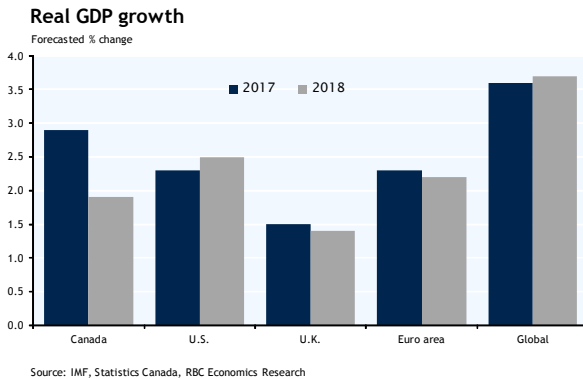




ECONOMIC AND FINANCIAL MARKET OUTLOOK

December 2017

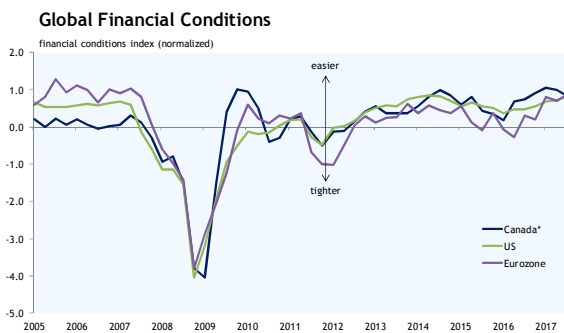
After a highly unusual 2017, what's in store for 2018?



2017 will go down as an unusual year with heightened political uncertainty accompanied by strong financial market performance and accelerating global economic growth. Uncertainty about US immigration, trade and tax policy, the early steps toward the Brexit negotiations, European elections and instability caused by North Korea's missile tests created a tense backdrop. Under usual circumstances, investors would shy away from risky assets and consumer and business confidence would soften. Not so in 2017 with the global economy on track to post the strongest growth since 2014 and the world stock market headed for a double-digit gain. Further, 2017 is closing out with solid momentum teeing up for global growth to stay on this firm growth path in 2018.

Broad-based growth across regions and sectors

The pickup in the global economy reflects activity in a number of countries accelerating backed by favourable financial conditions and improving labour markets. 2018's growth outlook is mixed with Canada likely to post a solid, but slower gain compared to 2017's robust 2.9% increase. In the US, a strong hand-off from 2017 and solid momentum sets up for real GDP to rise 2.5%. The euro-area is also experiencing strong momentum although as the Brexit negotiations progress from settling the divorce bill to hammering out the details of the future trade arrangement growth is likely to gear down modestly. The UK economy is likely to bear the brunt of Brexit related uncertainty although with monetary policy still very accommodative, we see the odds of severe downturn as low.



Inflation - still missing in action

One factor that continues to defy expectations is the absence of inflation outside a currency-induced uptick in the UK. The disconnect from strong economic growth, tightening labour markets and prices is complicating the outlook for monetary policy as most central banks target inflation running at about 2% but few are seeing it. The Fed has been most aggressive in unwinding stimulus but it's occurred at a glacial pace in part due to the lack of inflation pressures but also caution about destabilizing the economy and financial markets. The Fed stepped up the pace of rate hikes in 2017 as the economy moved closer to full employment. However elevated equity markets, narrow credit spreads and historically low interest rates kept financial conditions easy. We expect the Fed to continue to raise the Fed funds target in 2018 as core inflation reaches the 2% target.

In Canada the BOC reversed the cuts made in 2015 to combat the impact of the rout in oil prices. However after hiking in July and September 2017, the Bank stepped back to monitor the impact of these increases on household finances while keeping an eye on the NAFTA renegotiation and limited inflation pressures. With the economy main-

Craig Wright
Chief Economist
416-974-7457
craig.wright@rbc.com

Dawn Desjardins
Deputy Chief Economist
416-974-6919
dawn.desjardins@rbc.com

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

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

taining its strong momentum and the labour market at full employment, we expect inflation to gravitate to the Bank's target in 2018 supporting more rate hikes as the Bank moves to normalize policy.

Meanwhile with the UK and Euro-area heading into the Brexit negotiating round, uncertainty about the outcome will likely result in little action on monetary policy by either the BOE or ECB in 2018.

US economy strong hand off to 2018

The US economy hit warp speed in the middle of the year with the momentum easing only slightly in the fourth quarter. The most notable shift in the economy was the return of business investment which was helped by increased activity in the energy sector. Outside energy, solid consumer spending and a pickup in exports saw companies bump up against capacity limits and invest to meet burgeoning demand. In 2018 businesses will continue to benefit from strengthening trend growth, steady oil prices and low financing costs with a prospective corporate tax rate cut also teeing up for firms to continue to put money to work.

US consumers - in their happy place

With job creation running at a solid clip and the unemployment rate dropping to 4.1%, the long-awaited recovery in wages got underway in 2017 providing scope for consumers to continue spending in 2018. We anticipate the pace of hiring will slow in 2018 as the pool of available workers shrinks. However, with demand likely to hold up, an acceleration in the pace of wage gains will follow. Further, US households have seen their net worth rise materially as asset values jumped while debt levels rose only modestly. US consumers haven't seen this happy coincidence since before the Great Recession so 2018 is likely to mark a year of strong spending with firmer housing activity thrown into the mix.

Change in Fed Chair doesn't change outlook for policy

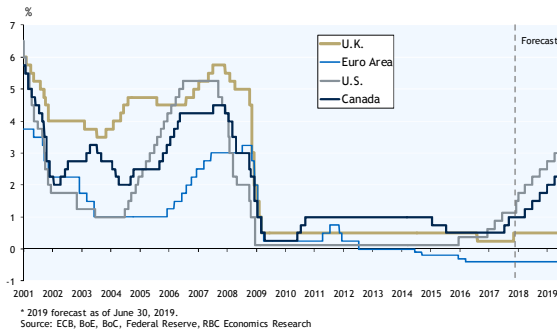
We expect the Fed will stay the course in 2018 and gradually raise the policy rate even when Jerome Powell takes over as Chair in February 2018. Powell appears to be cut of the same cloth as Yellen preferring a gradual, consistent withdrawal of policy stimulus although will likely have a lighter touch on the regulatory front. We are maintaining our forecast that the Fed will raise the Funds target each quarter in 2018 to end the year at 2.5%. Longer-term yields are forecast to rise as the policy rate increases and inflation rears its head (albeit modestly) with the 10-year yield forecast to end the year at 3.3%. In 2019, we expect the Fed to raise the policy rate again to get it closer to its equilibrium level resulting in the economy gearing down to run at a trend rate of 1.9%.

Shift in drivers of growth in Canada underway

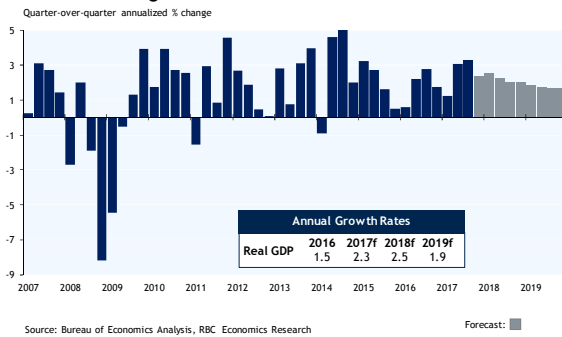
Canada is still on track to be the G-7's growth leader in 2017 with strong gains early in the year underpinning a 2.9% increase. We expect the economy to gear down in 2018 although still grow faster than the economy's potential growth rate. In 2019, as the impact of higher interest rates take effect, the economy is forecast to slow to 1.6% - in line with potential.

The drivers of Canada's economy are set to shift in 2018. After several years of consumer spending and housing activity acting as the main engines of growth, changes to regulations in the housing market and rising interest rates are setting up for a moderation in housing resales and ancillary purchases. Government spending will work to take up some of the slack as the federal government and several provinces continue their infrastructure spending initiatives. Business investment, which started to recover in 2017, is forecast to rise in 2018 with exports

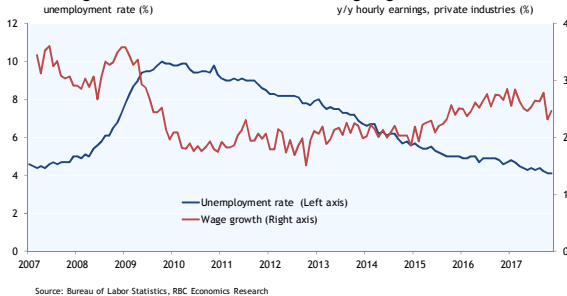
Policy rates: International



U.S.: real GDP growth



US: tight labour market conditions boosting wages



making a mild contribution on the back of solid global trade flows (in particular stronger demand from the US industrial sector) that bump up demand for Canadian goods.

Investment activity rebounded in 2017 backed by a partial recovery in spending by energy companies. Outside of energy, service producers reported increased spending on technology and imports of industrial machinery rose for three consecutive quarters. This trend is forecast to continue in 2018 as firms work to expand capacity given utilization rates hit a post-recession high in the middle of 2017.

Canada's export performance has been mixed with long-term projects coming on line in the oil patch boosting production and energy exports. Non-energy exports however have underperformed. With global trade volumes up and the US industrial sector investing, the door is open for Canadian exports to strengthen somewhat in 2018. This assumes that changes to NAFTA don't materially come into effect next year. The chances of a successful outcome of the talks deteriorated over the first five negotiating rounds. Should NAFTA be rescinded, legal challenges could leave tariffs little changed initially though uncertainty about how the trade relationship will evolve would likely weigh on confidence and limit investment. (see box below for more details)

Canada's dollar: range-bound

Canada's currency appreciated in 2017 on a trade weighted basis due to gains versus the US dollar. Excluding the US dollar, the currency index fell 1.9%. In 2018, Canada's dollar will likely continue to be driven by expectations about the path of policy normalization with gains tempered by concerns about NAFTA and competitiveness challenges emanating from US tax reforms. With the Fed expected to be more active than the Bank of Canada in reducing policy stimulus in the early part of the year, we expect Canada's dollar will weaken modestly. This underperformance against the US dollar is forecast to be short-lived with the Bank returning to rate hike mode early in the second quarter and oil prices expected to be range-bound for much of next year. On net, our forecast is that Canada's currency will trade between 75 US cents and 80 US cents in 2018.

Canada's housing market finally capitulates

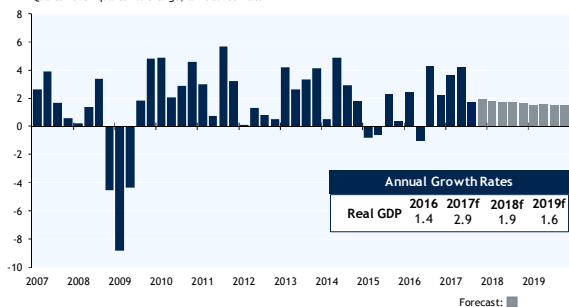
Canada's housing market entered into the early phase of a prolonged cooling process in mid-2017. Sales activity fell from 2016's record pace after a suite of policy measures by federal authorities and provincial governments in British Columbia and Ontario were implemented aimed at cooling some of the country's overheated markets. We expect rising interest rates will drive the next phase of the correction in 2018 as higher rates add to strained affordability in major markets that ultimately tamps down on homebuyer demand.

The risk of a full-blown housing market crash occurring in 2018 is low in our opinion. The majority of housing markets are in balanced condition and expected to remain so in 2018. This will maintain some degree of support for home prices which are forecast to rise again in 2018 albeit at a considerably slower pace.

Labour market heating up

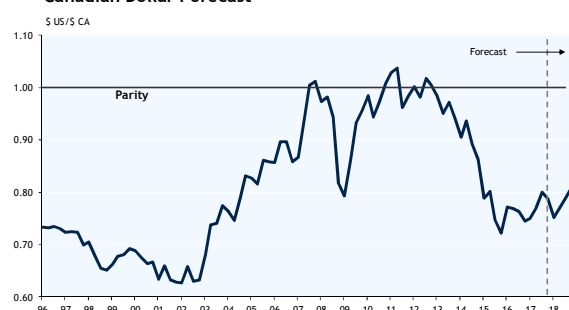
Canada's economy generated a stellar 344,000 jobs with only one month to go in 2017. This blockbuster pace rivalled the gain recorded over the same period in 2007 in the heady times before the Great Recession. Full-time employment grew and the unemployment rate dipped to a cycle low of 5.9% in November. The strong performance in job creation finally hit the trip wire for wages with the Bank of Canada's

Canada: real GDP growth
Quarter-over-quarter % change, annualized rate



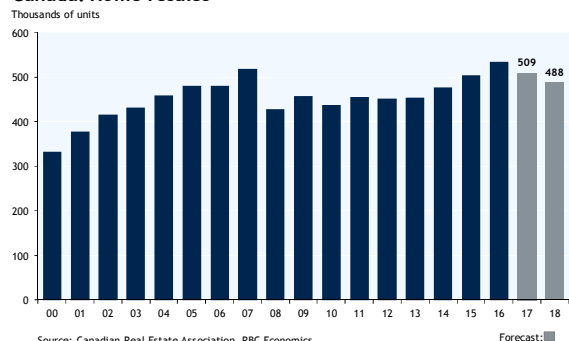
Source: Statistics Canada, RBC Economics Research

Canadian Dollar Forecast



Source: Bank of Canada, RBC Economics Research

Canada: Home resales

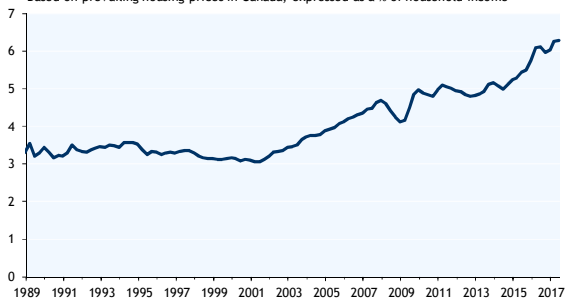


Source: Canadian Real Estate Association, RBC Economics



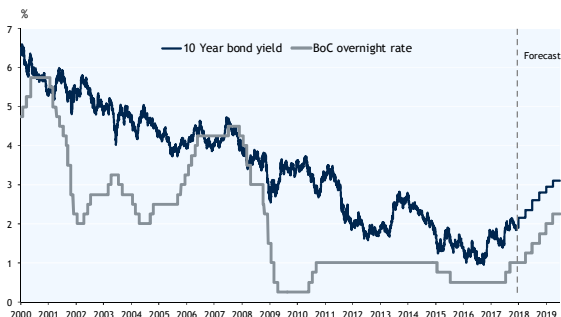
Effect of a 1 ppt rate increase on mortgage payments

Based on prevailing housing prices in Canada, expressed as a % of household income



Source: CREA, RBC Economics Research

Interest rates: Canada



* 2019 forecast as of June 30, 2019
Source: Bank of Canada, RBC Economics Research

favoured measure accelerating for five months running (notably October included the impact of minimum wage hikes in some provinces) and pushed the annual rate of increase to a 19-month high of 2.7%. These gains should allay some of the bank's concerns about slack in the labour market.

Bank of Canada – watching and waiting

The bank also expressed concern about the economy being more sensitive to higher interest rates given the run-up in household debt. By our reckoning, increases in mortgage rates will have approximately double the impact on household budgets today that they did 15 years ago. That said, the persistent improvement in labour market conditions sets up for an acceleration in income growth in 2018 which should mitigate some of the pressure.

In the near term, the bank is likely to maintain a cautious stance and leave the overnight rate at 1.0%. However with the economy forecast to stay on its current path, higher rates will be required to prevent the economy from overheating and pushing inflation above the Bank's 2% target and inflation expectations along with it. Additionally, reducing policy accommodation will help curb further debt accumulation addressing concerns about financial sector vulnerabilities. While the bank will likely sit on the sidelines for the next couple of months to assess the impact of its recent moves, we expect more hikes will come in 2018 and forecast the overnight rate will end the year at 1.75%.

U.S. Tax Reform

Tax reform in the U.S. made surprisingly quick progress late in 2017 and although negotiations are still ongoing, there are \$1½ trillion worth of cuts currently being contemplated. The economic impact of tax cuts in part depends on how much of the savings will be spent by individuals and corporations. The Congressional Committee on Taxation suggests that about half of the planned personal and corporate tax cuts will ultimately go to households making more than \$200k per year in other words higher income households that typically spend less of tax savings.

The current reforms would add about a trillion dollars to the already high and growing national debt over the next decade. "Fiscal hawks" in Congress – if they can still be called that – could demand either a reversal of these tax cuts over time or significant expenditure cuts. How this plays out will make a material difference to the impact of the reforms on the economy. As it stands, the current proposal could add 0.5 ppt to economic growth over the next two years. For now, we have assumed a 0.2 ppt add to growth in our forecast for 2018-2019 and will adjust as details of the package are finalized.

The Impact of NAFTA negotiations on Canada's economic outlook

The NAFTA negotiations have not gone well and the chances that President Trump will give the required six-month notice that the U.S. will withdraw from NAFTA sometime in the first half of next year have risen. That said, any withdrawal plans could get bogged down in court challenges and protracted political wrangling within the U.S. meaning NAFTA could potentially remain in effect in the intervening period.

What would replace NAFTA is unclear. Possibilities range from relatively benign scenarios where NAFTA effectively reverts back to a bilateral free trade agreement between Canada and the U.S. Alternatively a reversion to World Trade Organization tariff rates would have a negative but manageable impact on the economy as a whole – albeit with a more concentrated impact on industries that trade a lot across the Canada/U.S. border. More extreme but lower probability outcomes could see the U.S. impose dramatic tariff hikes on particular industries.

We treat the potential for tariff hikes next year largely as a downside risk in our forecast. Uncertainty about how the negotiations play out is likely already negatively impacting business investment. We expect business investment to rise in 2018 although have pared back our forecast due to the uncertainty created by the negotiations.

Economic forecast detail – Canada

Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	Actuals			Forecast								Actual				
	2017			2018				2019				year-over-year % change				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018	2019
Household Consumption	3.7	5.0	4.0	1.7	1.5	1.4	1.4	1.5	1.4	1.3	1.3	1.4	2.4	3.6	2.1	1.4
Durables	11.0	9.8	4.2	1.0	1.5	1.3	1.3	1.3	1.3	1.2	1.2	1.1	4.5	7.2	2.2	1.3
Semi-Durables	2.6	8.5	2.1	1.8	1.4	1.3	1.4	1.5	1.4	1.2	1.4	1.4	2.2	3.8	2.0	1.4
Non-durables	2.2	6.5	1.6	2.0	1.4	1.3	1.3	1.5	1.4	1.3	1.3	1.4	1.7	2.9	1.8	1.4
Services	2.8	2.9	5.3	1.8	1.7	1.5	1.5	1.6	1.4	1.4	1.3	1.4	2.2	3.1	2.1	1.4
NPISH consumption	-5.1	4.5	6.0	1.7	1.5	1.4	1.4	1.5	1.4	1.3	1.3	1.4	-0.5	0.1	2.3	1.4
Government expenditures	1.0	4.0	3.0	1.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.2	1.8	2.5	2.2
Government fixed investment	-5.2	-0.7	13.4	5.0	2.5	3.5	3.5	3.5	2.8	2.0	2.0	2.0	5.1	3.6	4.4	2.8
Residential investment	11.7	-3.6	-1.4	4.4	-0.4	-6.0	-6.9	-5.4	-1.2	0.8	2.0	2.0	3.3	2.8	-2.1	-2.1
Non-residential investment	10.6	8.2	3.7	1.4	2.8	2.8	2.3	2.1	2.0	2.0	2.0	2.0	-9.4	1.4	2.9	2.1
Non-residential structures	0.5	9.1	2.2	3.0	2.8	2.8	2.5	2.2	2.0	2.0	2.0	2.0	-11.5	-1.1	3.1	2.1
Machinery & equipment	28.1	6.8	6.1	-1.0	2.8	2.8	2.0	2.0	2.0	2.0	2.0	2.0	-6.0	5.2	2.6	2.0
Intellectual property	14.9	5.1	2.6	3.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	-6.4	0.8	2.7	2.0
Final domestic demand	4.0	4.2	3.7	2.0	1.8	1.3	1.2	1.4	1.4	1.5	1.6	1.6	1.1	2.9	2.0	1.4
Exports	2.4	6.1	-10.2	3.0	4.0	3.5	2.5	2.5	3.3	1.7	1.8	2.0	1.0	0.9	1.7	2.5
Imports	13.7	6.6	-0.2	-3.3	2.3	2.2	1.5	1.5	2.8	1.5	2.1	2.5	-1.0	2.9	1.0	2.0
Inventories (change in \$b)	10.8	11.9	17.1	7.3	5.4	5.7	6.6	6.6	6.6	6.5	6.5	6.5	1.0	11.8	6.1	6.5
Real gross domestic product	3.7	4.3	1.7	2.0	1.9	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.4	2.9	1.9	1.6

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	2.1	2.2	0.7	0.4	-0.5	-0.2	0.6	0.9	0.9	0.9	0.9	0.8	0.6	1.3	0.2	0.9
Pre-tax corporate profits	25.8	35.7	14.6	7.4	-1.0	0.1	0.3	-1.8	-1.2	-0.4	-0.4	-0.1	-1.9	19.9	-0.6	-0.5
Unemployment rate (%)*	6.7	6.5	6.2	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	6.4	6.0	6.0
Inflation																
Headline CPI	1.9	1.3	1.4	1.7	1.4	1.9	2.0	1.7	1.8	2.0	2.0	2.1	1.4	1.6	1.8	2.0
CPI ex. food and energy	2.0	1.4	1.4	1.4	1.4	1.7	1.9	2.0	2.1	2.1	2.0	2.0	1.9	1.5	1.8	2.0
External trade																
Current account balance (\$b)*	-54.5	-62.3	-77.4	-61.4	-59.4	-57.9	-56.1	-53.8	-50.1	-47.2	-46.3	-44.7	-65.4	-63.9	-56.8	-47.1
% of GDP*	-2.6	-2.9	-3.6	-2.8	-2.7	-2.6	-2.5	-2.4	-2.2	-2.1	-2.0	-1.9	-3.2	-3.0	-2.6	-2.1
Housing starts (000s)*	223	207	223	224	211	201	187	182	184	184	185	185	198	219	195	185
Motor vehicle sales (mill., saar)*	2.09	2.10	2.08	2.05	2.00	1.97	1.96	1.95	1.94	1.93	1.92	1.92	1.98	2.08	1.97	1.93

*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

	Actuals			Forecast									Actual		Forecast	
	2017			2018				2019					year-over-year % change			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018	2019
Consumer spending	1.9	3.3	2.3	2.8	2.6	2.4	2.1	2.0	1.9	1.9	1.8	1.8	2.7	2.7	2.5	2.0
Durables	-0.1	7.6	8.1	6.3	3.3	2.7	2.1	2.1	1.8	1.8	1.6	1.6	5.5	6.2	4.4	1.9
Non-durables	1.1	4.2	2.0	3.1	2.7	2.8	2.2	2.0	2.0	2.0	1.8	1.8	2.8	2.3	2.7	2.0
Services	2.5	2.3	1.5	2.2	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.8	2.3	2.3	2.1	1.9
Government spending	-0.6	-0.2	0.4	1.3	0.6	0.4	0.4	0.6	0.8	0.8	0.8	0.8	0.8	0.0	0.6	0.7
Residential investment	11.1	-7.3	-5.1	8.0	8.7	3.7	3.8	3.4	1.8	0.9	1.9	1.2	5.5	1.4	3.8	2.3
Non-residential investment	7.1	6.7	4.7	5.5	4.6	3.9	3.1	2.8	2.8	2.8	2.6	2.6	-0.6	4.6	4.5	2.9
Non-residential structures	14.8	7.0	-6.8	1.0	6.0	3.8	2.9	2.3	2.0	2.0	2.0	2.0	-4.1	5.3	2.4	2.3
Equipment & software	4.4	8.8	10.4	9.0	4.8	4.3	3.2	2.9	2.1	1.4	0.7	0.1	-3.4	4.6	6.1	2.1
Intellectual property	5.8	3.7	5.8	3.7	3.4	3.3	3.2	3.0	2.8	2.6	2.6	2.6	6.3	4.2	3.7	2.8
Final domestic demand	2.4	2.7	2.0	3.1	2.7	2.3	2.0	1.9	1.8	1.7	1.6	1.5	2.1	2.4	2.5	1.8
Exports	7.3	3.5	2.2	0.0	3.0	2.8	3.2	3.2	3.0	2.8	2.8	2.8	-0.3	2.9	2.4	3.0
Imports	4.3	1.5	-1.1	4.0	2.9	3.0	3.5	3.0	3.3	2.1	2.1	2.3	1.3	3.3	2.6	2.8
Inventories (change in \$b)	1.2	5.5	39.0	30.0	22.0	23.0	28.0	32.0	40.0	40.0	40.0	45.0	33.4	18.9	26.3	41.3
Real gross domestic product	1.2	3.1	3.3	2.4	2.5	2.3	2.0	2.0	1.9	1.8	1.7	1.7	1.5	2.3	2.5	1.9

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour

Productivity	1.1	1.3	1.5	1.3	1.9	1.8	1.2	1.2	1.1	1.0	0.9	0.8	0.1	1.3	1.5	0.9
Pre-tax corporate profits	3.3	6.4	5.4	4.0	6.9	6.6	2.6	1.7	1.4	0.8	0.3	0.1	-2.1	4.8	4.4	0.7
Unemployment rate (%)*	4.7	4.4	4.3	4.1	4.1	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.9	4.4	4.1	4.0
Inflation																
Headline CPI	2.5	1.9	2.0	2.1	1.7	2.0	1.9	1.4	1.7	1.9	2.0	2.1	1.3	2.1	1.7	1.9
CPI ex. food and energy	2.2	1.8	1.7	1.8	1.7	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.2	1.9	2.0	2.0
External trade																
Current account balance (\$b)*	-454	-493	-463	-499	-500	-504	-511	-514	-524	-526	-525	-528	-452	-477	-507	-526
% of GDP*	-2.4	-2.6	-2.4	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.4	-2.5	-2.5	-2.5
Housing starts (000s)*	1238	1167	1164	1270	1275	1285	1300	1315	1315	1315	1325	1325	1177	1210	1294	1320
Motor vehicle sales (millions, saar)*	17.1	16.8	17.1	17.5	17.5	17.9	17.9	18.1	18.1	18.3	18.2	18.4	17.5	17.1	17.8	18.2

*Period average

Source: Bureau of Economic Analysis, RBC Economics Research forecasts

Financial market forecast detail

Interest rates—North America

%, end of period

	Actual							Forecast							Actual			Forecast		
	16Q1	16Q2	16Q3	16Q4	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	2016	2017	2018			
Canada																				
Overnight	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.25	1.50	1.75	2.00	2.25	0.50	1.00	1.75			
Three-month	0.45	0.49	0.53	0.46	0.52	0.71	1.00	0.90	1.00	1.20	1.45	1.70	2.05	2.25	0.46	0.90	1.70			
Two-year	0.54	0.52	0.52	0.75	0.75	1.10	1.52	1.50	1.60	1.75	1.95	2.25	2.40	2.60	0.75	1.50	2.25			
Five-year	0.67	0.57	0.62	1.12	1.12	1.40	1.75	1.70	1.85	2.05	2.30	2.55	2.75	2.90	1.12	1.70	2.55			
10-year	1.23	1.06	1.00	1.71	1.62	1.76	2.10	1.90	2.15	2.35	2.60	2.80	2.95	3.10	1.71	1.90	2.80			
30-year	2.00	1.72	1.66	2.31	2.30	2.14	2.47	2.20	2.50	2.75	2.95	3.10	3.15	3.25	2.31	2.20	3.10			
Yield curve (10s-2s)	69	54	48	96	87	66	58	40	55	60	65	55	55	50	96	40	55			
United States																				
Fed funds*	0.50	0.50	0.50	0.75	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	0.75	1.50	2.50			
Three-month	0.21	0.26	0.29	0.51	0.76	1.03	1.06	1.30	1.55	1.80	2.05	2.30	2.55	2.80	0.51	1.30	2.30			
Two-year	0.73	0.58	0.77	1.20	1.27	1.38	1.47	1.85	2.10	2.35	2.55	2.75	3.00	3.25	1.20	1.85	2.75			
Five-year	1.21	1.01	1.14	1.93	1.93	1.89	1.92	2.15	2.50	2.70	2.90	3.05	3.25	3.45	1.93	2.15	3.05			
10-year	1.78	1.49	1.60	2.45	2.40	2.31	2.33	2.30	2.80	3.00	3.15	3.30	3.45	3.60	2.45	2.30	3.30			
30-year	2.61	2.30	2.32	3.06	3.02	2.84	2.86	2.65	3.20	3.35	3.50	3.60	3.70	3.75	3.06	2.65	3.60			
Yield curve (10s-2s)	105	91	83	125	113	93	86	45	70	65	60	55	45	35	125	45	55			
Yield spreads																				
Three-month T-bills	0.24	0.23	0.24	-0.05	-0.24	-0.32	-0.06	-0.40	-0.55	-0.60	-0.60	-0.60	-0.50	-0.55	-0.05	-0.40	-0.60			
Two-year	-0.19	-0.06	-0.25	-0.45	-0.52	-0.28	0.05	-0.35	-0.50	-0.60	-0.60	-0.50	-0.60	-0.65	-0.45	-0.35	-0.50			
Five-year	-0.54	-0.44	-0.52	-0.81	-0.81	-0.49	-0.17	-0.45	-0.65	-0.65	-0.60	-0.50	-0.50	-0.55	-0.81	-0.45	-0.50			
10-year	-0.55	-0.43	-0.60	-0.74	-0.78	-0.55	-0.23	-0.40	-0.65	-0.65	-0.55	-0.50	-0.50	-0.50	-0.74	-0.40	-0.50			
30-year	-0.61	-0.58	-0.66	-0.75	-0.72	-0.70	-0.39	-0.45	-0.70	-0.60	-0.55	-0.50	-0.55	-0.50	-0.75	-0.45	-0.50			

Note: Interest Rates are end of period rates. * Top of 25 basis point range

Interest rates—International

%, end of period

	Actual							Forecast							Actual			Forecast		
	16Q1	16Q2	16Q3	16Q4	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	2016	2017	2018			
United Kingdom																				
Repo	0.50	0.50	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.25	0.50	0.50			
Two-year	0.45	0.13	0.13	0.08	0.12	0.36	0.46	0.60	0.65	0.70	0.70	0.70	0.70	0.75	0.08	0.60	0.70			
10-year	1.43	0.89	0.76	1.24	1.14	1.26	1.38	1.50	1.60	1.65	1.75	1.80	1.90	2.05	1.24	1.50	1.80			
Euro Area																				
Deposit rate	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40			
Two-year	-0.48	-0.61	-0.69	-0.78	-0.74	-0.57	-0.69	-0.70	-0.65	-0.65	-0.60	-0.50	-0.50	-0.50	-0.78	-0.70	-0.50			
10-year	0.15	-0.11	-0.12	0.21	0.33	0.47	0.47	0.50	0.65	0.65	0.70	0.80	1.00	1.05	0.21	0.50	0.80			
Australia																				
Cash target rate	2.00	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	2.00	1.50	1.50	1.50				
Two-year swap	1.89	1.59	1.55	1.86	1.76	1.78	1.94	2.00	2.00	2.10	2.25	2.40	2.50	2.60	1.86	2.00	2.40			
10-year swap	2.49	1.98	1.91	2.76	2.70	2.60	2.84	2.55	2.90	3.10	3.40	3.55	3.85	4.10	2.76	2.55	3.55			
New Zealand																				
Cash target rate	2.25	2.25	2.00	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75			
Two-year	2.19	2.22	1.96	2.50	2.31	2.32	2.19	2.20	2.20	2.30	2.40	2.50	2.60	2.75	2.50	2.20	2.50			
10-year	2.97	2.65	2.41	3.58	3.41	3.35	3.24	3.05	3.40	3.60	3.80	3.95	4.10	4.30	3.58	3.05	3.95			

Growth outlook

% change, quarter-over-quarter in real GDP

	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017F	2018F	2019F
Canada*	3.7	4.3	1.7	2.0	1.9	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.4	2.9	1.9	1.6
United States*	1.2	3.1	3.3	2.4	2.5	2.3	2.0	2.0	1.9	1.8	1.7	1.7	1.5	2.3	2.5	1.9
United Kingdom	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	1.8	1.5	1.4	1.4
Euro area	0.6	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	1.8	2.3	2.2	1.9
Australia	0.4	0.9	0.6	0.9	0.8	0.6	0.5	0.5	0.7	0.7	0.9	0.9	2.6	2.2	2.8	3.0
New Zealand	0.6	0.8	0.8	0.8	1.0	0.8	0.8	0.7	0.7	0.7	0.7	0.7	3.0	2.7	3.4	2.9

*Seasonally adjusted annualized rates

Inflation outlook

% change, year-over-year

	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017F	2018F	2019F
Canada	1.9	1.3	1.4	1.7	1.4	1.9	2.0	1.7	1.8	2.0	2.0	2.1	1.4	1.6	1.8	2.0
United States	2.5	1.9	2.0	2.1	1.7	2.0	1.9	1.4	1.7	1.9	2.0	2.1	1.3	2.1	1.7	1.9
United Kingdom	2.2	2.8	2.8	2.9	2.8	2.6	2.6	2.5	2.3	2.2	2.2	2.0	0.6	2.7	2.6	2.2
Euro area	1.8	1.5	1.4	1.4	1.2	1.3	1.4	1.4	1.4	1.4	1.5	1.5	0.2	1.5	1.3	1.5
Australia	2.1	1.9	1.8	2.0	2.1	2.5	2.4	2.3	2.3	2.5	2.6	2.7	1.3	2.0	2.3	2.5
New Zealand	2.2	1.7	1.9	1.8	1.4	2.0	2.1	2.0	2.0	2.0	2.0	2.0	0.6	1.8	2.0	2.0

Exchange rates

%, end of period

	Actual							Forecast					Actual	Forecast	
	16Q1	16Q2	16Q3	16Q4	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	2016	2017	2018
AUD/USD	0.77	0.75	0.77	0.72	0.76	0.77	0.78	0.80	0.77	0.74	0.73	0.73	0.72	0.80	0.73
USD/CAD	1.30	1.29	1.31	1.34	1.33	1.30	1.25	1.27	1.33	1.30	1.27	1.24	1.34	1.27	1.24
EUR/USD	1.14	1.11	1.12	1.05	1.07	1.14	1.18	1.14	1.12	1.10	1.08	1.12	1.05	1.14	1.12
USD/JPY	112.6	102.7	101.3	117.0	111.4	112.4	112.5	110.0	107.0	105.0	107.0	109.0	117.0	110.0	109.0
NZD/USD	0.69	0.71	0.73	0.69	0.70	0.73	0.72	0.75	0.72	0.70	0.69	0.69	0.69	0.75	0.69
USD/CHF	0.96	0.98	0.97	1.02	1.00	0.96	0.97	1.02	1.04	1.07	1.11	1.09	1.02	1.02	1.09
GBP/USD	1.44	1.33	1.30	1.24	1.26	1.30	1.34	1.28	1.24	1.21	1.17	1.20	1.24	1.28	1.20

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.