backdrop, we expect the pace of



world growth to accelerate modestly, to 3.4% in 2017 and 3.6% in 2018, from an estimated 3.1% in 2016.

### **Recalibrating expectations**

One of the hallmarks of the post-recession period has been the downgrading of economic growth forecasts. Downward revisions in recent years reflected cyclical factors like the drop in commodity prices and lacklustre business investment. However, there were also structural factors at play: lower working-age participation rates and sliding productivity in both advanced and emerging-market economies. As the baby boom generation retires, there will likely be even greater downside pressure on labour market participation. Barring a pickup in productivity, global growth is unlikely to return to the 4%+ recorded before the recession.

Also weighing on the global outlook is slowing growth in emerging-market economies. China's economy is forecast to continue to gear down amid softer global trade activity and the unwinding of excess industrial capacity. Chinese service-sector growth, however, is expected to be robust, and a shift to growth driven by consumption remains on track. On balance, we expect China's economy to grow by 6.2% in 2017, slower than 2016's 6.6% pace. Meanwhile, recessions in Brazil and Russia are forecast to end in 2017, lending some support to global growth.

### US economy - a modest dose of stimulus in 2017

The US economy had a lacklustre 2016 as businesses pulled back on investment and adjusted inventories, taking half a percentage point off the annual growth rate. Another year of solid consumer spending and a modest gain in residential construction kept the economy growing, with real GDP on track to post a 1.6% increase in 2016. We expect US growth to accelerate to 2.3% in 2017 as business investment recovers and fiscal stimulus supplements solid consumer spending. Robust employment gains and quicker wage increases as the labour market reached full employment will underpin consumption and a pickup in housing market activity.

We have incorporated a modest dose of fiscal stimulus into our 2017 growth forecast. Our assumption is that the Trump Administration will implement personal and corporate tax cuts to the tune of \$2 trillion that will come into effect in mid-2017, increasing real GDP growth by 0.5 ppts in the following four quarters. This is in line with the amount contained in the House Republicans' proposals, and less than the amount Trump pledged in his campaign. While increased spending on infrastructure could be announced in 2017, we expect that it will be spread over five years with the initial lift to the economy from that effort likely to come in 2018.

### Trade at a cross-roads

Campaign-trail rhetoric raised the prospect that the US will implement protectionist policies, slowing global trade activity after a negligible increase in 2016. U.S. withdrawal from the Trans-Pacific Partnership and changes to NAFTA would disrupt not only the US but its trading partners as well. How-



ever, our forecast assumes that, at least in the early days of the Trump Administration, withdrawal from the TPP is likely but changes to NATFA are not. Nonetheless, US trade will likely weigh on growth in 2017, as the strong US dollar hurts exports. Import growth could also be stilted by the uncertainty about possible implementation of tariffs.

#### Inflation expectations reverse course

After several years of decline, measures of inflation expectations reversed course following the U.S. election, as markets began to anticipate that Trump's fiscal plans will boost growth. The uptick also reflects the anticipation of an easing in the weight on the headline inflation rate as energy prices rise commensurate with the recovery in oil prices. Our forecast assumes that oil prices will grind higher in the months ahead, after OPEC reached an agreement on production cuts in late November. We anticipate the price of a barrel of WTI will end 2016 at around \$50.00 with a further \$10 price increase in 2017.

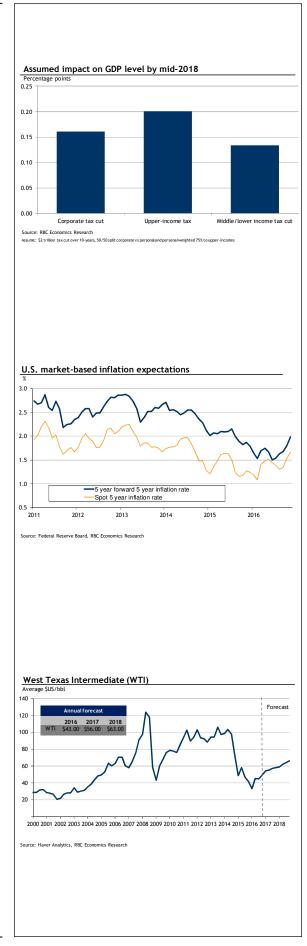
The recovery in energy prices will be partly responsible for headline inflation rising above 2% in 2017. Core prices are also expected to remain close to the Fed's 2% target as rising wages fuel price increases. The Fed will be closely monitoring how this rise in inflation affects expectations. With the labour market already close to full employment and inflation heading higher, we expect the Fed will be more aggressive in reducing monetary stimulus than they were over the previous twelve months. After boosting the fed funds target by 25 bps in mid-December we expect the Fed will follow up with two more rate hikes in 2017. Longer-term yields have already repriced to incorporate faster inflation and are likely to drift higher in 2017 albeit to still historically low levels.

### Trump election's impact on Canada: the jury is still out

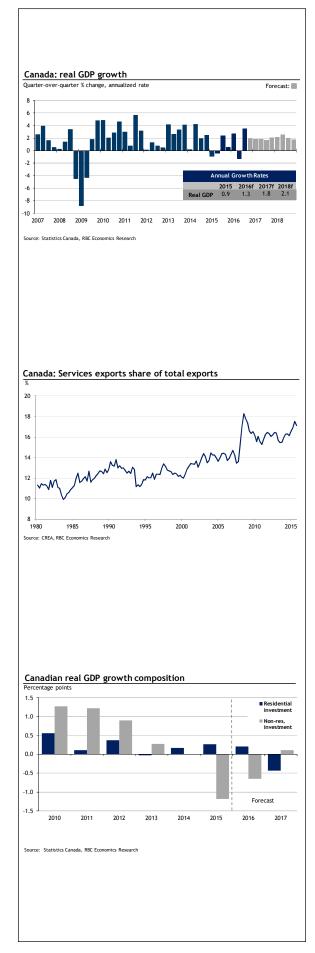
Falling energy prices (and more recently, wildfires in Alberta) have battered Canada's economy in the past two years. Growth in 2015 was a subpar 0.9% and is expected to have improved only modestly this year to 1.3%. The anticipated recovery in energy prices in 2017 sets up for the economy to grow at a firmer clip as the weight from falling investment eases and Ottawa steps up the pace of fiscal stimulus. The fly in the ointment is the rise in protectionist sentiment, which may hurt demand for Canadian exports. While President-elect Trump did not reference NAFTA in his plans for his first hundred days in office, concerns that the U.S. may push for new trade terms may induce Canadian exporters to hold off making investments. On the upside, with no imminent changes to NAFTA and the prospect of a fiscal package spurring stronger US growth, we are forecasting a modest uptick in Canadian exports next year. Export growth disappointed in 2016, mainly due to falling goods exports. Services exports increased 3.6% in the first three quarters of the year to make up an increasing share of the total. Sales of services abroad increased in all but one of the past 13 quarters, and we expect this trend to continue in 2017.

### Passing the baton

Since 2010, residential investment boosted growth in Canada in all years but one, and is on track to add 0.2 ppts in 2016. However, we expect the combined







effect of several housing policy measures to dampen home-resale activity, slow down the pace of new home building, and curb price increases across the country. Overall, this will result in a 0.4 ppt drag on 2017's growth rate. Conversely, business investment is expected to recover modestly, after weighing significantly on growth for the past two years. The recovery will mainly reflect the end of the retrenchment by energy companies, as well as increased investment by service sector companies. The latest Bank of Canada Business outlook survey indicated a rising share of service-sector firms plan to increase investment in information technology, with some exporters looking to increase spending on research and development. We expect business investment to provide a small lift to GDP growth next year.

### Counting on the Consumer

The Canadian consumer drove growth again in 2016 with spending forecast to have increased by 2.2%. Conditions continue to be favourable for consumers, with Canada adding 160,000 jobs in the first eleven months of the year and the unemployment rate averaging 7%. That said, the jobs created in 2016 were part-time, a shift following two years where full-time employment accounted for most if not all the gains. Regionally, full-time job cuts were concentrated in the oil-producing provinces. Ontario saw a rise in part-time employment accompanied by a fall in the number of self-employed workers. That said, on balance, the percentage of people working full-time is still in line with the long-term average.

Rising employment combined with changes to the federal Canada Child Benefit that came into effect on July 1 will underpin disposable income growth in both 2016 and 2017. Consumers also saw an increase in household net worth, which topped \$10 trillion in the third quarter of 2016. While Canadians' debt levels are elevated, the debt-to-net worth ratio posted a third consecutive decline and owners' equity in real estate remained encouragingly high at 74%.

### Housing market headed for a bumpy 2017

Regulatory changes at both the federal and provincial levels are expected to exert downward pressure on Canada's housing market in the near term, and slow the pace of debt accumulation. In light of the regulatory changes, we revised our housing market outlook, and forecast an 11.5% decline in home resales and a significantly slower pace of price increase in 2017 of 1.6%. This would follow a solid 4.4% rise in sales and 9.5% jump in prices in 2016. Underlying the 2017 forecast is our estimate that the tightening of mortgage insurance criteria implemented by Ottawa in October 2016 will cut home resales by close to 8% relative to our previous forecast and slow the pace of price increase by approximately 0.5 percentage points in 2017. Our base case scenario also assumes that the impact will vary across the country—with the more significant effect on home resales being felt in high-priced markets in Ontario and British Columbia.

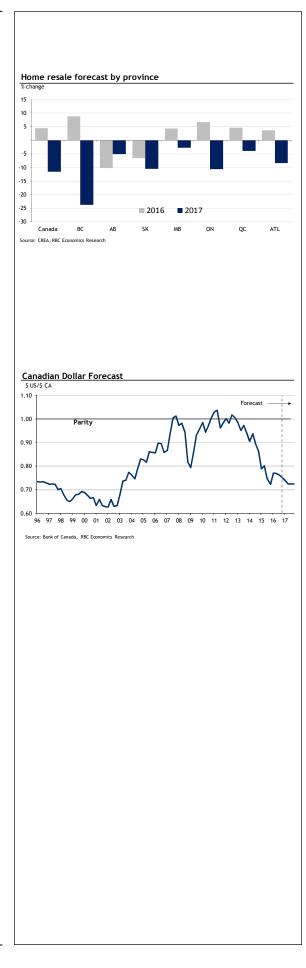
Another factor that may slow activity in the housing market is the recent uptick in interest rates. Expectations of stronger growth, rising inflation and a more aggressive Federal Reserve have pushed US Treasury yields higher with



Canadian long-term rates following suit. However, the rise in government bond yields in Canada in the post-election sell-off was more muted with the 10 -year yield gaining about 55bps compared to more than 70bps in the US. The yield on the two-year bond also rose modestly in Canada while jumping in the US as the case for rising U.S. policy rates strengthened. We expect the Bank of Canada to maintain the overnight rate at 50bps throughout 2017 curbing the increase in Canadian bond yields although rates are likely to drift higher in line with US Treasury rates. With the economy expanding at an abovepotential pace and the headline inflation rate topping the 2% target as energy prices rebound the Bank is likely to shift into tightening mode in the second quarter of 2018.

### Canadian dollar - tug of war

Canada's dollar traded in an 11 cent range against the US dollar in 2016 buffeted by volatility in oil prices and changing expectations about central bank policy. In 2017, these factors will run in opposite directions with rising oil prices positive for the Canadian dollar but monetary policy running in favour of the US. Concerns about the US government rewriting the NAFTA agreement may exert some downward pressure on the Canadian dollar and we anticipate a mild depreciation in the currency in 2017 to 72.5 US cents. We expect the currency to recover in 2018 as oil prices continue to rise and the Bank of Canada begins to scale back stimulus by increasing the policy rate.





### Economic forecast detail - Canada

### Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

		Actuals	;					Forecas	st				Actual	F	orecas	t
		<u>20</u>	16			20	<u>17</u>			<u>20</u>	18		year-	over-ye	ar % ch	ange
	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Household Consumption	2.5	1.8	2.6	2.2	2.2	2.1	2.0	1.7	1.7	1.7	1.6	1.7	1.9	2.2	2.1	1.7
Durables	4.0	-2.5	-2.4	2.8	2.3	1.5	1.5	1.0	1.5	1.3	1.3	1.3	2.8	2.9	1.2	1.3
Semi-Durables	8.4	-0.2	1.9	2.2	2.2	2.4	2.0	1.8	1.8	1.8	1.8	2.0	2.3	3.6	0.8	1.9
Non-durables	3.8	3.1	3.0	2.2	2.2	2.5	2.3	2.0	1.8	1.8	1.8	2.0	0.8	2.0	2.4	2.0
Services	0.9	2.6	3.7	2.1	2.1	2.1	1.9	1.8	1.7	1.7	1.6	1.6	2.1	1.8	1.9	1.7
NPISH consumption	0.3	-2.0	3.9	2.2	2.2	2.1	2.0	1.7	1.7	1.7	1.6	1.7	2.0	0.7	2.1	1.7
Government expenditures	3.3	5.3	-1.2	2.0	1.8	1.5	1.5	1.5	2.5	2.5	2.5	2.5	1.5	2.0	1.6	2.1
Government fixed investment	2.7	-0.9	2.6	7.5	8.5	8.5	7.0	5.0	2.5	3.5	3.5	3.5	4.5	0.9	6.6	4.3
Residential investment	10.2	0.3	-5.5	-2.2	-6.5	-7.1	-4.9	-2.4	-0.5	1.1	1.1	2.3	3.8	2.4	-4.9	-1.2
Non-residential investment	-8.5	-0.9	3.5	-6.8	3.7	3.3	3.0	3.6	3.9	3.8	2.6	2.4	-11.5	-7.2	1.2	3.4
Non-residential structures	-12.7	-4.3	15.7	-14.2	3.8	3.5	3.2	4.0	4.4	4.2	3.0	2.7	-16.0	-9.6	0.9	3.8
Machinery & equipment	-2.2	4.1	-12.2	4.5	3.5	3.0	2.8	3.0	3.2	3.1	2.0	2.0	-3.3	-3.5	1.4	2.9
Intellectual property	-9.7	0.7	-17.0	5.5	2.5	2.5	2.8	3.5	3.5	3.0	2.0	2.0	-9.0	-5.3	0.3	3.0
Final domestic demand	1.8	2.0	0.9	1.2	1.8	1.7	1.7	1.7	2.0	2.1	1.9	2.0	0.3	1.0	1.6	1.9
Exports	9.0	-14.8	8.9	3.7	3.4	2.6	2.4	3.4	3.7	4.4	2.3	1.6	3.4	1.1	2.6	3.2
Imports	2.3	1.4	3.3	0.5	3.7	2.5	3.4	2.9	3.3	2.9	2.2	2.3	0.3	-0.5	2.6	2.9
Inventories (change in \$b)	-8.2	1.0	4.6	3.0	3.7	4.3	5.8	6.7	7.0	6.9	6.8	6.2	3.9	0.1	5.1	6.7
Real gross domestic product	2.7	-1.3	3.5	1.9	1.9	1.8	1.6	2.0	2.1	2.5	1.9	1.7	0.9	1.3	1.8	2.1

### Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	-0.1	0.5	1.1	1.0	1.2	1.5	0.8	1.2	1.1	1.3	1.4	1.4	-0.2	0.6	1.2	1.3
Pre-tax corporate profits	-10.4	-15.1	-1.5	8.1	8.2	21.5	3.2	2.7	3.3	4.5	5.3	5.1	-19.5	-5.0	8.4	4.5
Unemployment rate (%)*	7.2	6.9	7.0	6.9	6.9	6.9	6.8	6.8	6.7	6.6	6.5	6.5	6.9	7.0	6.9	6.6
Inflation																
Headline CPI	1.5	1.6	1.2	1.5	2.2	2.4	2.7	2.7	2.4	2.2	2.2	2.2	1.1	1.5	2.5	2.2
Core CPI	2.0	2.1	1.9	1.8	1.9	1.9	2.1	2.3	2.3	2.1	2.2	2.1	2.2	1.9	2.0	2.2
External trade																
Current account balance (\$b)	-68.2	-76.1	-73.2	-62.7	-61.7	-58.3	-58.0	-55.7	-52.3	-46.5	-42.7	-40.4	-67.6	-70.0	-58.4	-45.5
% of GDP	-3.4	-3.8	-3.6	-3.0	-3.0	-2.8	-2.7	-2.6	-2.4	-2.1	-1.9	-1.8	-3.4	-3.5	-2.8	-2.1
Housing starts (000s)*	198	198	200	190	183	180	177	176	175	175	173	174	196	197	179	175
Motor vehicle sales (mill., saar)*	2.01	1.99	1.94	1.98	1.92	1.87	1.84	1.82	1.83	1.83	1.84	1.84	1.94	1.98	1.86	1.83

\*Period average

Source: Statistics Canada, RBC Economics Research forecasts



### Economic forecast detail – United States

### Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	1	Actual	S				I	Foreca	ast				Actual	F	orecas	t
		20	16			20	17			<u>20</u>	18		year-	over-ye	ear % cł	nange
	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Consumer spending	1.6	4.3	2.8	2.4	2.2	2.1	2.5	2.4	2.6	2.4	2.1	2.0	3.2	2.6	2.5	2.4
Durables	-0.6	9.8	11.6	4.5	4.0	3.5	3.1	3.1	3.0	2.7	2.1	2.1	6.9	5.3	5.1	2.8
Non-durables	2.1	5.7	-0.6	2.1	1.8	1.9	2.8	2.8	3.1	2.8	2.2	2.0	2.6	2.4	2.0	2.7
Services	1.9	3.0	2.5	2.2	2.0	2.0	2.3	2.2	2.4	2.2	2.1	2.0	2.8	2.3	2.2	2.2
Government spending	1.6	-1.7	0.2	2.0	1.5	1.2	1.2	1.0	0.6	0.4	0.4	0.4	1.8	0.9	1.1	0.7
Residential investment	7.8	-7.8	-4.4	9.2	6.6	3.8	3.9	4.0	4.5	4.8	5.0	5.2	11.7	4.8	3.7	4.5
Non-residential investment	-3.4	1.0	0.1	2.6	3.3	3.3	4.3	4.4	4.3	3.9	3.1	2.8	2.1	-0.6	2.8	3.9
Non-residential structures	0.1	-2.1	10.1	-1.0	2.1	2.2	4.0	4.5	4.5	3.8	2.9	2.3	-4.4	-3.0	2.6	3.8
Equipment & software	-9.5	-3.0	-4.7	3.3	3.4	3.4	4.8	4.8	4.8	4.3	3.2	2.9	3.5	-2.9	2.2	4.3
Intellectual property	3.8	9.0	1.0	3.9	3.9	3.9	3.8	3.7	3.4	3.3	3.2	3.0	4.8	4.6	3.8	3.5
Final domestic demand	1.2	2.4	1.7	2.6	2.4	2.2	2.5	2.5	2.5	2.3	2.1	1.9	3.1	2.0	2.3	2.4
Exports	-0.7	1.8	10.1	-1.0	1.8	1.8	1.9	2.0	2.9	3.2	3.2	3.2	0.1	0.6	2.3	2.7
Imports	-0.6	0.2	2.1	2.3	5.0	4.0	2.1	2.5	3.1	2.9	3.1	2.5	4.6	0.7	3.1	2.8
Inventories (change in \$b)	40.7	-9.5	7.6	3.0	20.0	30.0	28.0	28.0	25.0	24.8	24.6	24.4	84.0	10.5	26.5	24.7
Real gross domestic product	0.8	1.4	3.2	2.1	2.3	2.1	2.5	2.4	2.4	2.3	2.0	2.0	2.6	1.6	2.3	2.3

### Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	0.1	-0.3	0.0	0.8	1.3	1.7	1.2	1.4	1.4	1.5	1.5	1.4	0.8	0.1	1.4	1.5
Pre-tax corporate profits	-6.6	-4.3	2.8	10.6	7.7	9.0	3.1	2.9	2.9	2.7	2.7	2.4	-3.0	0.4	5.6	2.7
Unemployment rate (%)*	4.9	4.9	4.9	4.7	4.7	4.7	4.6	4.6	4.5	4.5	4.4	4.4	5.3	4.9	4.7	4.5
Inflation																
Headline CPI	1.1	1.0	1.1	1.8	2.5	2.4	2.6	2.2	2.1	2.1	2.2	2.2	0.1	1.3	2.4	2.2
Core CPI	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	1.8	2.2	2.0	2.1
External trade																
Current account balance (\$b)	-527	-473	-437	-475	-497	-509	-515	-522	-530	-536	-543	-546	-463	-478	-511	-539
% of GDP	-2.9	-2.6	-2.4	-2.5	-2.6	-2.6	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.6	-2.6	-2.6	-2.7
Housing starts (000s)*	1151	1159	1145	1180	1190	1202	1218	1236	1257	1279	1302	1327	1108	1159	1212	1291
Motor vehicle sales (millions, saar)*	17.3	17.1	17.5	17.8	17.9	18.0	18.1	18.2	18.2	18.3	18.3	18.4	17.4	17.4	18.1	18.3

\*Period average

Source: Bureau of Economic Analysis, RBC Economics Research forecasts



### Financial market forecast detail

### Interest rates-North America

%, end of period

				Actua	1				F	oreca	st		Actual	Forec	ast
	15Q1	15Q2	15Q3	15Q4	16Q1	16Q2	16Q3	16Q4	17Q1	17Q2	17Q3	17Q4	2015	2016	2017
Canada															
Overnight	0.75	0.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Three-month	0.55	0.58	0.43	0.51	0.45	0.49	0.53	0.50	0.50	0.50	0.55	0.60	0.51	0.50	0.60
Two-year	0.50	0.48	0.52	0.48	0.54	0.52	0.52	0.70	0.75	0.80	0.85	0.90	0.48	0.70	0.90
Five-year	0.77	0.82	0.80	0.73	0.67	0.57	0.62	1.00	1.05	1.30	1.55	1.75	0.73	1.00	1.75
10-year	1.36	1.69	1.43	1.40	1.23	1.06	1.00	1.60	1.70	1.90	2.15	2.30	1.40	1.60	2.30
30-year	1.98	2.31	2.20	2.15	2.00	1.72	1.66	2.20	2.30	2.40	2.60	2.80	2.15	2.20	2.80
Yield curve (10s-2s)	86	121	91	92	69	54	48	90	95	110	130	140	92	90	140
United States															
Fed funds*	0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.75	0.75	1.00	1.00	1.25	0.50	0.75	1.25
Three-month	0.03	0.01	0.00	0.16	0.21	0.26	0.29	0.50	0.50	0.75	0.85	1.00	0.16	0.50	1.00
Two-year	0.56	0.64	0.64	1.06	0.73	0.58	0.77	1.05	1.20	1.40	1.60	1.75	1.06	1.05	1.75
Five-year	1.37	1.63	1.37	1.76	1.21	1.01	1.14	1.75	1.90	2.10	2.25	2.35	1.76	1.75	2.35
10-year	1.94	2.35	2.06	2.27	1.78	1.49	1.60	2.30	2.45	2.60	2.75	2.85	2.27	2.30	2.85
30-year	2.54	3.11	2.87	3.01	2.61	2.30	2.32	3.00	3.10	3.15	3.25	3.35	3.01	3.00	3.35
Yield curve (10s-2s)	138	171	142	121	105	91	83	125	125	120	115	110	121	125	110
Yield spreads															
Three-month T-bills	0.52	0.57	0.43	0.35	0.24	0.23	0.24	0.00	0.00	-0.25	-0.30	-0.40	0.35	0.00	-0.40
Two-year	-0.06	-0.16	-0.12	-0.58	-0.19	-0.06	-0.25	-0.35	-0.45	-0.60	-0.75	-0.85	-0.58	-0.35	-0.85
Five-year	-0.60	-0.81	-0.57	-1.03	-0.54	-0.44	-0.52	-0.75	-0.85	-0.80	-0.70	-0.60	-1.03	-0.75	-0.60
10-year	-0.58	-0.66	-0.63	-0.87	-0.55	-0.43	-0.60	-0.70	-0.75	-0.70	-0.60	-0.55	-0.87	-0.70	-0.55
30-year	-0.56	-0.80	-0.67	-0.86	-0.61	-0.58	-0.66	-0.80	-0.80	-0.75	-0.65	-0.55	-0.86	-0.80	-0.55
Note: Interest Rates a	re end o	of period	d rates	* Top 0	f 25 ba	sis noin	t range								
note. Interest rates a	i e enu t	n period	a rates.	1000	25 00	ara pom	range								

### Interest rates-International

 $\%, \, \text{end} \ \text{of} \ \text{period}$ 

				Actua	l				F	orecas	st		Actual	Forec	ast
	15Q1	15Q2	15Q3	15Q4	16Q1	16Q2	16Q3	16Q4	17Q1	17Q2	17Q3	17Q4	2015	2016	2017
United Kingdom															
Repo	0.50	0.50	0.50	0.50	0.50	0.50	0.25	0.25	0.25	0.25	0.10	0.10	0.50	0.25	0.10
Two-year	0.43	0.55	0.56	0.66	0.45	0.13	0.13	0.20	0.20	0.20	0.05	0.10	0.66	0.20	0.10
10-year	1.58	2.01	1.76	1.96	1.43	0.89	0.76	1.30	1.40	1.60	1.75	1.90	1.96	1.30	1.90
Euro Area															
Deposit rate	-0.20	-0.20	-0.20	-0.30	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.30	-0.40	-0.40
Two-year	-0.25	-0.23	-0.26	-0.34	-0.48	-0.61	-0.69	-0.60	-0.70	-0.65	-0.55	-0.50	-0.34	-0.60	-0.50
10-year	0.18	0.77	0.59	0.63	0.15	-0.11	-0.12	0.10	0.20	0.35	0.50	0.60	0.63	0.10	0.60
Australia															
Cash target rate	2.25	2.00	2.00	2.00	2.00	1.75	1.50	1.50	1.50	1.25	1.25	1.25	2.00	1.50	1.25
Two-year swap	1.72	2.01	1.81	2.02	1.89	1.59	1.55	1.55	1.50	1.50	1.60	1.60	2.02	1.55	1.60
10-year swap	2.32	3.01	2.61	2.88	2.49	1.98	1.91	2.50	2.55	2.65	2.95	3.10	2.88	2.50	3.10
Now Zoolond															
New Zealand															
Cash target rate	3.50	3.25	2.75	2.50	2.25	2.25	2.00	1.75	1.75	1.50	1.50	1.50	2.50	1.75	1.50
Two-year	3.48	3.09	2.69	2.83	2.19	2.22	1.96	2.00	1.90	1.90	1.90	2.00	2.83	2.00	2.00
10-year	3.71	3.89	3.48	3.73	2.97	2.65	2.41	2.85	2.85	2.95	3.20	3.35	3.73	2.85	3.35



### Growth outlook

% change, quarter-over-quarter in real GDP

	16Q1	16Q2	16Q3	16Q4	<u>17Q1</u>	<u>17Q2</u>	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	2015	2016F	2017F	2018F
Canada*	2.7	-1.3	3.5	1.9	1.9	1.8	1.6	2.0	2.1	2.5	1.9	1.7	0.9	1.3	1.8	2.1
United States*	0.8	1.4	3.2	2.1	2.3	2.1	2.5	2.4	2.4	2.3	2.0	2.0	2.6	1.6	2.3	2.3
United Kingdom	0.4	0.7	0.5	0.3	0.3	0.1	0.1	0.1	0.4	0.4	0.5	0.5	2.2	2.0	1.1	1.2
Euro area	0.5	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.4	0.4	0.4	0.4	1.9	1.6	1.3	1.5
Australia	1.0	0.6	-0.5	0.4	0.7	0.7	0.8	0.7	0.5	0.7	0.8	0.7	2.4	2.8	2.5	2.7
New Zealand	0.9	0.9	0.8	0.6	0.7	0.8	0.8	0.6	0.6	0.6	0.6	0.6	2.5	3.3	3.0	3.6

\*Seasonally adjusted annualized rates

#### Inflation outlook

% change, year-over-year

	16Q1	16Q2	16Q3	16Q4	<u>17Q1</u>	<u>17Q2</u>	<u>17Q3</u>	<u>17Q4</u>	18Q1	18Q2	18Q3	<u>18Q4</u>	2015	2016F	2017F	2018F
Canada	1.5	1.6	1.2	1.5	2.2	2.4	2.7	2.7	2.4	2.2	2.2	2.2	1.1	1.5	2.5	2.2
United States	1.1	1.0	1.1	1.8	2.5	2.4	2.6	2.2	2.1	2.1	2.2	2.2	0.1	1.3	2.4	2.2
United Kingdom	0.3	0.4	0.7	1.2	2.1	2.5	2.4	2.4	2.3	2.3	2.2	2.1	0.0	0.7	2.4	2.2
Euro area	0.0	-0.1	0.3	0.7	1.6	1.5	1.4	1.2	1.3	1.4	1.4	1.4	0.0	0.2	1.4	1.4
Australia	1.3	1.0	1.3	1.4	2.2	2.6	2.5	2.7	2.7	2.6	2.6	2.5	1.5	1.3	2.5	2.6
New Zealand	0.4	0.4	0.4	0.9	1.0	1.0	1.2	1.5	1.6	1.7	1.8	1.8	0.3	0.5	1.2	1.7

#### **Exchange rates**

%, end of period

				Actua	l				F	oreca	st			Fore	ecast
	15Q1	15Q2	15Q3	15Q4	16Q1	16Q2	16Q3	16Q4	17Q1	17Q2	17Q3	17Q4	2015	2016	2017
AUD/USD	0.76	0.77	0.70	0.73	0.77	0.75	0.77	0.79	0.79	0.76	0.74	0.72	0.73	0.79	0.72
USD/CAD	1.27	1.25	1.33	1.38	1.30	1.29	1.31	1.33	1.35	1.38	1.38	1.38	1.38	1.33	1.38
EUR/USD	1.07	1.11	1.12	1.09	1.14	1.11	1.12	1.10	1.08	1.07	1.06	1.05	1.09	1.10	1.05
USD/JPY	120.1	122.5	119.9	120.1	112.6	102.7	101.3	97.0	95.0	92.0	95.0	97.0	120.1	97.0	97.0
NZD/USD	0.75	0.68	0.64	0.68	0.69	0.71	0.73	0.78	0.80	0.78	0.77	0.76	0.68	0.78	0.76
USD/CHF	0.97	0.94	0.97	1.00	0.96	0.98	0.97	0.98	0.99	1.01	1.03	1.06	1.00	0.98	1.06
GBP/USD	1.48	1.57	1.51	1.47	1.44	1.33	1.30	1.25	1.15	1.15	1.16	1.18	1.47	1.25	1.18

Note: Exchange rates are expressed in units per USD, with the exception of the euro, GBP, AUD, and NZD, which are expressed in USD per local currency unit. Source: Reuters, RBC Economics Research forecasts

The material contained in this report is the property of Royal Bank of Canada and may not be reproduced in any way, in whole or in part, without express authorization of the copyright holder in writing. The statements and statistics contained herein have been prepared by RBC Economics Research based on information from sources considered to be reliable. We make no representation or warranty, express or implied, as to its accuracy or completeness. This publication is for the information of investors and business persons and does not constitute an offer to sell or a solicitation to buy securities.

