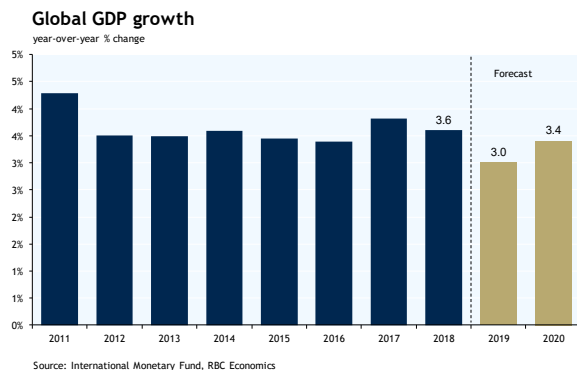


2020 OUTLOOK - A PROLONGED, PRECARIOUS EXPANSION

December 2019



As uncertainty revved up, growth geared down in 2019. Global GDP is on track to rise 3%, the slowest pace in a decade, reflecting sagging business confidence that undermined investment and trade. Central bankers responded by injecting or augmenting stimulus to keep the decade-long expansion going. While low interest rates and accommodative financial conditions will likely be enough to prolong the expansion through 2020, much will depend on how choppy the geopolitical waters are.

Global trade volumes fell in 2019 for the first time since the Great Recession, reflecting rollercoaster US-China trade negotiations, a lack of progress on Brexit, and political unrest in Hong Kong and some Latin American countries. Manufacturers were hardest hit, with the global measure of activity contracting for six straight months. Business investment in OECD countries edged up 1% in the first half of 2019, a marked slowing from a 3%-plus average pace in 2017-18. Amid these difficulties, the services sector held up remarkably well.

Canada, and US to post trend growth in 2020

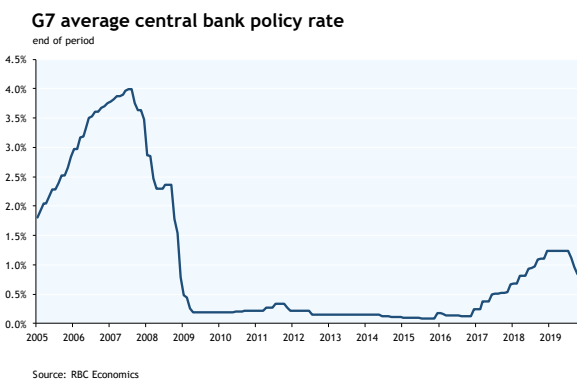
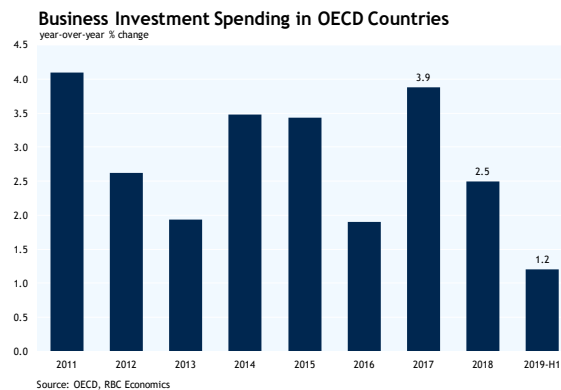
While the US election may be top of mind for 2020, other factors are likely to influence the global economy's performance, including the ultimate shape of the UK-EU relationship and stability (or lack thereof) in global trade. Canada, and the US are expected to grow at a trend pace while the Euro area and the UK are headed for a year of subpar gains. In part, this reflects the stresses coming from capacity constraints as the expansion enters its 11th year. Given tight labour markets, wage gains are likely to accelerate, which will be good news for consumers but will boost costs for business. Our forecast is for a lessening in policy uncertainty combined with low interest rates will support confidence, underpin a mild increase in investment and keep consumers spending.

Central banks are projected to run accommodative monetary policy, but current projections don't imply much fiscal support. ECB President Lagarde recently suggested governments should use this "moment of opportunity" to boost spending to offset challenges stemming from weakening trade and the side-effects from technological advancements. Canada's minority government has already made overtures toward modestly increasing policy stimulus, while next year's election will likely limit change in US fiscal policy.

US consumer to do the heavy lifting

The US economy performed reasonably well in 2019 in spite of the pressure that trade tensions put on the goods-producing sector. Manufacturing sentiment deteriorated sharply and industrial production ground to a halt as the year wore on. The spillover to the services economy was limited, with companies in that sector responsible for 85% of the hiring over the past 12 months. Services-sector output grew at a solid 3% annualized clip in the first half of 2019. Even with the economy's momentum slowing in the second half, real GDP likely advanced 2.3% in 2019.

Even if pressures ease we don't expect a strong increase in investment spending in the year ahead. Trade activity is forecast to be weak, and even though it's a much smaller contributor to the US economy compared



Real GDP growth: U.S.

Quarter-over-quarter annualized % change



to countries like Canada, this will stifle momentum. Similarly, the healthy dose of fiscal stimulus in 2019 is unlikely to be repeated heading into the November election. Containing any spillover from the weaker goods sector will be key to the US expansion continuing in 2020.

So will the health of the US consumer. In the year to November, the US added another 2.2 million jobs. The unemployment rate is near the lowest level in 50 years with even the broadest measure of unemployment down sharply. Wage gains also accelerated in 2019 breaching 3% consistently for the first time since 2008. Persistent job creation, low interest rates and elevated equity markets are all working to underpin confidence. Household balance sheets are in good shape with net worth at a record high and equity in real estate fully recovering from the drop during the financial crisis. Supportive monetary policy and full employment are projected to support stronger demand for housing in 2020.

We expect the Fed to pause after its mid-cycle policy adjustment

The Fed cut rates in July, September and October in an effort to mitigate the downside risks we've outlined above. Policymakers deemed this 75-basis-point, mid-cycle adjustment sufficient to keep the economy growing, the labour market strong, and core inflation on track to hit the central bank's 2% goal.

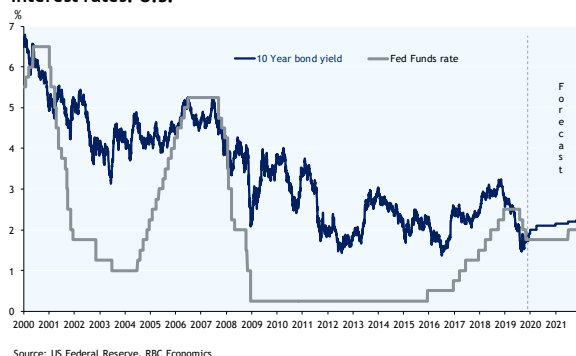
While headline inflation rates continue to hold around the 2% target, the Fed's preferred measure averaged 1.6% this year. Well-anchored inflation expectations and the strong trade-weighted dollar limited the upside risk to the inflation outlook creating the space for the Fed to ease. Our forecast for the economy to grow just shy of its potential amid low unemployment will likely result in the Fed meeting its inflation target without further rate reductions. Barring another bout of trade policy uncertainty, we project the Fed will maintain the Fed funds target at 1.75% throughout 2020.

Canada's resilience faces challenges

Canada bounced back more quickly from the Great Recession than many other countries but likely faces a bleaker outlook should another global downturn occur. This isn't to say the economy is headed for a downturn in 2020. Low interest rates, a robust labour market and the potential for government spending should support moderate growth. But Canada's economy will face a more challenging 2020 hampered by weak investment and sluggish exports. That leaves the consumer to do the heavy lifting. Low interest rates will support the housing market recovery that started in 2019. Our forecast is for GDP to increase 1.6% in 2020, little changed from 2019's 1.7% pace and just a touch below the economy's potential.

Uncertainty about global trade and transportation issues in the energy sector saw business investment slide in 2019. These factors offset any benefit from an easing in financial conditions. Even with a decent gain in the third quarter, business investment is on track for a small 0.9% rise in 2019. The outlook for 2020 will be driven by global factors including the direction of trade tensions and energy prices. We expect oil prices to be relatively steady and expect some reduction in policy uncertainty, but don't think this opens the door to a rebound in business spending even if it is sufficient to beat 2019's pace.

The weakening in US industrial production will weigh on demand for Canadian exports while falling global trade activity will weigh on commodity prices. Add in the persistence of transportation bottlenecks in the energy sector, even if they ease somewhat, and a mild rise in Canadian exports is all that can be expected in 2020.

Interest rates: U.S.**Real GDP growth: Canada**

Quarter-over-quarter annualized % change





Bank of Canada walking a fine line

The Bank of Canada has not followed the global trend to lower policy rates as it weighed the downside risks from trade conflicts and uncertain global growth against a domestic economy that's growing in line with potential and inflation around the 2% target. Also in the mix is the bank's concern about the potential for households to take on more debt. The bank is aware the soft global outlook will increasingly test the Canadian economy's resilience heading into 2020. But, while it's ready to ease policy to mitigate the risks to the outlook, it remains wary about stoking households' appetite for debt. Given these conflicting factors, we think the bank will act judiciously, making only one 25 bps insurance cut in the first half of 2020.

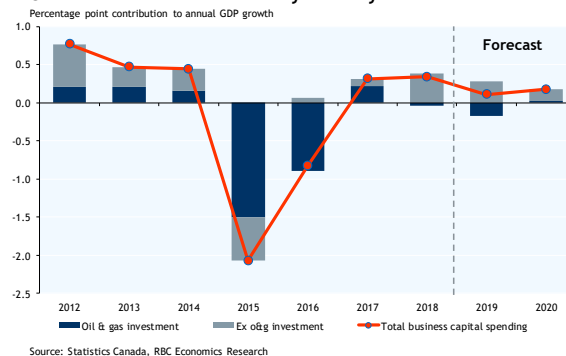
Canada's currency has remained in a relatively tight range against its US counterpart for most of 2019 and we anticipate limited movement in 2020. The key drivers of the currency remain oil prices and Canada/US short term rate spreads, neither of which we think will move materially enough to push the currency out of its long-held trading range.

Strong wage growth, lower rates buoy consumers

Canada's unemployment rate stands at close to a 44-year low. The prospect of more job growth in 2020 is good, although companies are reporting difficulties finding workers, both skilled and unskilled. The imbalance between supply and demand for labour began to show up in wages in mid-2019. Stronger incomes and lower rates will support Canadian consumers in 2020 as even in the absence of a cut by the Bank of Canada the drop in global interest rates pressured Canadian market rates down. The resulting easing in debt-service costs limited the financial stress on household balance sheets, even opening up some room for a re-acceleration in credit growth. These factors augur well for consumer spending on goods, services and housing to make another substantial contribution to 2020's 1.6% growth rate.

The strong labour market will also keep the housing-market recovery going. 2019 was a turning point, marking the end of the biggest Canadian housing correction since the 2008 financial crisis. The correction left the housing market in better shape in most regions and although home sales are likely to accelerate more quickly in 2020, we expect the pace of price increases to remain well below the double-digit gains recorded in 2016-17.

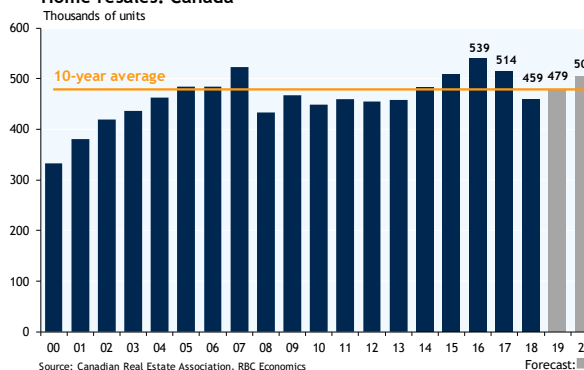
Canada Business Investment by Industry



Interest rates: Canada



Home resales: Canada





Economic forecast detail – Canada

Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	Forecast												Actual	Forecast		
	2019			2020				2021				year-over-year % change	2018	2019	2020	2021
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3					
Household Consumption	2.5	0.5	1.6	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	2.2	1.6	1.6	1.5
Durables	5.0	-1.7	1.8	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.0	1.1	1.0
Semi-Durables	3.1	3.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.7	2.2	2.0	2.0
Non-durables	1.2	0.1	1.2	2.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.8	1.0	1.5	1.6
Services	2.3	0.8	1.6	2.0	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	2.5	1.9	1.6	1.5
NPISH consumption	6.5	0.3	2.8	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	2.9	1.7	1.5
Government expenditures	2.1	2.4	0.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.3	1.9	2.0
Government fixed investment	10.2	-7.2	6.9	2.0	1.6	1.4	1.1	0.9	1.0	1.0	1.0	1.0	5.2	-0.5	1.6	1.0
Residential investment	-2.7	5.5	13.3	3.7	-2.3	0.2	3.5	3.4	3.0	2.0	0.3	0.5	-1.6	-0.5	2.7	2.3
Non-residential investment	18.0	-7.0	9.5	0.2	-0.4	1.0	2.2	2.2	3.5	4.4	5.3	6.2	1.4	0.9	1.2	3.5
Non-residential structures	4.2	4.4	11.1	3.3	0.0	1.0	2.0	2.0	3.0	3.7	4.4	5.1	-0.6	1.2	2.8	3.0
Machinery & equipment	42.1	-21.8	7.0	-4.6	-1.0	1.0	2.5	2.5	4.3	5.5	6.7	7.9	4.7	0.6	-1.2	4.2
Intellectual property	-20.0	6.1	6.0	2.0	1.5	1.0	1.0	1.0	0.8	0.8	0.8	0.8	3.9	-3.9	2.2	0.9
Final domestic demand	3.3	0.3	3.2	2.0	1.2	1.5	1.8	1.8	1.9	1.9	1.8	1.9	2.1	1.4	1.7	1.8
Exports	-3.3	12.9	-1.5	-1.0	1.6	1.7	1.5	1.5	1.6	1.6	1.6	1.6	3.1	1.9	1.4	1.6
Imports	8.1	-3.5	0.1	1.0	2.0	1.2	1.9	2.0	2.0	2.0	2.0	2.5	2.6	0.6	1.1	2.0
Inventories (change in \$b)	20.6	12.8	4.2	4.5	6.3	6.3	6.3	6.7	6.5	6.5	6.5	6.5	-0.5	10.5	6.4	6.5
Real gross domestic product	0.8	3.5	1.3	1.4	1.4	1.6	1.7	1.7	1.7	1.7	1.7	1.6	2.0	1.7	1.6	1.7

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	0.5	0.5	0.6	1.0	0.9	1.1	1.1	1.1	1.0	1.0	1.0	1.0	-0.2	0.9	1.0	1.0
Pre-tax corporate profits	-3.0	2.9	-5.6	5.8	4.5	-2.7	2.5	1.4	1.1	1.0	1.3	1.4	2.5	-0.1	1.3	1.2
Unemployment rate (%)*	5.8	5.5	5.6	5.7	5.8	5.8	5.8	5.8	5.9	6.0	6.0	6.0	5.8	5.7	5.8	6.0
Inflation																
Headline CPI	1.6	2.1	1.9	2.2	2.0	1.5	1.5	1.5	1.6	1.7	1.9	2.0	2.3	2.0	1.6	1.8
CPI ex. food and energy	1.9	2.3	2.2	2.1	1.9	1.7	1.7	1.7	1.7	1.9	2.0	2.1	1.9	2.1	1.7	1.9
External trade																
Current account balance (\$b)*	-67.3	-27.0	-39.4	-41.4	-40.1	-37.1	-36.7	-36.4	-32.6	-31.1	-29.5	-28.9	-55.5	-43.8	-37.6	-30.5
% of GDP*	-3.0	-1.2	-1.7	-1.8	-1.7	-1.6	-1.5	-1.5	-1.3	-1.3	-1.2	-1.2	-2.5	-2.0	-1.6	-1.3
Housing starts (000s)*	187	224	223	207	208	209	213	213	215	214	209	209	213	210	211	212
Motor vehicle sales (mill., saar)*	2.02	1.94	1.98	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	2.04	1.97	1.92	1.92

*Period average



Economic forecast detail – United States

Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	Forecast												Actual	Forecast		
	2019			2020				2021					year-over-year % change			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020	2021
Consumer spending	1.1	4.6	2.9	1.9	1.8	1.9	1.9	1.9	1.9	1.7	1.7	1.7	3.0	2.6	2.2	1.8
Durables	0.3	13.0	8.3	1.5	1.6	1.8	1.9	1.9	1.9	1.9	1.8	1.8	6.3	4.7	3.2	1.9
Non-durables	2.2	6.5	4.3	1.6	1.6	1.8	1.8	1.8	1.7	1.7	1.5	1.5	3.0	3.4	2.3	1.7
Services	1.0	2.8	1.7	2.0	1.9	2.0	2.0	2.0	1.9	1.7	1.7	1.7	2.5	2.0	2.0	1.9
Government spending	2.9	4.8	1.6	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	2.3	1.8	1.5
Residential investment	-1.1	-2.9	5.1	4.0	0.9	1.0	2.0	1.4	1.5	1.2	1.4	1.1	-1.5	-1.6	1.9	1.4
Non-residential investment	4.4	-1.0	-2.7	0.1	0.1	-0.1	0.5	1.0	2.0	2.2	2.5	2.9	6.4	2.2	-0.3	1.6
Non-residential structures	4.0	-11.1	-12.0	-6.0	-2.0	-2.0	0.0	2.0	2.0	3.0	3.0	4.0	4.1	-4.5	-4.2	1.9
Equipment & software	-0.1	0.8	-3.8	1.5	-0.5	-1.0	-0.5	2.0	2.0	2.0	3.0	3.0	6.8	1.6	2.7	2.4
Intellectual property	10.9	3.6	5.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	7.4	7.5	2.5	2.0
Final domestic demand	1.8	3.6	2.0	1.7	1.5	1.5	1.7	1.9	1.8	1.7	1.8	1.8	3.0	2.3	1.8	1.8
Exports	4.2	-5.7	0.9	-0.5	2.8	2.5	2.5	2.5	2.0	2.0	2.0	1.5	3.0	-0.2	1.3	2.2
Imports	-1.5	0.0	1.5	-4.5	0.0	1.5	1.0	2.0	2.0	2.0	3.0	2.5	4.4	1.2	-0.1	2.0
Inventories (change in \$b)	116.0	69.4	79.8	72.0	55.0	53.0	47.0	43.0	40.0	35.0	30.0	25.0	48.2	84.3	49.5	32.5
Real gross domestic product	3.1	2.0	2.1	2.2	1.5	1.6	1.8	1.8	1.7	1.6	1.5	1.5	2.9	2.3	1.8	1.7

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	1.7	1.8	1.5	1.7	0.9	0.2	0.6	0.8	0.9	1.2	1.0	0.9	1.3	1.7	0.6	1.0
Pre-tax corporate profits	-2.2	1.3	-0.8	0.7	4.8	0.9	1.0	0.7	1.1	1.0	0.8	0.6	3.4	-0.3	1.8	0.9
Unemployment rate (%)*	3.9	3.6	3.6	3.6	3.7	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.9	3.7	3.8	3.9
Inflation																
Headline CPI	1.6	1.8	1.8	2.0	2.3	2.0	2.0	1.9	2.2	2.1	2.1	2.1	2.4	1.8	2.0	2.1
CPI ex. food and energy	2.1	2.1	2.3	2.3	2.3	2.4	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.1
External trade																
Current account balance (\$b)*	-545	-513	-513	-481	-468	-467	-461	-462	-469	-473	-484	-495	-491	-513	-464	-480
% of GDP*	-2.6	-2.4	-2.4	-2.2	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.4	-2.4	-2.1	-2.1
Housing starts (000s)*	1213	1256	1282	1295	1300	1300	1310	1310	1315	1315	1320	1320	1250	1261	1305	1318
Motor vehicle sales (millions, saar)*	16.8	17.0	17.0	17.2	17.2	17.2	17.1	17.1	17.1	17.2	17.2	17.2	17.2	17.0	17.2	17.2

*Period average



Financial market forecast detail

Interest rates—North America

	Forecast												Actual	Forecast			
	19Q1	19Q2	19Q3	19Q4	20Q1	20Q2	20Q3	20Q4	21Q1	21Q2	21Q3	21Q4	2018	2019	2020	2021	
Canada																	
Overnight	1.75	1.75	1.75	1.75	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	1.50	1.75	
Three-month	1.67	1.66	1.65	1.60	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.65	1.64	1.60	1.40	1.65	
Two-year	1.55	1.47	1.58	1.60	1.50	1.40	1.50	1.55	1.60	1.65	1.70	1.80	1.86	1.60	1.55	1.80	
Five-year	1.52	1.39	1.40	1.60	1.55	1.50	1.60	1.70	1.70	1.75	1.80	1.90	1.89	1.60	1.70	1.90	
10-year	1.62	1.47	1.36	1.65	1.70	1.70	1.75	1.80	1.85	1.90	1.95	2.00	1.97	1.65	1.80	2.00	
30-year	1.89	1.69	1.53	1.80	1.85	1.90	1.90	1.95	2.00	2.05	2.05	2.10	2.18	1.80	1.95	2.10	
Yield curve (10s-2s)	7	0	-22	5	20	30	25	25	25	25	25	20	11	5	25	20	
United States																	
Fed funds*	2.50	2.50	2.00	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.00	2.00	2.50	1.75	1.75	2.00	
Three-month	2.40	2.12	1.88	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.90	1.90	2.45	1.65	1.65	1.90	
Two-year	2.27	1.75	1.63	1.65	1.70	1.75	1.75	1.75	1.80	1.85	1.90	1.95	2.48	1.65	1.75	1.95	
Five-year	2.23	1.76	1.55	1.70	1.80	1.90	1.90	1.90	1.90	1.95	1.95	2.00	2.51	1.70	1.90	2.00	
10-year	2.41	2.00	1.68	1.90	2.00	2.10	2.10	2.10	2.15	2.15	2.20	2.25	2.69	1.90	2.10	2.25	
30-year	2.81	2.52	2.12	2.40	2.45	2.50	2.50	2.50	2.55	2.55	2.60	2.65	3.02	2.40	2.50	2.65	
Yield curve (10s-2s)	14	25	5	25	30	35	35	35	35	30	30	30	21	25	35	30	
Yield spreads																	
Three-month T-bills	-0.73	-0.46	-0.23	-0.05	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.50	-0.25	-0.81	-0.05	-0.25	-0.25	
Two-year	-0.72	-0.28	-0.05	-0.05	-0.20	-0.35	-0.25	-0.20	-0.20	-0.20	-0.20	-0.15	-0.62	-0.05	-0.20	-0.15	
Five-year	-0.71	-0.37	-0.15	-0.10	-0.25	-0.40	-0.30	-0.20	-0.20	-0.20	-0.15	-0.10	-0.62	-0.10	-0.20	-0.10	
10-year	-0.79	-0.53	-0.32	-0.25	-0.30	-0.40	-0.35	-0.30	-0.30	-0.25	-0.25	-0.25	-0.72	-0.25	-0.30	-0.25	
30-year	-0.92	-0.83	-0.59	-0.60	-0.60	-0.60	-0.60	-0.55	-0.55	-0.50	-0.55	-0.55	-0.84	-0.60	-0.55	-0.55	

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

Interest rates—International

%, end of period

	Forecast												Actual	Forecast		
	19Q1	19Q2	19Q3	19Q4	20Q1	20Q2	20Q3	20Q4	21Q1	21Q2	21Q3	21Q4	2018	2019	2020	2021
United Kingdom																
Repo	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00	1.00	0.75	0.75	0.75	1.00
Two-year	0.63	0.62	0.37	0.55	0.60	0.60	0.60	0.60	0.70	1.00	1.00	1.00	0.75	0.55	0.60	1.00
10-year	0.99	0.84	0.49	0.85	0.90	1.00	1.10	1.10	1.25	1.50	1.50	1.50	1.27	0.85	1.10	1.50
Euro Area																
Deposit rate	-0.40	-0.40	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.40	-0.50	-0.50	-0.50
Two-year	-0.60	-0.73	-0.74	-0.80	-0.80	-0.80	-0.75	-0.75	-0.75	-0.75	-0.70	-0.70	-0.59	-0.80	-0.75	-0.70
10-year	-0.07	-0.33	-0.58	-0.25	-0.10	-0.05	0.00	0.00	0.05	0.10	0.15	0.15	0.25	-0.25	0.00	0.15
Australia																
Cash target rate	1.50	1.25	1.00	0.75	0.50	0.50	0.50	0.50	0.25	0.25	0.25	0.25	1.50	0.75	0.50	0.25
Two-year swap	1.47	0.98	0.76	0.75	0.50	0.40	0.35	0.30	0.30	0.30	0.30	0.30	1.89	0.75	0.30	0.30
10-year swap	1.78	1.32	1.01	1.20	1.25	1.30	1.20	1.15	1.15	1.05	0.95	1.00	2.32	1.20	1.15	1.00
New Zealand																
Cash target rate	1.75	1.50	1.00	0.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.75	0.75	0.50	0.50
Two-year	1.62	1.35	0.92	0.85	0.75	0.75	0.75	0.70	0.65	0.60	0.60	0.60	1.96	0.85	0.70	0.60
10-year	2.15	1.78	1.20	1.35	1.35	1.45	1.45	1.40	1.45	1.40	1.35	1.30	2.64	1.35	1.40	1.30



Growth outlook

% change, quarter-over-quarter in real GDP

	<u>19Q1</u>	<u>19Q2</u>	<u>19Q3</u>	<u>19Q4</u>	<u>20Q1</u>	<u>20Q2</u>	<u>20Q3</u>	<u>20Q4</u>	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>2018</u>	<u>2019F</u>	<u>2020F</u>	<u>2021F</u>
Canada*	0.8	3.5	1.3	1.4	1.4	1.6	1.7	1.7	1.7	1.7	1.7	1.6	2.0	1.7	1.6	1.7
United States*	3.1	2.0	2.1	2.2	1.5	1.6	1.8	1.8	1.7	1.6	1.5	1.5	2.9	2.3	1.8	1.7
United Kingdom	0.6	-0.2	0.3	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	1.4	1.3	1.0	1.5
Euro area	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.9	1.2	1.0	1.2
Australia	0.5	0.6	0.4	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.9	0.9	2.7	1.8	2.4	3.1

*Seasonally adjusted annualized rates

Inflation outlook

% change, year-over-year

	<u>19Q1</u>	<u>19Q2</u>	<u>19Q3</u>	<u>19Q4</u>	<u>20Q1</u>	<u>20Q2</u>	<u>20Q3</u>	<u>20Q4</u>	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>2018</u>	<u>2019F</u>	<u>2020F</u>	<u>2021F</u>
Canada*	1.6	2.1	1.9	2.2	2.0	1.5	1.5	1.5	1.6	1.7	1.9	2.0	2.3	2.0	1.6	1.8
United States*	1.6	1.8	1.8	2.0	2.3	2.0	2.0	1.9	2.2	2.1	2.1	2.1	2.4	1.8	2.0	2.1
United Kingdom	1.8	2.0	1.9	1.5	1.7	1.3	1.3	1.6	1.7	1.8	1.9	1.9	2.5	1.8	1.5	1.9
Euro area	1.4	1.4	1.0	0.9	1.4	1.1	0.9	1.0	1.1	1.3	1.4	1.4	1.8	1.2	1.1	1.3
Australia	1.3	1.6	1.7	1.6	2.2	2.0	1.9	1.9	1.9	2.0	2.1	2.2	1.9	1.6	2.1	2.1

Exchange rates

End of period

	Actual								Forecast					Actual		Forecast		
	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	20Q1	20Q2	20Q3	20Q4	2017	2018	2019	2020		
AUD/USD	0.77	0.74	0.72	0.70	0.71	0.70	0.68	0.68	0.67	0.67	0.66	0.66	0.78	0.70	0.68	0.66		
USD/CAD	1.29	1.31	1.29	1.36	1.33	1.31	1.32	1.31	1.30	1.31	1.32	1.33	1.26	1.36	1.31	1.33		
EUR/USD	1.23	1.17	1.16	1.15	1.12	1.14	1.09	1.11	1.10	1.08	1.10	1.12	1.20	1.15	1.11	1.12		
USD/JPY	106.3	110.8	113.7	109.7	110.9	107.9	108.1	110.0	112.0	111.0	110.0	109.0	112.7	109.7	110.0	109.0		
USD/CHF	0.95	0.99	0.98	0.98	1.00	0.98	1.00	1.00	1.02	1.04	1.03	1.01	0.97	0.98	1.00	1.01		
GBP/USD	1.40	1.32	1.30	1.28	1.30	1.27	1.23	1.35	1.39	1.37	1.36	1.35	1.35	1.28	1.35	1.35		

*FX forecasts were revised following initial publication of this report.

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

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