

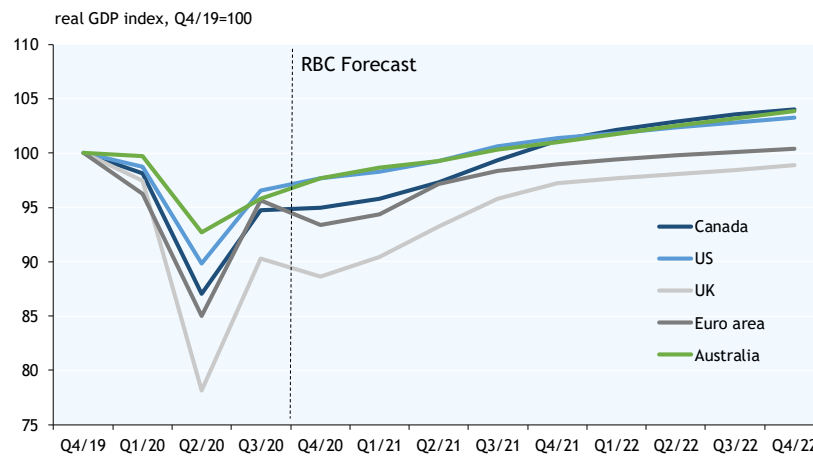
Vaccine clears path for recovery but not out of the woods yet

December 15, 2020

2021 promises to be a better year with the discovery of a vaccine against COVID-19 set to restore both our health and the economy. The timing of the recovery is still uncertain given the logistical challenges of the manufacture and distribution of the vaccine. Uncertainties about its effectiveness and durability will also dictate how quickly the losses from the pandemic are recouped. The surge in infections in recent months and re-imposition of containment measures sets up for a soft start to 2021 to be followed by a healthy rebound as the vaccine becomes widely available. On net we look for the US and Canadian economies to post gains of 4.4% and 5% respectively.

The near term outlook for many countries including Canada remains clouded by the resurgence in infections and lockdown measures which are weighing heavily on economic activity. While Canada and the US are expected to cross the finish line of 2020 with gains, the Euro-area and UK economies are projected to contract given more expansive lockdown measures. Substantial monetary and fiscal policy support will underpin modest growth in all four economies in early 2021 with the momentum building as more people are vaccinated, restrictions ease and confidence improves.

Some economies will return to pre-pandemic levels next year



Source: StatCan, BEA, ONS, EuroStat, ABS, RBC Economics

Virus surge slows US economy but 2-speed recovery slogging on

After reversing two thirds of the losses experienced in the first half of the year, the US economy's momentum held up relatively well over the course of the final quarter of 2020 despite surging infections and fading government support. While many sectors continue to improve, the hospitality sector remains under severe pressure accounting for a whopping 35% of the almost 10 million shortfall in jobs relative to pre-shock levels. Negotiations on the passage of another stimulus bill to support workers and businesses hurt by the second wave of infections continue although it looks increasingly likely this won't materialize until early next year. The Federal Reserve's support conversely has been unwavering with policymakers keeping the Fed Funds target range at 0-0.25% with purchases of government securities limiting increases in longer-term interest rates.

The rise in COVID-19 infections in late 2020 resulted in a slowing in the labour market recovery after rapid gains through the summer. The unemployment rate continued to inch lower although this in part reflected workers exiting the workforce stoking worries about the longer-term impact of the crisis. The expansion of COVID-related restrictions late in the year is expected to put the US economy on a slower growth trajectory in early 2021.

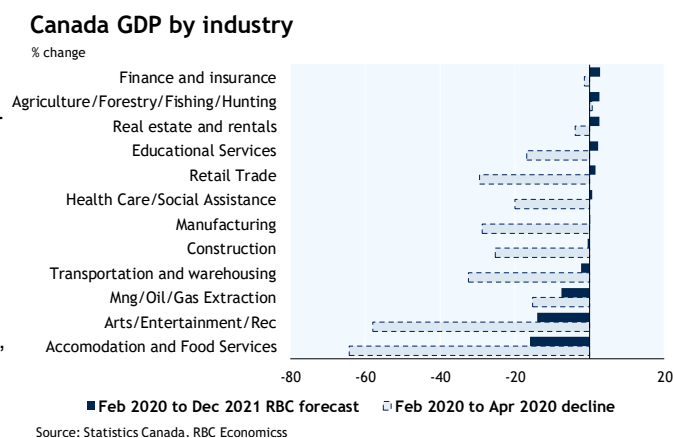
Vaccine rollout key to full recovery

Our forecast assumes that the vaccine will be sufficiently distributed to substantially and sustainably reduce the need for restrictions over the summer. Low interest rates, elevated savings and job creation will support consumer spending and housing. Business spending is also forecast to rise as companies restock inventories and invest to expand their capacity. By year-end 2021 we expect the US economy will be operating with little economic slack and expect inflation to be running around 2.0%.

Even with a more hopeful medium-term outlook, we expect the Federal Reserve to maintain a very stimulative policy stance. The near-term economic backdrop is still very challenging, and there is still uncertainty about the roll-out of vaccines. The Fed's decision to adopt a flexible inflation targeting regime and broaden its employment goal earlier this year means they have the latitude to keep rates very low to support parts of the economy that lag in the recovery.

Canada's economy to recover to pre-COVID levels in 2021

The economy posted a very strong gain in the third quarter sufficient to reverse – by September – almost three-quarters of the 18% drop in activity in the spring when lockdown measures were greatest. The resurgence of infections in the fall led to more limited restrictions which tempered growth but didn't lead to a full retrenchment. As is the case south of the border, some areas of the economy remain under severe pressure including the hospitality, recreation and travel sectors. Almost half of those still off-work compared to pre-shock levels are in the accommodation & food services industries. Others, like manufacturing, are much closer to their pre-pandemic levels. Housing has more than fully recovered. Retail sales also bounced back quickly, although the closure of non-essential retailers in some regions late in the year likely tempered sales. While lockdowns will restrain the economy's growth in late 2020 and early 2021, our forecast assumes a stronger and sustained recovery in activity once the vaccine is more widely distributed. By the end of 2021, we project the GDP will be back to pre-shock levels.



Generous fiscal policy and low interest rates

Government support measures implemented to contain the impact of the virus on households and businesses will remain in place in the first half of 2021. Those measures will not likely be sufficient to save all businesses, and the near-term economic backdrop is still very challenging. But wage subsidies, rent relief and loans guarantees have been extended to help bridge businesses through the crisis. A variety of income supports are underwriting household incomes. In sum, the federal government's COVID economic response plan is slated at \$282 billion with an additional \$50 billion planned for next fiscal year. The Bank of Canada's substantial support also remains in place. We expect the bank to maintain a policy rate of 0.25% throughout 2021 and continue to purchase securities, albeit at a gradually reduced pace, to keep longer-term rates low for borrowers. These measures have already supported a historically rapid rebound in the housing market.

The large pool of savings amassed by Canadian households during the crisis will be a key driver of the economy in 2021. We esti-

mate that household savings surged \$160 billion as lockdown measures prevented spending on many services and government programs helped offset wage losses. As the economy fully reopens, we look for consumer spending to remain strong as they pare down savings and return to work.

Businesses will remain cautious

Investment and inventory rebuilding are expected to begin in 2021 although given the uncertain global backdrop and changes to consumer demand, the recovery may be slow. This is particularly true in the energy sector with oil prices likely to remain below pre-pandemic levels. Purchases of machinery and equipment and intellectual property are projected to return to pre-crisis levels by the end of 2021 as businesses increase capacity and upgrade their processes to align with shifts in demand that evolved during the pandemic.

Low rates to keep housing market hot

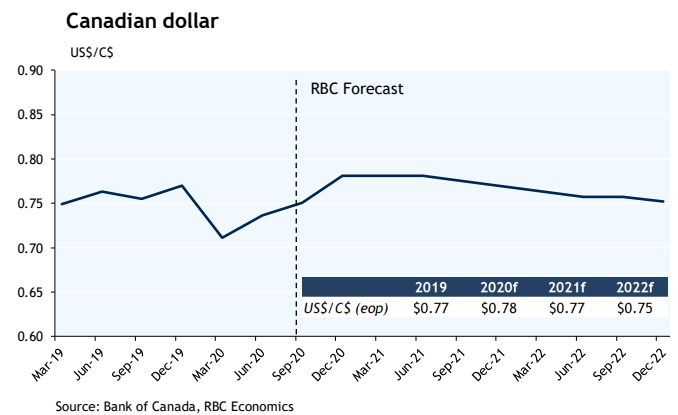
Canada's housing market rebound was extraordinary in 2020 and although it is likely to slow in 2021, we still expect sales activity and prices to remain historically elevated. The combination of low interest rates and elevated savings balances underpinned the surge in sales in mid-2020. These conditions will remain in place in 2021, though slower population growth and deteriorating affordability argue for sales to pullback somewhat.

Lingering excess capacity to cap price pressures

After dipping into negative territory during the deepest days of the crisis, Canada's inflation rate firmed as the economy started to recover. Both the Bank of Canada's preferred measures and inflation expectations also ticked higher though remained below the 2% target. Inflation rates are likely to move modestly higher in 2021 as the recovery gains momentum although excess capacity will limit the rise.

Canadian dollar to hold steady in 2021

The Canadian dollar recovered its pandemic related losses against the US dollar as risk appetite improved. The rebound in equity and non-energy commodity prices supported the Canadian dollar's rise. The currency is expected to hold onto its gains in the first half of 2021. As the year progresses however we expect the US dollar will start to regain ground with markets likely to look for the Federal Reserve to pare back stimulus ahead of other central banks, including the BOC.



Economic forecast detail — Canada

Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	Forecast												Forecast			
	2020			2021				2022					2019	2020F	2021F	2022F
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Household Consumption	-10.1	-44.3	62.8	-0.8	2.5	6.1	8.7	7.0	5.7	3.8	3.5	2.8	1.6	-6.5	5.5	5.5
Durables	-31.2	-46.2	262.7	0.5	1.0	1.2	1.5	1.5	1.5	1.5	1.8	1.8	0.0	-4.5	13.0	1.5
Semi-Durables	-32.4	-44.5	202.6	1.5	1.2	1.5	1.8	1.8	1.8	1.8	2.0	2.0	2.3	-5.5	11.3	1.8
Non-durables	14.3	-14.8	18.7	1.4	1.2	1.5	1.8	1.8	1.8	1.8	2.0	2.0	1.2	2.9	2.3	1.8
Services	-11.1	-54.1	44.3	-2.5	3.8	10.5	15.4	12.0	9.5	5.8	5.0	3.5	2.1	-11.1	4.5	9.0
NPISH consumption	-2.7	-40.0	27.0	3.5	2.5	6.5	8.7	7.0	5.7	3.8	3.5	2.8	1.6	-5.7	3.7	5.6
Government expenditures	-1.5	-12.3	13.5	1.8	2.5	2.5	3.0	3.0	1.0	2.0	1.0	0.7	2.0	-0.5	2.8	1.9
Government fixed investment	5.9	-14.8	23.4	1.5	1.5	1.5	2.5	2.5	3.0	3.0	3.0	3.0	0.3	1.7	3.0	2.8
Residential investment	-1.4	-47.7	187.3	6.5	-10.0	-14.5	2.4	4.0	3.5	1.3	0.8	0.5	-0.2	3.7	4.8	1.3
Non-residential investment	-0.6	-55.1	25.8	2.1	9.1	13.5	8.1	7.3	8.2	8.3	6.7	6.5	1.1	-12.6	4.0	8.1
Non-residential structures	6.9	-49.8	-1.2	1.5	8.6	12.5	8.5	7.0	9.0	7.0	6.5	6.5	1.1	-9.4	1.3	7.9
Machinery & equipment	-12.7	-63.6	91.8	3.0	9.8	15.0	7.5	7.8	7.0	10.5	7.0	6.5	1.0	-17.9	8.7	8.3
Intellectual property	-7.8	-30.7	30.8	1.5	2.5	2.0	2.0	2.0	3.0	4.0	5.0	6.0	-1.9	-4.8	2.7	3.3
Final domestic demand	-6.1	-38.4	50.8	0.8	1.8	3.7	6.5	5.6	4.5	4.1	3.0	2.5	1.4	-4.7	4.5	4.5
Exports	-6.6	-56.7	71.8	11.0	3.0	5.0	1.5	4.0	5.5	5.4	4.5	4.0	1.3	-9.6	5.4	4.4
Imports	-9.3	-65.0	113.7	18.5	9.8	2.0	2.2	3.2	3.0	6.0	3.5	4.2	0.4	-11.4	9.2	3.6
Inventories (change in \$b)	1.3	-31.9	-36.0	-24.0	-5.5	4.0	15.0	23.5	16.5	12.0	8.0	5.0	18.8	-22.6	9.3	10.4
Real gross domestic product	-7.3	-38.1	40.5	1.0	3.5	6.5	8.5	7.5	4.0	3.0	2.5	1.8	1.9	-5.8	5.0	4.8

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	5.0	15.6	4.7	2.2	-1.9	-11.2	-1.0	2.7	3.4	4.0	3.1	2.0	0.7	6.9	-3.1	3.2
Pre-tax corporate profits	-5.0	-26.6	-1.8	2.8	13.2	40.3	14.3	14.5	15.2	15.3	10.6	6.7	0.6	-7.8	19.4	11.8
Unemployment rate (%)*	6.3	13.0	10.0	8.7	8.5	8.0	7.3	6.7	6.5	6.3	6.1	6.0	5.7	9.5	7.6	6.2
Inflation																
Headline CPI	1.8	0.0	0.3	0.6	0.4	1.4	1.1	1.3	1.6	2.0	2.0	1.9	1.9	0.7	1.0	1.9
CPI ex. food and energy	1.8	1.0	0.6	1.2	0.7	1.2	1.3	1.3	1.6	1.9	2.0	2.0	2.1	1.2	1.1	1.9
External trade																
Current account balance (\$b)*	-55.5	-28.0	-30.1	-38.0	-47.6	-45.8	-41.3	-36.4	-30.5	-30.3	-26.8	-25.6	-189.5	-37.9	-42.8	-28.3
% of GDP*	-2.4	-1.4	-1.3	-1.7	-2.1	-2.0	-1.7	-1.5	-1.2	-1.2	-1.1	-1.0	-8.5	-1.6	-2.0	-1.2
Housing starts (000s)*	209	191	238	226	214	208	199	192	189	192	202	216	209	216	203	200
Motor vehicle sales (mill., saar)*	1.61	1.04	1.86	1.70	1.71	1.72	1.73	1.73	1.74	1.75	1.76	1.77	1.96	1.55	1.72	1.76

*Period average

Source: Statistics Canada, RBC Economics

Economic forecast detail — United States

Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	Forecast												Forecast			
	2020			2021				2022					2019	2020F	2021F	2022F
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Consumer spending	-6.9	-33.2	40.6	6.1	4.4	5.6	5.4	3.4	1.5	1.5	1.5	1.5	2.4	-3.7	5.9	2.6
Durables	-12.5	-1.7	82.9	7.5	2.1	1.7	2.0	0.6	1.5	1.5	1.5	1.5	4.8	6.9	10.1	1.4
Non-durables	7.1	-15.1	30.6	4.6	2.8	1.5	2.5	1.1	1.5	1.5	1.5	1.5	3.1	2.9	4.6	1.5
Services	-9.8	-41.8	37.6	6.3	5.4	7.6	7.0	4.6	1.5	1.5	1.5	1.5	1.8	-7.2	5.6	3.1
Government spending	1.3	2.5	-4.9	0.5	0.0	0.5	1.2	2.0	3.0	3.0	3.0	3.0	2.3	1.2	0.0	2.4
Residential investment	19.0	-35.5	62.3	7.5	-4.2	-3.5	0.5	0.5	1.5	1.5	1.5	1.5	-1.7	4.3	2.9	0.9
Non-residential investment	-6.7	-27.2	21.8	4.8	2.3	2.9	2.5	2.4	1.7	1.7	1.7	1.7	2.9	-4.6	2.9	2.0
Non-residential structures	-3.7	-33.6	-15.8	2.2	4.5	5.5	5.5	4.0	1.5	1.5	1.5	1.5	-0.6	-10.4	-1.4	2.7
Equipment & software	-15.2	-35.9	66.6	8.5	1.5	2.0	3.5	2.0	1.5	1.5	1.5	1.5	2.1	-6.0	6.5	1.9
Intellectual property	2.4	-11.4	6.0	2.0	2.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	6.4	0.9	1.7	2.1
Final domestic demand	-4.6	-27.1	29.4	4.9	3.0	3.9	4.2	2.9	1.8	1.8	1.8	1.8	2.3	-2.7	4.3	2.4
Exports	-9.5	-64.4	60.5	30.3	16.0	2.2	3.5	2.0	3.0	2.4	2.5	3.0	-0.1	-12.5	9.0	2.6
Imports	-15.0	-54.1	93.1	28.0	20.2	4.2	2.0	2.5	3.5	2.0	1.8	1.4	1.1	-9.4	14.3	2.5
Inventories (change in \$b)	-80.9	-287.0	-4.3	20.0	35.0	45.0	95.0	100.0	110.0	110.0	105.0	95.0	48.5	-88.1	68.8	105.0
Real gross domestic product	-5.0	-31.4	33.1	5.0	2.5	4.0	5.5	3.0	1.9	1.9	1.8	1.8	2.2	-3.5	4.4	2.7

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour																
Productivity	0.9	2.7	4.2	3.7	3.9	1.8	0.2	0.4	0.4	0.3	0.6	0.6	1.7	2.9	1.5	0.5
Pre-tax corporate profits	-6.7	-19.3	3.3	1.5	16.2	30.9	4.4	4.6	6.4	4.9	3.3	1.7	0.3	-5.3	12.9	4.0
Unemployment rate (%)*	3.8	13.0	8.8	6.8	6.6	6.2	5.4	5.0	4.8	4.6	4.4	4.4	3.7	8.1	5.8	4.6
Inflation																
Headline CPI	2.1	0.4	1.2	1.3	1.5	2.9	2.1	2.1	2.1	2.2	2.2	2.1	1.8	1.2	2.1	2.1
CPI ex. food and energy	2.2	1.3	1.7	1.7	1.7	2.6	2.0	2.0	2.0	2.1	2.1	2.1	2.2	1.7	2.1	2.1
External trade																
Current account balance (\$b)*	-446	-682	-867	-869	-899	-890	-893	-904	-1029	-1032	-1032	-1028	-480	-716	-896	-1030
% of GDP*	-2.1	-3.5	-4.1	-4.0	-4.1	-4.0	-4.0	-4.0	-4.5	-4.5	-4.4	-4.4	-2.2	-3.4	-4.0	-4.4
Housing starts (000s)*	1484	1079	1440	1500	1315	1315	1300	1300	1301	1302	1303	1304	1295	1376	1308	1303
Motor vehicle sales (millions, saar)*	15.0	11.3	15.3	16.0	16.2	16.3	16.5	16.6	16.8	17.0	17.2	17.3	17.0	14.4	16.4	17.1

*Period average

Source: Bureau of Economic Analysis, RBC Economics

Financial market forecast detail

Interest rates—North America

% , end of period

	20Q1	20Q2	20Q3	Forecast								2019	Forecast				
				20Q4	21Q1	21Q2	21Q3	21Q4	22Q1	22Q2	22Q3		22Q4	2020F	2021F	2022F	
Canada																	
Overnight	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	1.75	0.25	0.25	0.50
Three-month	0.21	0.20	0.12	0.15	0.15	0.15	0.20	0.20	0.25	0.25	0.25	0.50	0.55	1.66	0.15	0.20	0.55
Two-year	0.42	0.29	0.25	0.30	0.30	0.30	0.35	0.35	0.55	0.75	0.90	1.10	1.70	0.30	0.35	1.10	
Five-year	0.59	0.37	0.36	0.45	0.50	0.60	0.70	0.80	0.95	1.05	1.20	1.35	1.69	0.45	0.80	1.35	
10-year	0.70	0.53	0.57	0.70	0.75	0.90	1.00	1.05	1.15	1.25	1.35	1.50	1.70	0.70	1.05	1.50	
30-year	1.31	0.99	1.11	1.25	1.30	1.40	1.45	1.50	1.60	1.65	1.75	1.85	1.76	1.25	1.50	1.85	
Yield curve (10s-2s)	28	24	32	40	45	60	65	70	60	50	45	40	0	40	70	40.00	
United States																	
Fed funds*	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.38	0.38	0.63	0.63	1.63	0.13	0.13	0.63	
Three-month	0.11	0.16	0.10	0.10	0.10	0.15	0.20	0.25	0.40	0.55	0.70	0.75	1.55	0.10	0.25	0.75	
Two-year	0.23	0.16	0.13	0.15	0.20	0.25	0.40	0.60	0.85	1.00	1.25	1.50	1.58	0.15	0.60	1.50	
Five-year	0.37	0.29	0.28	0.40	0.50	0.60	0.75	1.00	1.05	1.15	1.30	1.55	1.69	0.40	1.00	1.55	
10-year	0.70	0.66	0.69	0.95	1.05	1.15	1.20	1.25	1.30	1.40	1.50	1.65	1.92	0.95	1.25	1.65	
30-year	1.35	1.41	1.46	1.70	1.70	1.75	1.75	1.80	1.85	1.90	1.95	2.00	2.39	1.70	1.80	2.00	
Yield curve (10s-2s)	47	50	56	80	85	90	80	65	45	40	25	15	34	80	65	15.00	
Yield spreads																	
Three-month T-bills	0.10	0.04	0.02	0.05	0.05	0.00	0.00	-0.05	-0.15	-0.30	-0.20	-0.20	0.11	0.05	-0.05	-0.20	
Two-year	0.19	0.13	0.12	0.15	0.10	0.05	-0.05	-0.25	-0.30	-0.25	-0.35	-0.40	0.12	0.15	-0.25	-0.40	
Five-year	0.22	0.08	0.08	0.05	0.00	0.00	-0.05	-0.20	-0.10	-0.10	-0.10	-0.20	0.00	0.05	-0.20	-0.20	
10-year	0.00	-0.13	-0.12	-0.25	-0.30	-0.25	-0.20	-0.20	-0.15	-0.15	-0.15	-0.15	-0.22	-0.25	-0.20	-0.15	
30-year	-0.04	-0.42	-0.35	-0.45	-0.40	-0.35	-0.30	-0.30	-0.25	-0.25	-0.20	-0.15	-0.63	-0.45	-0.30	-0.15	

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

Interest rates—International

% , end of period

	20Q1	20Q2	20Q3	Forecast								2019	Forecast			
				20Q4	21Q1	21Q2	21Q3	21Q4	22Q1	22Q2	22Q3		22Q4	2020F	2021F	2022F
United Kingdom																
Repo	0.10	0.10	0.10	0.10	-0.15	-0.15	-0.15	-0.15	-0.15	-0.15	-0.15	-0.15	0.75	0.10	-0.15	-0.15
Two-year	0.13	-0.08	-0.02	-0.10	-0.25	-0.20	-0.20	-0.20	-0.20	-0.20	-0.15	-0.10	0.54	-0.10	-0.20	-0.10
Five-year	0.20	-0.06	-0.06	-0.10	-0.20	-0.15	-0.15	-0.15	-0.10	0.00	0.10	0.15	0.61	-0.10	-0.15	0.15
10-year	0.34	0.17	0.23	0.10	0.00	0.10	0.15	0.20	0.25	0.35	0.50	0.75	0.83	0.10	0.20	0.75
30-year	0.82	0.64	0.78	0.70	0.60	0.65	0.75	0.85	0.95	1.10	1.25	1.40	1.33	0.70	0.85	1.40
Euro Area																
Deposit rate	-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	-0.50	-0.50	-0.50
Two-year	-0.69	-0.69	-0.70	-0.75	-0.65	-0.60	-0.60	-0.60	-0.60	-0.60	-0.55	-0.50	-0.59	-0.75	-0.60	-0.50
Five-year	-0.65	-0.70	-0.71	-0.70	-0.75	-0.65	-0.55	-0.50	-0.50	-0.45	-0.40	-0.30	-0.46	-0.70	-0.50	-0.30
10-year	-0.48	-0.45	-0.53	-0.55	-0.60	-0.50	-0.40	-0.35	-0.30	-0.25	-0.15	0.00	-0.19	-0.55	-0.35	0.00
30-year	0.03	0.01	-0.09	-0.10	-0.05	0.10	0.25	0.35	0.40	0.50	0.60	0.70	0.35	-0.10	0.35	0.70
Australia																
Cash target rate	0.25	0.25	0.25	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.75	0.10	0.10	0.10
Two-year	0.24	0.25	0.16	0.10	0.05	0.05	0.05	0.05	0.10	0.20	0.25	0.25	0.92	0.10	0.05	0.25
10-year	0.77	0.87	0.84	1.00	0.90	0.95	1.00	1.05	1.00	1.10	1.20	1.35	1.37	1.00	1.05	1.35
New Zealand																
Cash target rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.00	0.25	0.25	0.25
Two-year	0.52	0.19	0.05	0.25	0.25	0.25	0.25	0.25	0.30	0.35	0.40	0.45	1.25	0.25	0.25	0.45
10-year	0.92	0.72	0.50	0.90	0.95	1.00	1.05	1.10	1.10	1.20	1.30	1.45	1.78	0.90	1.10	1.45

Outlook

Growth outlook

% change, quarter-over-quarter in real GDP

	<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>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	2019	2020F	2021F	2022F
Canada*	-7.3	-38.1	40.5	1.0	3.5	6.5	8.5	7.5	4.0	3.0	2.5	1.8	1.9	-5.8	5.0	4.8
United States*	-5.0	-31.4	33.1	5.0	2.5	4.0	5.5	3.0	1.9	1.9	1.8	1.8	2.2	-3.5	4.4	2.7
United Kingdom	-2.5	-19.8	15.5	-1.8	2.0	3.1	2.7	1.5	0.5	0.4	0.4	0.4	1.3	-11.1	6.2	4.3
Euro Area	-3.7	-11.7	12.5	-2.3	1.0	3.0	1.2	0.6	0.5	0.4	0.3	0.3	1.3	-7.3	5.0	2.9
Australia	-0.3	-7.0	3.3	1.9	1.0	0.6	1.0	0.7	0.7	0.8	0.6	0.6	1.9	-2.8	3.5	3.0

*Seasonally adjusted annualized rates

Inflation outlook

% change, year-over-year

	<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>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	2019	2020F	2021F	2022F
Canada*	1.8	0.0	0.3	0.8	0.7	1.6	1.3	1.3	1.5	1.8	1.9	1.9	1.9	0.7	1.2	1.8
United States*	2.1	0.4	1.2	1.3	1.5	2.9	2.1	2.1	2.1	2.2	2.2	2.1	1.8	1.2	2.1	2.1
United Kingdom	1.7	0.7	0.6	0.7	0.7	1.4	1.4	1.6	1.7	1.8	1.8	1.9	1.8	0.9	1.3	1.8
Euro Area	1.1	0.2	0.0	-0.3	0.2	0.5	0.9	1.4	1.1	1.4	1.3	1.4	1.2	0.3	0.8	1.3
Australia	2.2	-0.3	0.7	0.9	1.1	3.5	2.4	2.1	2.1	2.1	2.1	2.0	1.6	0.9	2.1	2.0

Exchange rates

End of period

	<u>20Q1</u>	<u>20Q2</u>	<u>20Q3</u>	Forecast									2019	Forecast		
				<u>20Q4</u>	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>		2020F	2021F	2022F
AUD/USD	0.61	0.69	0.72	0.75	0.74	0.72	0.70	0.69	0.68	0.67	0.67	0.67	0.70	0.75	0.69	0.67
USD/CAD	1.41	1.36	1.33	1.28	1.28	1.28	1.29	1.30	1.31	1.32	1.32	1.33	1.30	1.28	1.30	1.33
EUR/USD	1.10	1.12	1.17	1.20	1.18	1.16	1.15	1.14	1.13	1.12	1.13	1.14	1.12	1.20	1.14	1.14
USD/JPY	107.5	107.9	105.5	103.0	100.0	98.0	97.0	98.0	99.0	100.0	101.0	102.0	108.6	103.0	98.0	102.00
USD/CHF	0.96	0.95	0.92	0.88	0.90	0.91	0.93	0.95	0.96	0.98	0.98	0.98	0.97	0.88	0.95	0.98
GBP/USD	1.24	1.24	1.29	1.32	1.27	1.23	1.21	1.19	1.16	1.15	1.16	1.18	1.33	1.32	1.19	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

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