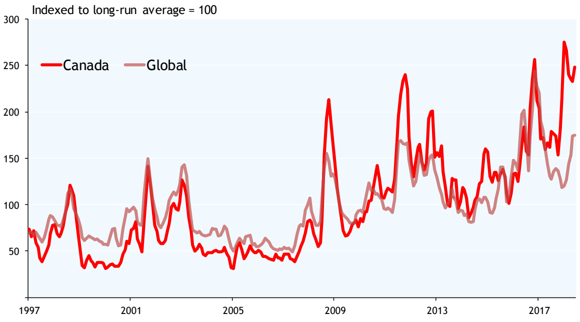
ECONOMIC AND FINANCIAL MARKET OUTLOOK

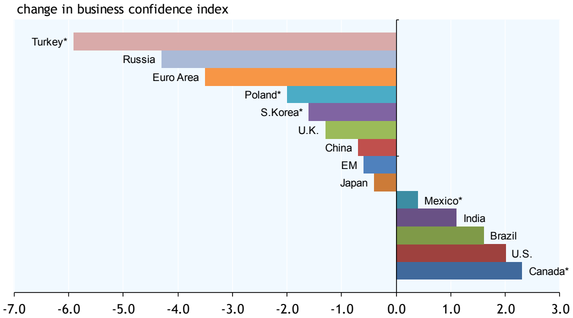
September 2018

Global Policy Uncertainty Elevated



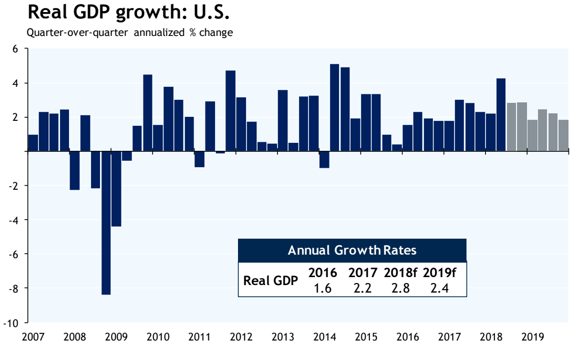
Source: Policyuncertainty.com, RBC Economics Research

PMI



*Manufacturing only
Source:IIF, Markit, Bloomberg, RBC Economics Research

Real GDP growth: U.S.



Source: Bureau of Economics Analysis, RBC Economic Research

Global economy losing altitude though remains on positive growth path

The global economy has been hitting more patches of turbulence over the past few months. Trade tensions are high, with the US keeping the pressure on two of its top three trading partners - Canada and China. Although the US and Mexico came to an agreement on trade in late August, Canada has yet to sign on to a revamped NAFTA, and the White House is threatening auto tariffs if a resolution can't be found. The US is also threatening to put tariffs on $200 billion of Chinese imports. Global trade activity has started to ease with the persistence of these trade frictions opening the door to further slowing ahead. Business activity indicators remain consistent with growth however they have started to turn lower in some countries. In the emerging market economies, indices have fallen in China, Turkey and Russia since the beginning of the year while among advanced economies the Euro-area has turned down. With policy uncertainty high and unemployment rates running below their pre-recession averages the risk is rising that the peak in global growth is behind us.

Despite the headwinds, we expect the global economy to post a strong gain in 2018 and to avoid a significant downturn next year. Monetary policy stimulus remains, and some countries have opened the spigot on the fiscal front. The US tax cuts and large infrastructure bill will keep the economy on a firm growth path for the remainder of 2018. In 2019, growth is likely to slow modestly as the Federal Reserve continues to retract policy support via interest rate increases and as the lift from fiscal policy fades. In Canada and the Euro-area, our forecast is for growth to be more modest, although both regions will likely expand close to their economy's potential rate. The UK economy will lag its trading partners as Brexit uncertainty dampens activity.

US economy reaping the benefits of policy stimulus

The US economy hit warp speed in the second quarter, with real GDP posting the fastest gain since the middle of 2014. Growth is likely to gear down modestly in the second half of the year as Q2's surge in exports unwinds. Outside of the trade sector, most areas of the US economy are projected to maintain their positive momentum. US consumer spending was volatile in the first half of the year with a weak first quarter followed by a surge in consumption which clocked in at a 3.8% rate in Q2. The combination of a robust labour market, rising asset values and an elevated savings rate will support spending activity in the

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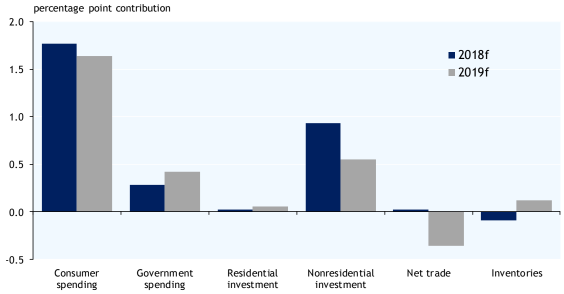
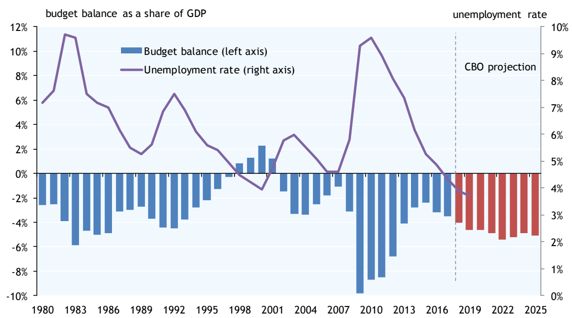
Contributions to US GDP growth



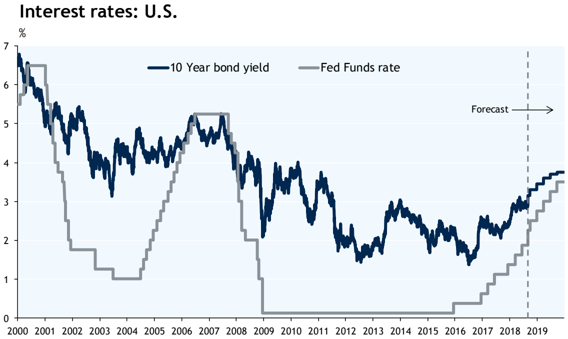
Source: Bureau of Economic Analysis, RBC Economics Research

US federal budget deficit and unemployment rate



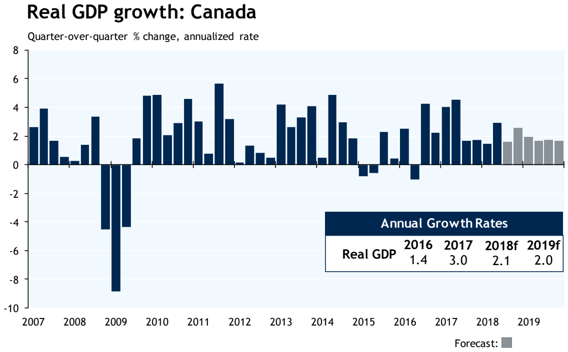
Source: Congressional Budget Office, Bureau of Labor Statistics, RBC Economics Research

Interest rates: U.S.



Source: Federal Reserve, RBC Economic Research

Real GDP growth: Canada



Source: Statistics Canada, RBC Economic Research

second half of the year. The economy will likely benefit from healthy consumer spending again in 2019, albeit at a someone slower pace as interest rate increases curb borrowing activity.

The key support for the US consumer continues to be a strong labour market. The unemployment rate stands at 3.9%, the lowest since late 2000. Demand for workers remains strong and the pool of labour is shrinking, suggesting wages will rise as employers compete for increasingly scarce labour. That said, wage growth to-date has been uncharacteristically slow, raising the prospect that structural changes in the economy are at work.

Business investment is on the rise with some industries hitting capacity limits. The US Tax Cuts and Jobs Act spurred businesses to spend to take advantage of the full expensing of equipment purchases while the cuts to the CIT saw after-tax profits rise at a 15½% pace compared to the first half of 2017. We estimate that fiscal stimulus will add 0.4ppt and 0.3ppt to the economy's output in 2018 and 2019, respectively. These policy measures will however amplify the rise in the debt-to-GDP ratio. Providing stimulus this late in the cycle with the unemployment rate at its cyclical low is uncommon and creates inflation risks. This raises the possibility that the Fed may need to hike rates at a faster clip.

Inflation pressures are already showing signs of picking up. The headline CPI rate is close to 3% and although a portion of the increase reflects surging energy prices, the core measure which excludes both energy and food prices, has also accelerated to stand at the highest level since the recession. Government spending is augmenting the positive momentum in consumption and business investment and will likely keep the economy growing at an above-potential rate in the second half of this year. The expansion is likely slow mildly in 2019 with real GDP up 2.4% as the Fed reduces the amount of policy stimulus via interest rate increases.

The Fed has arguably achieved its dual mandate with the economy at (or even beyond) full employment and inflation around the 2% target. Our forecast assumes the fed funds target will rise 25 bps each quarter and reach 3.5% by the end of 2019. A fed funds rate above 3% implies that policy will turn restrictive for the first time in over a decade. We project ten-year yields will reach 3.75% by the end of next year, close to 100bps above today's level.

Canada's economy chugging along despite trade uncertainty

Canada's economic performance was uneven over the first half of 2018 with Q1's mild 1.4% gain followed by an outsized 2.9% rise in Q2. We expect the second half will be much the same, with a shutdown at a major oil sands producer in July expected to weigh on the quarter's performance to be followed by a rebound in Q4 as production recovers.

On net, the economy is forecast to grow by 2.1% in 2018 and slow just a shade in 2019 to 2%. Despite the uncertain trade backdrop, consumer and business confidence remains high. Canada's trade gap narrowed in the second quarter with exports surging as US buyers got ahead of US import tariffs. Given the tense trade backdrop with tariffs being levied on both sides of the border, exports and imports are forecast to rise at a significantly slower pace going forward.

The consumer will continue to underpin the expansion although spending growth will slow markedly from 2017's 3.5% pace. The persistence of solid job gains is generating modest upward pressure on wages although disposable income growth softened a bit in the first half of 2018. In part this reflects a rise in tax payments. Households' net worth also dipped slightly, but remains historically elevated and sufficient to sustain consumer spending growth of 2% in 2018. The outlook for 2019 is for somewhat softer activity as higher interest rates push up debt service costs.

Housing market correction ran deeper and longer than we expected

New stress tests for borrowers and rising interest rates weighed on Canada's housing market in the first part of 2018. While the correction proved deeper and lasted longer than we had anticipated, we believe it has largely run its course with sales rising in the three months to July. We expect the recovery in sales activity will continue in the second half of the year, limiting the annual decline to 11.5%. The annual drop masks the divergence in housing market activity across regions with BC and Ontario experiencing more substantive declines while Quebec will likely see sales increase on average this year.

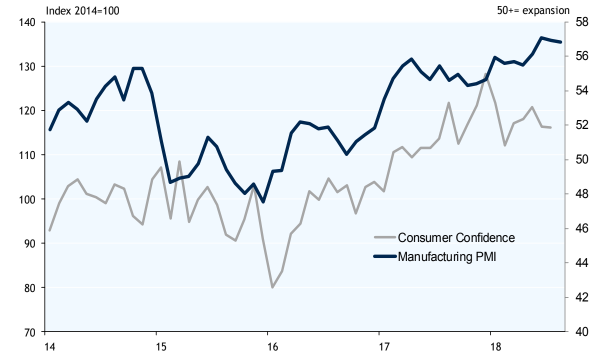
The correction in sales activity was accompanied by a decline in listings, resulting in most markets shifting into better balance. This took some of the heat off of prices which as of July were up 2.1% from a year earlier. Prices in Vancouver and Montreal are up while after falling prices in Toronto have levelled off. Our forecast looks for price gains to average just 1.8% this year with little change expected in 2019, a marked slowdown from the close to 10% gains recorded in 2016 and 2017.

Canadian households remain heavily indebted although the debt-to-income ratio fell 0.8 ppts in Q1 from a year earlier to mark the largest annual decline since 2001. While the debt service ratio held steady at 13.9 cents per dollar of PDI, this masked an increase in interest costs with higher rates bumping up the interest portion 10.5% relative to early 2017. Further rate increases will put more pressure on service payments given the large stock of debt outstanding. The recent acceleration in wage growth will help slow, though won't stop, an uptick in the debt service ratio meaning households will need to direct an increasing amount of their incomes to make their loan payments.

Businesses keeping a stiff upper lip

Business investment continued to firm in the first half of 2018 as companies expanded their capacity. Since bottoming in late 2016, investment is up more than 12% and an elevated number of Canadian businesses still report they would have difficulty meeting stronger demand. A significant number also reported labour shortages. The June survey was conducted before the US levied tariffs on Canadian steel and alu-

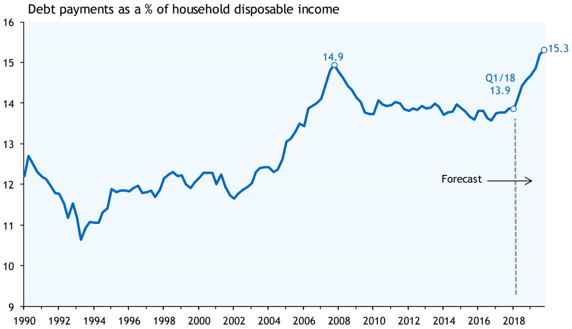
PMI and Consumer Confidence: Canada



Source: IHS Markit, Conference Board, RBC Economic Research

Household debt service ratio: Canada

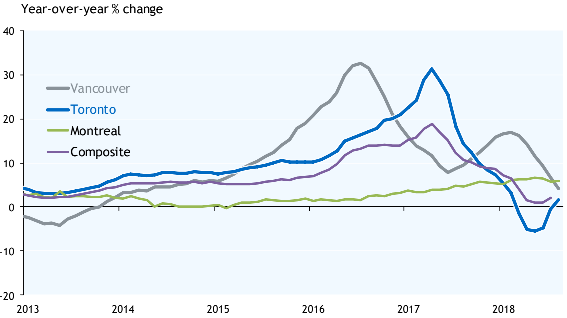
Debt payments as a % of household disposable income



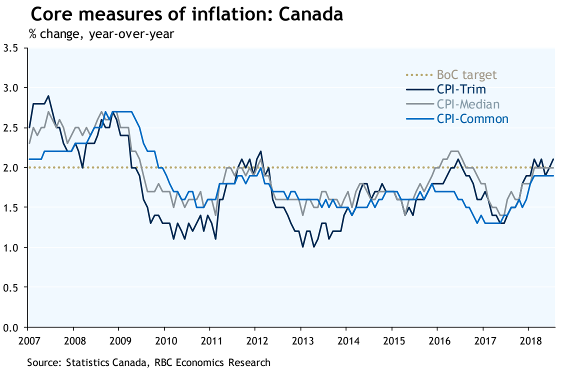
Source: Statistics Canada, RBC Economic Research

MLS Home Price Index

Year-over-year % change



Source: CREA, TREB, REBGV, RBC Economic Research

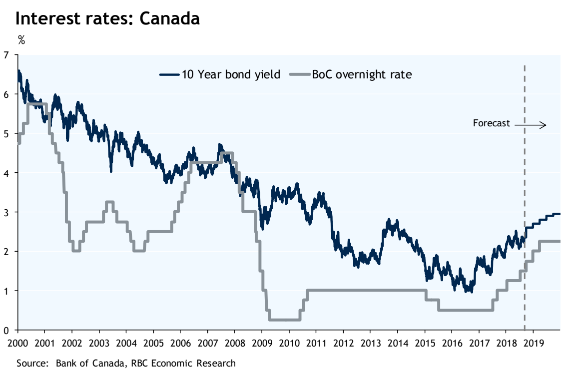


minum. While 39% of companies still intended to address supply constraints by upping spending on M&E, the number came down sharply from previous surveys. Uncertainty about NAFTA, US tax cuts, and tariffs likely played some role in the pullback. A resolution on NAFTA could fuel further gains in investment activity while the dissolution of the trade pact could see companies pull back significantly.

Canada's headline inflation touched 3% in July in large part due to energy prices as well as an unusually large surge in airfares while the bank's core inflation measures converged at 2%. A growing number of businesses expect inflation will be 2% or higher in the year ahead suggests inflation rates are unlikely to slide below target in a meaningful way. Additional, albeit modest, upward pressure on inflation is being generated by Canada's retaliatory tariffs on US imports.

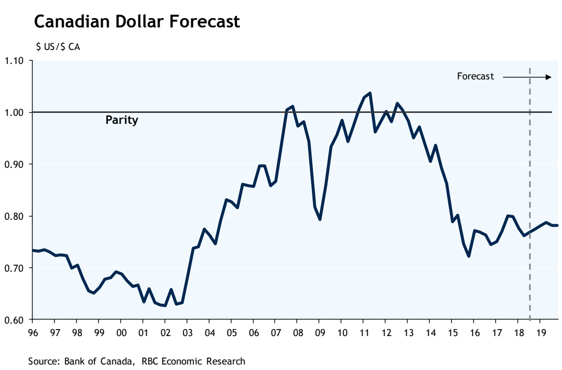
Poloz and team on hiking path

The Bank of Canada raised the overnight rate to 1.50% in July. Another hike is likely in the fourth quarter as the bank works to move the policy rate closer to neutral given limited slack in the economy and core inflation running at the 2% target.

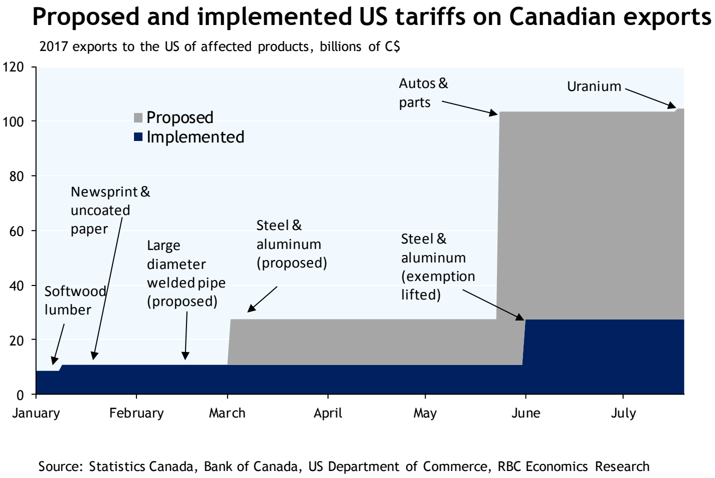


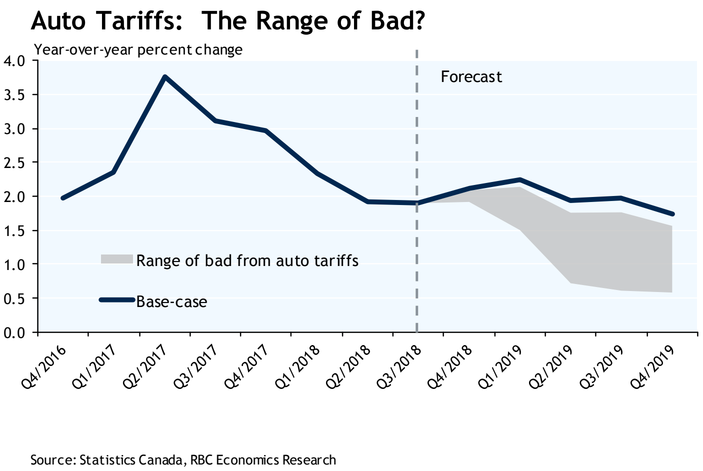
The bank will continue to act with caution in order to minimize the pressure being exerted on household balance sheets as debt service costs go up. Further rate increases in the first half of 2019 are forecast to bring the overnight rate to 2.25% by mid-year.

Canada's currency is down 4.3% against the US dollar so far this year however it is holding up against the other majors. The effective exchange rate excluding the USD is down just ½%. To be sure, being part of the countries with a rate-hiking central bank has helped Canada's currency versus the other majors. Looking ahead with both the Fed and the BOC likely to continue to bump up the policy rate at a measured pace, the upside for Canada's currency against USD will be limited. Our bullish outlook for oil will provide some support for CAD, although renewed uncertainty about the Trans Mountain Pipeline will lessen the impact.



The cost of tariffs for Canada's economy





To-date the US government has levied tariffs on 5% of Canadian goods exports. Should the Trump Administration follow through with its threat to levy tariffs on Canadian autos and parts it would mean that 20% of Canadian exports would face tariffs when entering the US. Canada retaliated with tariffs on $16.6 billion of imports from the US that will cut into Canadian import demand in the second half of 2018 and will put upward, albeit modest, pressures on prices. Our forecast assumes that the US tariffs and Canada's retaliatory measures to-date will lower the level of GDP by ~0.2 ppts by the end of 2018.

Should the Trump administration levy 20-25% tariffs on Canada's auto sector, the impact would be more dramatic. Just how much, though, depends on a myriad of factors: how big the tariffs ultimately are, the range of products targeted and any retaliation from the Canadian side along with offsets from Canadian dollar depreciation – just to name a few. Tariffs on production and an assumed decline in auto sales activity would generate an estimated 0.5ppt hit to the economy. Adding on sectors indirectly impacted, could more than double the hit to the economy's growth rate.

Economic forecast detail — Canada

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
Household Consumption	4.0	4.3	3.1	2.2	1.0	2.6	1.9	2.0	1.8	1.7	1.6	1.7	2.4	3.5	2.2	1.9
Durables	12.2	7.2	-0.6	2.1	1.5	2.1	1.7	1.7	1.6	1.6	1.5	1.5	4.5	6.5	1.8	1.6
Semi-Durables	2.8	6.0	2.3	-0.7	-0.4	4.8	1.9	1.9	1.8	1.6	1.8	1.8	2.2	3.3	1.7	1.9
Non-durables	2.1	5.6	0.4	3.5	-0.5	1.0	1.7	2.5	2.0	1.7	1.7	1.8	1.7	2.6	1.5	1.9
Services	3.0	2.8	5.2	2.0	1.7	3.2	2.0	2.0	1.8	1.8	1.7	1.8	2.2	3.2	2.6	1.9
NPISH consumption	-4.8	0.0	3.4	-1.1	4.5	6.7	1.9	2.0	1.8	1.7	1.6	1.7	-0.5	-1.1	3.0	2.1
Government expenditures	4.8	0.8	3.5	3.8	2.6	1.6	2.5	2.5	2.0	2.0	2.0	2.0	2.2	2.3	2.6	2.1
Government fixed investment	-4.2	-1.1	11.6	8.4	4.0	-2.0	3.5	3.5	2.8	2.0	2.0	2.0	5.1	3.8	4.1	2.4
Residential investment	7.1	-1.3	-0.1	13.5	-10.5	1.1	0.8	-4.0	-3.6	-2.0	-0.5	0.3	3.3	2.9	-0.4	-1.9
Non-residential investment	14.3	7.5	5.9	8.0	11.4	1.9	2.3	2.1	2.0	2.0	2.0	2.0	-9.4	2.8	6.2	2.1
Non-residential structures	5.9	6.7	8.9	4.0	8.2	2.2	2.5	2.2	2.0	2.0	2.0	2.0	-11.5	0.7	5.1	2.1
Machinery & equipment	28.5	8.7	1.6	14.5	16.4	1.4	2.0	2.0	2.0	2.0	2.0	2.0	-6.0	6.0	8.0	2.0
Intellectual property	11.9	6.8	9.2	3.0	14.4	1.0	2.0	2.0	2.0	2.0	2.0	2.0	-6.4	1.2	6.1	1.9
Final domestic demand	4.9	3.2	3.6	4.1	1.7	2.1	2.0	1.8	1.5	1.5	1.6	1.7	1.1	3.0	2.6	1.7
Exports	2.6	6.4	-9.9	3.9	2.4	12.3	1.5	3.5	3.3	1.7	1.8	2.0	1.0	1.1	3.0	3.1
Imports	14.9	4.1	1.3	7.7	4.2	6.5	0.0	2.2	2.1	1.0	1.5	2.1	-1.0	3.6	4.2	1.8
Inventories (change in $b)	8.9	12.8	18.3	15.8	15.8	14.1	9.5	11.5	11.8	11.3	11.3	11.3	1.0	13.9	12.7	11.4
Real gross domestic product	**4.0**	**4.6**	**1.7**	**1.7**	**1.4**	**2.9**	**1.6**	**2.6**	**1.9**	**1.7**	**1.7**	**1.7**	**1.4**	**3.0**	**2.1**	**2.0**

Other indicators

Year-over-year % change unless otherwise indicated

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018	2019
Business and labour																
Productivity	2.2	2.6	1.1	1.1	-0.2	0.2	0.8	1.2	1.6	1.3	1.4	1.0	0.6	1.8	0.5	1.3
Pre-tax corporate profits	25.7	35.4	14.5	7.9	0.0	4.6	4.8	3.5	4.4	2.0	2.7	1.6	-1.9	19.9	3.2	2.7
Unemployment rate (%)*	6.6	6.5	6.2	6.0	5.8	5.9	5.9	5.8	5.8	5.8	5.8	5.8	7.0	6.3	5.9	5.8
Inflation																
Headline CPI	1.9	1.3	1.4	1.8	2.1	2.3	2.8	2.7	2.3	2.7	2.4	2.3	1.4	1.6	2.5	2.4
CPI ex. food and energy	2.0	1.4	1.4	1.6	1.8	1.8	2.3	2.4	2.2	2.3	2.3	2.4	1.9	1.6	2.1	2.3
External trade																
Current account balance ($b)*	-55.9	-59.6	-71.7	-65.9	-69.9	-63.5	-63.7	-56.8	-54.4	-50.2	-48.3	-48.0	-65.4	-63.3	-63.5	-50.2
% of GDP*	-2.6	-2.8	-3.3	-3.0	-3.2	-2.9	-2.8	-2.5	-2.4	-2.2	-2.1	-2.0	-3.2	-2.9	-2.8	-2.2
Housing starts (000s)*	222	207	223	229	225	219	209	203	198	196	193	192	198	220	214	195
Motor vehicle sales (mill., saar)*	2.07	2.10	2.08	2.05	2.12	2.07	2.02	1.99	1.96	1.95	1.94	1.94	1.98	2.08	2.05	1.95

*Period average

Source: Statistics Canada, RBC Economic 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	1.8	2.9	2.2	3.9	0.5	3.8	3.2	2.7	1.7	2.3	2.3	1.8	2.7	2.5	2.6	2.4
Durables	1.9	8.6	7.8	12.6	-2.0	8.6	4.5	2.8	2.2	2.3	2.2	1.6	5.5	6.8	5.6	3.0
Non-durables	1.9	4.0	2.3	4.0	0.1	3.7	4.5	3.5	1.9	2.5	2.4	1.8	2.7	2.1	2.8	2.8
Services	1.7	1.7	1.4	2.6	1.0	3.1	2.6	2.5	1.6	2.3	2.3	1.8	2.3	2.0	2.1	2.2
Government spending	-0.8	0.1	-1.0	2.4	1.5	2.4	2.4	2.7	2.4	2.4	2.4	2.4	1.4	-0.1	1.6	2.5
Residential investment	11.1	-5.5	-0.5	11.2	-3.4	-1.6	0.0	3.4	1.8	0.9	1.9	1.2	6.5	3.3	0.6	1.5
Non-residential investment	9.6	7.3	3.4	4.9	11.5	8.5	3.9	5.7	2.8	2.8	2.6	2.6	0.5	5.3	7.1	3.8
Non-residential structures	12.8	3.8	-5.8	1.3	13.9	13.2	3.0	5.2	4.0	4.0	2.0	2.0	-5.0	4.6	6.2	4.3
Equipment & software	9.1	9.7	9.8	9.9	8.5	4.4	5.0	6.5	3.5	3.5	0.7	0.1	-1.5	6.1	7.6	3.7
Intellectual property	7.9	6.6	1.7	0.7	14.1	11.0	3.0	5.0	4.8	3.6	2.6	2.6	7.5	4.6	6.9	4.3
Final domestic demand	2.6	2.6	1.7	4.0	1.9	3.9	3.0	3.1	2.1	2.5	2.2	1.8	2.3	2.5	2.9	2.6
Exports	5.0	3.6	3.5	6.6	3.6	9.1	1.0	2.5	1.8	2.8	2.8	2.8	-0.1	3.0	4.8	2.6
Imports	4.8	2.5	2.8	11.8	3.0	-0.4	7.5	6.0	5.4	3.3	2.8	3.2	1.9	4.6	4.6	4.5
Inventories (change in $b)	-2.4	11.9	64.4	16.1	30.3	-26.9	5.0	15.0	25.0	27.0	27.0	32.0	23.4	22.5	5.9	27.8
Real gross domestic product	**1.8**	**3.0**	**2.8**	**2.3**	**2.2**	**4.2**	**2.8**	**2.8**	**1.8**	**2.4**	**2.2**	**1.8**	**1.6**	**2.2**	**2.8**	**2.4**

Other indicators

Year-over-year % change unless otherwise indicated

	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	2016	2017	2018	2019
Business and labour																
Productivity	1.0	1.2	1.5	0.8	0.9	1.4	1.1	1.7	1.7	1.2	1.2	1.0	0.2	1.1	1.3	1.3
Pre-tax corporate profits	3.0	3.6	2.8	3.3	5.9	7.7	8.2	7.0	6.3	3.9	3.5	2.5	-1.1	3.2	7.2	4.0
Unemployment rate (%)*	4.7	4.3	4.3	4.1	4.1	3.9	3.8	3.7	3.7	3.6	3.6	3.6	4.9	4.4	3.9	3.6
Inflation																
Headline CPI	2.5	1.9	2.0	2.1	2.2	2.7	2.7	2.7	2.5	2.6	2.6	2.4	1.3	2.1	2.6	2.5
CPI ex. food and energy	2.2	1.8	1.7	1.8	1.9	2.2	2.3	2.3	2.2	2.2	2.3	2.4	2.2	1.8	2.2	2.3
External trade																
Current account balance ($b)*	-431	-487	-414	-465	-496	-427	-477	-513	-544	-556	-563	-571	-433	-449	-478	-558
% of GDP*	-2.3	-2.5	-2.1	-2.4	-2.5	-2.1	-2.3	-2.4	-2.6	-2.6	-2.6	-2.6	-2.3	-2.3	-2.3	-2.6
Housing starts (000s)*	1231	1171	1172	1259	1317	1254	1300	1315	1315	1315	1325	1325	1177	1208	1297	1320
Motor vehicle sales (millions, saar)*	17.1	16.8	17.1	17.6	17.1	17.2	16.8	17.3	17.3	17.3	17.4	17.4	17.5	17.1	17.1	17.4

*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	
	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017	2018	2019
Canada																
Overnight	0.50	0.50	1.00	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.25	2.25	0.50	1.00	1.75	2.25
Three-month	0.52	0.71	1.00	1.06	1.10	1.26	1.40	1.65	1.90	2.15	2.15	2.15	0.46	1.06	1.65	2.15
Two-year	0.75	1.10	1.52	1.69	1.78	1.91	2.10	2.30	2.45	2.45	2.40	2.35	0.75	1.69	2.30	2.35
Five-year	1.12	1.40	1.75	1.87	1.97	2.07	2.25	2.45	2.55	2.65	2.70	2.70	1.12	1.87	2.45	2.70
10-year	1.62	1.76	2.10	2.04	2.09	2.17	2.35	2.60	2.70	2.80	2.90	2.95	1.71	2.04	2.60	2.95
30-year	2.30	2.14	2.47	2.27	2.23	2.20	2.45	2.70	2.80	2.90	3.00	3.00	2.31	2.27	2.70	3.00
Yield curve (10s-2s)	87	66	58	35	31	26	25	30	25	35	50	60	96	35	30	60
United States																
Fed funds*	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	0.75	1.50	2.50	3.50
Three-month	0.76	1.03	1.06	1.39	1.73	1.93	2.15	2.35	2.65	2.90	3.15	3.35	0.51	1.39	2.35	3.35
Two-year	1.27	1.38	1.47	1.89	2.27	2.52	2.65	2.80	3.00	3.25	3.40	3.55	1.20	1.89	2.80	3.55
Five-year	1.93	1.89	1.92	2.20	2.56	2.73	2.95	3.10	3.25	3.45	3.55	3.65	1.93	2.20	3.10	3.65
10-year	2.40	2.31	2.33	2.40	2.74	2.85	3.15	3.30	3.45	3.60	3.70	3.75	2.45	2.40	3.30	3.75
30-year	3.02	2.84	2.86	2.74	2.97	2.98	3.35	3.50	3.65	3.75	3.80	3.85	3.06	2.74	3.50	3.85
Yield curve (10s-2s)	113	93	86	51	47	33	50	50	45	35	30	20	125	51	50	20
Yield spreads																
Three-month T-bills	-0.24	-0.32	-0.06	-0.33	-0.63	-0.67	-0.75	-0.70	-0.75	-0.75	-1.00	-1.20	-0.05	-0.33	-0.70	-1.20
Two-year	-0.52	-0.28	0.05	-0.20	-0.49	-0.61	-0.55	-0.50	-0.55	-0.80	-1.00	-1.20	-0.45	-0.20	-0.50	-1.20
Five-year	-0.81	-0.49	-0.17	-0.33	-0.59	-0.66	-0.70	-0.65	-0.70	-0.80	-0.85	-0.95	-0.81	-0.33	-0.65	-0.95
10-year	-0.78	-0.55	-0.23	-0.36	-0.65	-0.68	-0.80	-0.70	-0.75	-0.80	-0.80	-0.80	-0.74	-0.36	-0.70	-0.80
30-year	-0.72	-0.70	-0.39	-0.47	-0.74	-0.78	-0.90	-0.80	-0.85	-0.85	-0.80	-0.85	-0.75	-0.47	-0.80	-0.85

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

Interest rates—International %, end of period

	Actual						Forecast						Actual		Forecast	
	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017	2018	2019
United Kingdom																
Repo	0.25	0.25	0.25	0.50	0.50	0.50	0.75	0.75	1.00	1.00	1.00	1.25	0.25	0.50	0.75	1.25
Two-year	0.12	0.36	0.46	0.45	0.82	0.72	0.80	0.95	1.00	1.05	1.10	1.15	0.08	0.45	0.95	1.15
10-year	1.14	1.26	1.38	1.19	1.34	1.28	1.60	1.75	2.00	2.10	2.20	2.30	1.24	1.19	1.75	2.30
Euro Area																
Deposit rate	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.30	-0.20	-0.40	-0.40	-0.40	-0.20
Two-year	-0.74	-0.57	-0.69	-0.63	-0.59	-0.69	-0.60	-0.50	-0.50	-0.50	-0.40	-0.30	-0.78	-0.63	-0.50	-0.30
10-year	0.33	0.47	0.47	0.43	0.50	0.31	0.70	0.80	1.00	1.05	1.25	1.25	0.21	0.43	0.80	1.25
Australia																
Cash target rate	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.50	1.50	1.50	1.75
Two-year swap	1.76	1.78	1.94	2.00	2.00	2.00	2.00	2.10	2.20	2.25	2.35	2.50	1.86	2.00	2.10	2.50
10-year swap	2.70	2.60	2.84	2.63	2.60	2.63	2.80	2.80	2.85	3.00	3.20	3.35	2.76	2.63	2.80	3.35

Growth outlook

% change, quarter-over-quarter in real GDP

	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017	2018F	2019F
Canada*	4.0	4.6	1.7	1.7	1.4	2.9	1.6	2.6	1.9	1.7	1.7	1.7	1.4	3.0	2.1	2.0
United States*	1.8	3.0	2.8	2.3	2.2	4.2	2.8	2.8	1.8	2.4	2.2	1.8	1.6	2.2	2.8	2.4
United Kingdom	0.4	0.2	0.4	0.4	0.2	0.4	0.3	0.4	0.3	0.4	0.3	0.4	1.8	1.7	1.3	1.4
Euro area	0.6	0.7	0.7	0.7	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	1.8	2.5	2.1	1.8
Australia	0.4	0.7	0.7	0.7	1.1	0.9	0.6	0.8	0.7	0.6	0.8	0.8	2.6	2.2	3.3	3.0
New Zealand	0.8	0.9	0.6	0.6	0.5	0.8	0.9	0.8	0.8	0.8	0.8	0.8	4.0	2.8	2.8	3.3

*Seasonally adjusted annualized rates

Inflation outlook

% change, year-over-year

	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017	2018F	2019F
Canada	1.9	1.3	1.4	1.8	2.1	2.3	2.8	2.7	2.3	2.7	2.4	2.3	1.4	1.6	2.5	2.4
United States	2.5	1.9	2.0	2.1	2.2	2.7	2.7	2.7	2.5	2.6	2.6	2.4	1.3	2.1	2.6	2.5
United Kingdom	2.2	2.8	2.8	3.0	2.7	2.4	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	1.3	1.7	2.0	1.8	1.9	1.7	1.6	1.5	0.2	1.5	1.7	1.7
Australia	2.1	1.9	1.8	1.9	1.9	2.1	2.2	2.2	2.3	2.5	2.6	2.7	1.3	1.9	2.1	2.5
New Zealand	2.1	1.7	1.9	1.6	1.1	1.5	1.9	1.6	1.6	1.6	1.6	1.7	0.7	1.9	1.6	1.6

Exchange rates

%, end of period

	Actual						Forecast						Actual		Forecast	
	17Q1	**17Q2**	**17Q3**	**17Q4**	**18Q1**	**18Q2**	**18Q3**	**18Q4**	**19Q1**	**19Q2**	**19Q3**	**19Q4**	**2016**	**2017**	**2018**	**2019**
AUD/USD	0.76	0.77	0.78	0.78	0.77	0.74	0.71	0.70	0.71	0.71	0.70	0.70	0.72	0.78	0.70	0.70
USD/CAD	1.33	1.30	1.25	1.26	1.29	1.31	1.30	1.29	1.28	1.27	1.28	1.28	1.34	1.26	1.29	1.28
EUR/USD	1.07	1.14	1.18	1.20	1.23	1.17	1.16	1.12	1.14	1.16	1.18	1.20	1.05	1.20	1.12	1.20
USD/JPY	111.4	112.4	112.5	112.7	106.3	110.8	112.0	115.0	117.0	119.0	122.0	125.0	117.0	112.7	115.0	125.0
NZD/USD	0.70	0.73	0.72	0.71	0.72	0.68	0.67	0.67	0.69	0.70	0.70	0.70	0.69	0.71	0.67	0.70
USD/CHF	1.00	0.96	0.97	0.97	0.95	0.99	0.97	1.02	1.00	0.98	0.97	0.95	1.02	0.97	1.02	0.95
GBP/USD	1.26	1.30	1.34	1.35	1.40	1.32	1.27	1.20	1.23	1.25	1.27	1.29	1.24	1.35	1.20	1.29

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