

Russian invasion and surging inflation take over as key global growth risks

March 10, 2022

The economic impact of the pandemic is getting smaller as widely available vaccines and new treatments prompt a more aggressive easing of restrictions across most of the regions we cover. But new risks have emerged. The invasion of Ukraine is rocking financial markets, pushing commodity prices higher, and threatening further disruptions to already stretched global supply chains.

Even before the escalation in geopolitical risk, production capacity limits—including acute labour shortages and rising input costs—were emerging as more significant concerns for businesses than any shortfall in orders. Improving labour markets, rising wages, and a stockpile of savings accumulated during the pandemic are expected to sustain household purchasing power, while strong demand and the limited ability of businesses to increase production are broadening inflation pressures. Those are pre-existing pressures that will only be exacerbated by the Russian invasion. And that has kept central banks on track to hike interest rates.

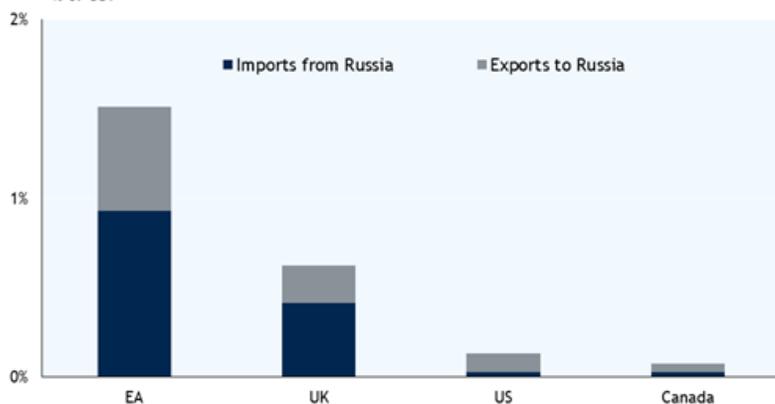
Ukraine conflict adds to global inflation pressures

The conflict has dramatically disrupted trade in the region with aggressive sanctions and risks of supply and transportation disruptions sending some commodity prices soaring. Oil prices surged above \$US 115/bbl, a level not seen since 2008. The Russian ruble has lost almost half its value since the invasion as sanctions and transportation disruptions curtail exports and freeze foreign currency reserves held abroad.

Together, Russia and Ukraine account for just 0.1% of Canadian trade in goods and services. But their direct links with countries in the Euro area are larger. Higher oil prices and potentially significant disruptions to agricultural production (both Russia and Ukraine are major agricultural exporters) will boost food and energy price inflation globally. And the potential for further escalation represents a large new source of geopolitical uncertainty for the global economic outlook.

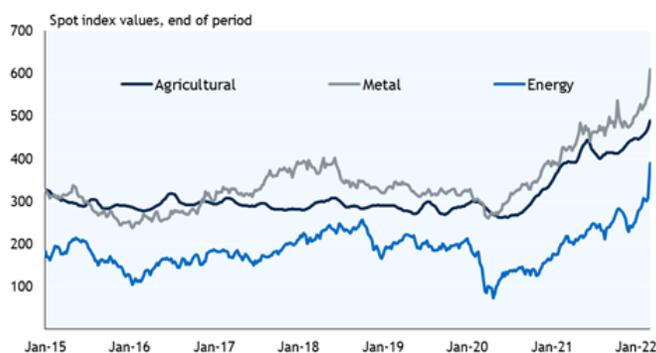
Canada's direct trade links with Russia are limited

% of GDP



Source: Haver, RBC Economics

Global energy and food prices surged higher

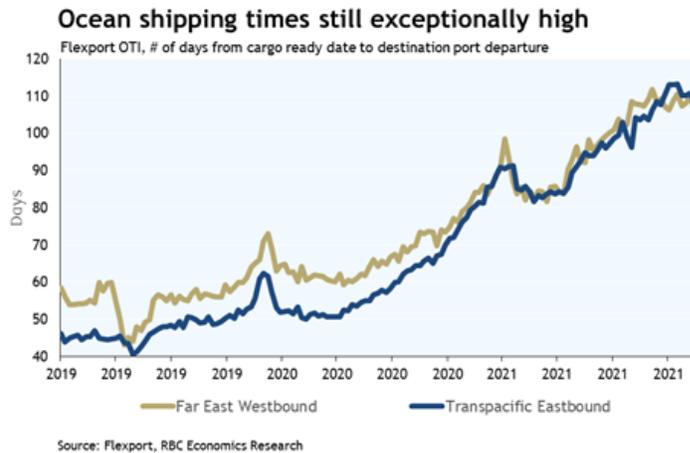


Source: S&P Goldman Sachs commodity indexes, RBC Economics

Supply chain pressures remain acute conflict

The cost of ocean container shipping has leveled off below summer 2020 peaks—but is still roughly 7 times pre-pandemic levels. And though there have been signs of delivery times easing, ocean shipping on all legs of the journey from factory floor to destination port departure are still taking twice as long as before the pandemic.

There are reasons to expect supply chain disruptions will ease. Backlogs at ports have begun to clear. Consumer demand is still expected to shift to services from goods as COVID-19 restrictions ease. And the pace of inventory re-stocking from pandemic-related drawdowns should slow. But the ripple-effects from disruptions tied to the Russian invasion could lengthen that process.



Labour shortages expected to outlast the virus

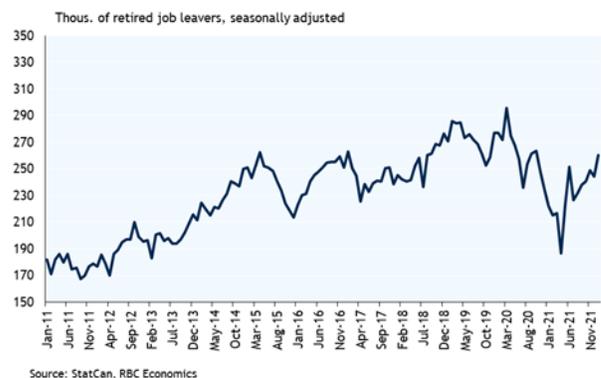
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Most industries have fewer workers to fill vacancies than pre-pandemic



Retirements to accelerate after pandemic delays



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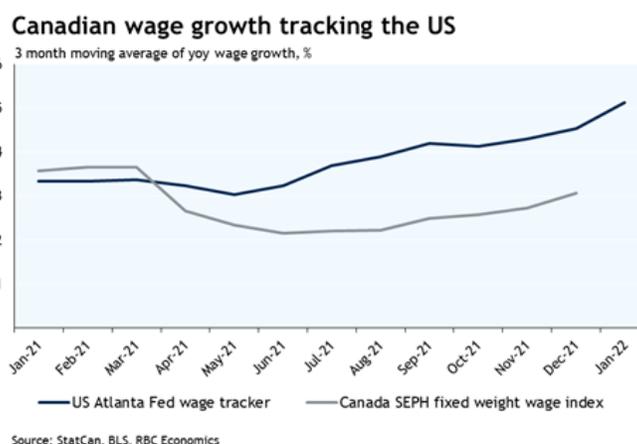
Even if supply chains globally were to normalize quickly, labour shortages are expected to remain a binding constraint on output growth. Indeed, for many businesses retaining and hiring new staff has become a more significant concern than a shortfall of orders. This includes businesses in the higher-contact service-sectors hardest hit by the pandemic, since a large share of their pre-pandemic workforce switched to other jobs/industries. The number of unemployed workers per job posting is below pre-pandemic levels for virtually all industries in Canada—including the accommodation and food services sector, where the number of workers is still more than 300,000 below where it was pre-COVID-19 as of January.

A sharp rebound in immigration will help add workers near-term, but widespread labour market shortages are expected to persist. The oft-cited Canadian ‘Great Resignation’ is not so much a result of the pandemic as the continuation of a trend that started more than a decade ago as the post-WWII baby boom generation began to enter retirement age. And we are probably only about halfway through that wave of expected labour force exits. Indeed, the pandemic temporarily delayed retirement plans for a large number of Canadians, but that just means more retirements to come in the year(s) ahead.

Wage pressures and labour shortages drive investment higher

Of course, tight labour markets are a positive economic indicator—it means the economy has largely recovered. And it puts workers in a stronger bargaining position in wage negotiations. There are early signs that a surge in wage growth in the United States in 2021 is beginning to be mirrored in Canada. Though actual observed Canadian wage growth has been slower, it’s drifting higher. The share of employees that switch jobs every month is rising—and that kind of job-switching typically accounts for more wage growth than within-job pay raises. Worker confidence in labour markets has clearly improved with more people quitting jobs due to ‘dissatisfaction’ without an immediate replacement position.

Canadian businesses expect to hire more people (and pay more to do so) but they are also responding to rising demand with investments designed to boost existing workforce productivity. Most industries plan to spend more on investment in 2022 than before COVID-19 hit in 2019. Outliers include investment plans in the oil and gas sector (although that could change depending how long the current oil price surge lasts) and manufacturing where difficulties sourcing inputs are still limiting production.



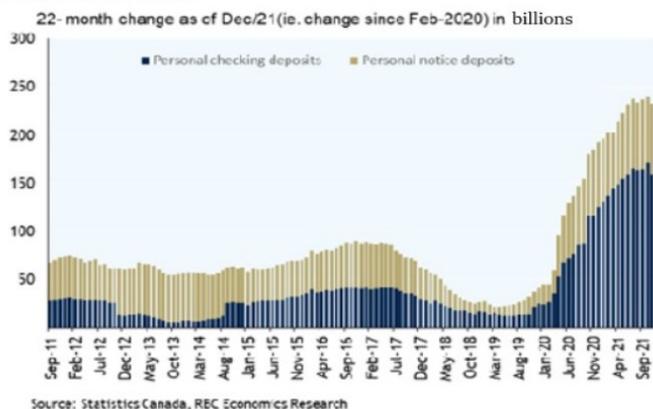
Pandemic savings support household purchasing power and underpin inflation

Household demand continues to be robust, backed by stronger labour markets, a large stockpile of savings accumulated during the pandemic, and low interest rates. Canadian household savings rose more than \$300 billion above pre-pandemic levels during the last two years. A significant portion of that has likely been used to purchase investments and to support exceptionally strong demand for housing. But cash in chartered bank deposits is also still running almost \$200 billion in excess of pre-pandemic trends.

Savings have not been evenly distributed, with a larger concentration among higher-income households that are less likely to spend it. Nevertheless, the stockpile is exceptionally large and will stand as a backstop against potential unexpected shocks while supporting consumer spending and housing investments—even as prices and interest rates rise.

There's still room for further recovery in spending on household services. But with production already running at or above pre-pandemic levels in most other industries, more demand chasing limited ability to produce means higher prices. Pandemic-related distortions can still explain a large portion of recent inflation rate increases both in Canada and abroad, and the recent surge in oil prices will add to energy price growth. But price pressures continue to widen across a growing number of products and services. In Canada, over 60% of the consumer price basket was growing at a 2% or higher annual rate from pre-pandemic levels as of January. In the United States, that share was closer to 80%, even when higher shelter costs were excluded.

Canadian household deposits remain above pre-pandemic levels



Interest rates to continue to move higher

The Bank of Canada noted significantly increased geopolitical uncertainties alongside its Mar. 2 decision to hike interest rates for the first time since 2018. Despite those risks, domestic economic conditions are simply too strong, and inflation pressures too firm, to justify emergency low interest rates. Inflation rates both in Canada and abroad continue to be affected by surging energy prices and acute supply chain issues that have, for example, caused the price of vehicles to soar. And persistently low interest rates have contributed to sharply higher home prices.

On Mar. 16, we expect the U.S. Fed to also follow through with the first of an expected five 25 basis point rate hikes this year. We look for the Bank of Canada to hike at a once-a-quarter pace (with the next increase at the next decision point in April). This would return rates to the pre-pandemic level of 1.75% by middle of next year. We expect the European Central Bank to hold off on any rate changes this year given greater direct exposures to the conflict in Ukraine.

Households have the ability to absorb higher interest rate costs

For households, that pace of interest rate hikes is expected to be manageable, provided incomes also continue to grow as expected. Debt levels have risen significantly during the pandemic, but the increase has been financed at very low interest rates. As a result, required payments on those larger balances have been lower as a share of disposable income. Most of the debt growth in Canada has come from mortgage loans that are often fixed rate, and so not immediately impacted by rate increases. And while interest rate hikes are coming substantially sooner than envisioned at this time a year ago, terminal rates at the end of the current hiking cycle are still expected to be relatively low from a historical perspective – around pre-pandemic levels. That expectation has limited the impact of shifting central bank rate expectations to effective term borrowing costs for households and businesses. Elevated debt balances will remain a key vulnerability for the Canadian economy (as they were pre-pandemic) but our base case forecast implies household debt servicing ratios will only return to pre-pandemic levels over the course of the next year and a half.

Housing markets remain exceptionally strong

Home sales have been limited only by a lack of available listings and with sellers in the driver's seat in almost all local markets, prices have continued to rise at a record pace. New home construction has also remained strong as builders rush to tap into high prices and accommodate higher levels of immigration in coming years. Still, we expect higher interest rates and stretched affordability to help take some of the heat out of the market later this year—capping the contribution of housing to economic growth while still remaining well above pre-pandemic levels.

Economic forecast detail — Canada

Real growth in the economy

Quarter-over-quarter annualized % change unless otherwise indicated

	2021				2022				2023				2021	2022F	2023F
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Household Consumption	1.9	-1.0	20.4	1.0	4.0	4.5	5.2	4.1	2.5	1.9	1.7	1.7	5.2	5.2	3.0
Durables	-1.3	-11.8	-8.6	0.9	3.0	1.5	1.8	1.8	1.8	1.8	1.8	1.8	7.7	-0.4	1.8
Semi-Durables	7.6	-11.4	74.1	-2.5	3.5	2.5	3.0	2.0	1.5	1.5	1.5	1.5	14.4	7.6	1.8
Non-durables	2.4	-7.7	5.3	-1.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.4	2.0
Services	1.8	7.3	30.9	2.4	5.0	6.5	7.8	6.0	3.0	2.0	1.5	1.5	5.1	8.2	3.9
NPISH consumption	-9.5	1.3	5.5	6.1	4.0	4.5	5.2	4.1	2.5	1.9	1.7	1.7	5.2	4.6	3.0
Government expenditures	8.8	-1.2	0.1	2.2	1.0	2.0	1.0	0.7	1.5	1.5	1.5	1.5	4.9	1.1	1.3
Government fixed investment	4.5	-9.6	9.4	6.2	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	4.5	3.5	2.7
Residential investment	43.2	-11.0	-31.0	10.2	3.5	3.0	1.0	1.5	1.0	-1.0	0.0	-2.5	15.4	-2.0	0.5
Non-residential investment	1.0	15.3	1.7	8.7	9.2	8.9	10.5	6.5	7.0	6.4	5.8	5.3	2.3	8.4	7.1
Non-residential structures	15.7	9.3	3.3	11.0	10.5	8.0	12.5	6.5	7.5	7.5	6.5	6.0	-0.6	9.1	7.7
Machinery & equipment	-18.2	26.1	-1.1	4.7	7.0	10.5	7.0	6.5	6.0	4.5	4.5	4.0	7.1	7.2	5.9
Intellectual property	3.0	2.4	-3.0	-3.9	3.0	4.0	5.0	6.0	7.0	8.0	7.5	7.0	0.7	1.5	6.6
Final domestic demand	6.6	-1.2	7.0	2.9	3.7	4.1	4.2	3.3	2.6	2.1	1.9	1.6	5.5	3.8	2.8
Exports	1.9	-16.7	7.1	13.4	8.5	10.2	5.5	3.5	3.0	4.0	4.0	2.8	1.4	7.1	4.1
Imports	4.9	2.8	-1.6	14.4	6.0	8.0	6.0	5.2	4.0	3.0	4.5	3.0	7.4	6.6	4.5
Inventories (change in \$b)	-11.5	7.5	-12.1	9.9	5.0	8.5	11.0	8.5	8.0	6.0	6.0	7.0	-1.5	8.3	6.8
Real gross domestic product	4.8	-3.6	5.5	6.7	3.5	5.5	4.5	2.3	2.2	2.0	1.8	1.8	4.6	4.3	2.6

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour															
Productivity	-1.6	-12.3	-4.6	-2.7	-0.3	0.2	2.3	2.5	2.0	1.6	1.0	0.8	-5.5	1.1	1.3
Pre-tax corporate profits	50.6	65.0	13.2	14.6	2.6	7.4	16.3	9.6	3.4	0.3	1.3	2.4	32.7	8.8	1.8
Unemployment rate (%)*	8.4	7.9	7.2	6.3	6.3	6.0	5.8	5.7	5.7	5.7	5.7	5.7	7.4	5.9	5.7
Inflation															
Headline CPI	1.4	3.3	4.1	4.7	5.5	5.6	4.3	3.3	2.3	1.8	2.1	2.2	3.4	4.7	2.1
CPI ex. food and energy	1.0	2.1	3.0	3.2	3.9	3.7	3.2	3.1	2.7	2.7	2.7	2.7	2.4	3.5	2.7
External trade															
Current account balance (\$b)*	3.0	3.1	3.2	-3.2	17.2	28.2	22.6	15.1	8.5	11.2	13.0	13.9	1.6	20.8	11.6
% of GDP*	0.1	0.1	0.1	-0.1	0.6	1.0	0.8	0.5	0.3	0.4	0.5	0.5	0.1	0.8	0.4
Housing starts (000s)*	304	279	262	261	277	265	259	250	242	237	233	232	271	263	236
Motor vehicle sales (mill., saar)*	1.82	1.71	1.65	1.53	1.54	1.57	1.60	1.62	1.63	1.64	1.64	1.65	1.68	1.58	1.64

*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

	2021				2022				2023				2021	2022F	2023F
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Consumer spending	11.4	12.0	2.0	3.1	2.2	3.5	1.2	1.5	1.8	2.1	2.8	1.5	7.9	3.0	1.9
Durables	50.0	11.6	-24.6	2.7	0.2	0.3	0.5	0.5	0.8	0.8	0.7	0.5	18.1	-2.2	0.6
Non-durables	15.9	13.9	2.0	0.8	0.8	0.9	0.8	0.5	1.5	1.5	1.8	1.8	9.1	1.7	1.2
Services	3.9	11.5	8.2	3.9	3.0	5.0	1.5	2.0	2.0	2.5	3.5	1.5	5.8	4.4	2.4
Government spending	4.2	-2.0	0.9	-2.6	0.5	6.0	7.0	5.0	4.5	3.5	2.0	2.5	0.5	1.9	4.4
Residential investment	13.3	-11.7	-7.7	1.0	14.5	-2.0	-2.0	-1.5	-2.0	-2.2	-1.5	-1.0	9.1	1.1	-1.8
Non-residential investment	12.9	9.2	1.6	3.1	10.1	3.5	4.1	4.0	2.9	2.2	2.1	2.3	7.4	5.2	3.0
Non-residential structures	5.4	-3.0	-4.1	-9.4	9.6	5.5	7.5	6.0	5.5	4.0	4.5	5.5	-8.1	2.0	5.4
Equipment & software	14.1	12.2	-2.4	2.4	18.0	4.0	4.5	5.0	2.5	1.5	1.0	1.2	13.0	6.8	2.8
Intellectual property	15.6	12.5	9.1	10.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	10.2	5.0	2.0
Final domestic demand	10.4	8.0	1.3	2.0	3.3	3.8	2.6	2.4	2.3	2.2	2.4	1.7	6.6	3.0	2.4
Exports	-2.9	7.6	-5.3	23.6	14.1	4.0	4.0	2.0	4.5	2.5	2.0	1.0	4.6	8.7	3.0
Imports	9.3	7.1	4.7	17.6	12.0	5.5	6.0	3.0	2.0	2.5	6.0	3.5	14.0	9.2	3.6
Inventories (change in \$b)	-88.3	-168.5	-66.8	171.2	128.0	95.0	105.0	115.0	85.0	65.0	50.0	55.0	-38.1	110.8	63.8
Real gross domestic product	6.3	6.7	2.3	7.0	2.5	3.0	2.5	2.5	2.0	1.8	1.7	1.5	5.7	3.6	2.1

Other indicators

Year-over-year % change unless otherwise indicated

Business and labour															
Productivity	3.6	2.2	-0.5	2.0	1.3	0.8	2.0	0.7	1.1	1.0	0.9	0.7	1.8	1.2	0.9
Pre-tax corporate profits	17.6	45.1	19.7	27.6	24.5	14.6	12.3	7.0	5.5	4.4	3.7	3.0	26.8	14.2	4.2
Unemployment rate (%)*	6.2	5.9	5.1	4.2	3.8	3.8	3.8	3.7	3.7	3.7	3.7	3.7	5.4	3.8	3.7
Inflation															
Headline CPI	1.9	4.8	5.3	6.7	7.8	7.3	6.0	4.4	2.7	1.9	2.3	2.5	4.7	6.3	2.4
CPI ex. food and energy	1.4	3.7	4.1	5.0	6.4	5.7	5.2	4.6	3.6	3.1	3.0	3.0	3.6	5.5	3.2
External trade															
Current account balance (\$b)*	-758	-793	-859	-873	-902	-925	-942	-949	-940	-944	-976	-995	-821	-930	-964
% of GDP*	-3.4	-3.5	-3.7	-3.6	-3.7	-3.7	-3.7	-3.7	-3.6	-3.6	-3.7	-3.7	-3.6	-3.7	-3.7
Housing starts (000s)*	1599	1588	1562	1654	1450	1425	1400	1375	1350	1351	1352	1353	1601	1413	1352
Motor vehicle sales (millions, saar)*	16.8	16.9	13.3	12.9	13.5	14.2	14.9	15.6	15.7	15.8	15.9	16.0	15.0	14.6	15.8

*Period average

Source: Bureau of Economic Analysis, RBC Economics

Financial market forecast detail

Interest rates—North America

%, end of period

	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	<u>23Q1</u>	<u>23Q2</u>	<u>23Q3</u>	<u>23Q4</u>
Canada												
Overnight	0.25	0.25	0.25	0.25	0.50	0.75	1.00	1.25	1.50	1.75	1.75	1.75
Three-month	0.09	0.15	0.12	0.16	0.60	0.85	1.10	1.30	1.50	1.65	1.70	1.70
Two-year	0.23	0.45	0.53	0.95	1.35	1.40	1.50	1.65	1.80	1.90	1.95	2.00
Five-year	0.99	0.98	1.11	1.26	1.60	1.70	1.75	1.85	1.95	2.00	2.05	2.10
10-year	1.56	1.39	1.51	1.43	1.80	1.90	1.95	2.00	2.05	2.10	2.15	2.20
30-year	1.99	1.84	1.99	1.68	2.05	2.10	2.15	2.20	2.25	2.30	2.30	2.30
Yield curve (10s-2s)	133	94	98	48	45	50	45	35	25	20	20	20
United States												
Fed funds*	0.13	0.13	0.13	0.13	0.38	0.88	1.13	1.38	1.63	1.88	2.13	2.38
Three-month	0.03	0.05	0.04	0.06	0.35	0.88	1.13	1.40	1.65	1.90	2.15	2.40
Two-year	0.16	0.25	0.28	0.73	1.50	1.65	1.80	1.95	2.05	2.20	2.30	2.40
Five-year	0.92	0.87	0.98	1.26	1.85	1.95	2.10	2.20	2.25	2.30	2.35	2.40
10-year	1.74	1.45	1.52	1.52	2.00	2.05	2.15	2.25	2.35	2.40	2.45	2.45
30-year	2.41	2.06	2.08	1.90	2.25	2.30	2.35	2.40	2.45	2.45	2.50	2.50
Yield curve (10s-2s)	158	120	124	79	50	40	35	30	30	20	15	5
Yield spreads												
Three-month T-bills	0.06	0.10	0.08	0.10	0.25	-0.03	-0.02	-0.10	-0.15	-0.25	-0.45	-0.70
Two-year	0.07	0.20	0.25	0.22	-0.15	-0.25	-0.30	-0.30	-0.25	-0.30	-0.35	-0.40
Five-year	0.07	0.11	0.13	0.00	-0.25	-0.25	-0.35	-0.35	-0.30	-0.30	-0.30	-0.30
10-year	-0.18	-0.06	-0.01	-0.09	-0.20	-0.15	-0.20	-0.25	-0.30	-0.30	-0.30	-0.25
30-year	-0.42	-0.22	-0.09	-0.22	-0.20	-0.20	-0.20	-0.20	-0.20	-0.15	-0.20	-0.20

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

Interest rates—International

%, end of period

	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	<u>23Q1</u>	<u>23Q2</u>	<u>23Q3</u>	<u>23Q4</u>
United Kingdom												
Repo	0.10	0.10	0.10	0.25	0.75	0.75	1.00	1.00	1.00	1.25	1.25	1.25
Two-year	0.11	0.07	0.40	0.68	1.25	1.20	1.30	1.30	1.40	1.40	1.40	1.40
Five-year	0.40	0.33	0.62	0.82	1.30	1.30	1.35	1.40	1.45	1.55	1.55	1.55
10-year	0.85	0.72	1.02	0.97	1.40	1.45	1.50	1.55	1.65	1.75	1.75	1.75
30-year	1.40	1.24	1.37	1.12	1.50	1.55	1.55	1.60	1.70	1.75	1.75	1.75
Euro Area												
Deposit rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.25	0.00	0.25	0.25
Two-year	-0.69	-0.67	-0.69	-0.64	-0.65	-0.50	-0.40	-0.20	0.15	0.20	0.30	0.30
Five-year	-0.62	-0.59	-0.56	-0.45	-0.30	-0.20	-0.10	0.10	0.40	0.45	0.50	0.50
10-year	-0.29	-0.20	-0.21	-0.18	0.05	0.15	0.25	0.40	0.60	0.60	0.65	0.65
30-year	0.26	0.30	0.29	0.20	0.30	0.40	0.45	0.50	0.60	0.65	0.70	0.70
Australia												
Cash target rate	0.10	0.10	0.10	0.10	0.10	0.10	0.50	0.75	1.00	1.25	1.25	1.25
Two-year	0.08	0.06	0.04	0.54	0.90	1.10	1.30	1.50	1.60	1.70	1.75	1.80
10-year	1.74	1.49	1.49	1.67	2.25	2.20	2.30	2.45	2.55	2.60	2.60	2.60
New Zealand												
Cash target rate	0.25	0.25	0.25	0.75	1.00	1.50	2.00	2.25	2.50	2.75	2.75	2.75
Two-year	0.46	0.78	1.39	2.16	2.65	2.75	2.85	2.90	3.00	3.10	3.10	3.10
10-year	1.95	1.87	2.21	2.62	3.00	3.05	3.05	3.10	3.05	3.10	3.10	3.10

Outlook

Growth outlook

% change, quarter-over-quarter in real GDP

	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	<u>23Q1</u>	<u>23Q2</u>	<u>23Q3</u>	<u>23Q4</u>
Canada*	4.8	-3.6	5.5	6.7	3.5	5.5	4.5	2.3	2.2	2.0	1.8	1.8
United States*	6.3	6.7	2.3	7.0	2.5	3.0	2.5	2.5	2.0	1.8	1.7	1.5
United Kingdom	-1.2	5.6	1.0	1.0	0.7	0.5	0.4	0.3	0.5	0.4	0.4	0.4
Euro Area	-0.2	2.2	2.3	0.3	0.4	0.2	0.3	0.6	0.4	0.4	0.4	0.4
Australia	1.9	0.8	-1.9	3.4	0.8	1.9	0.9	0.7	0.7	0.4	0.5	0.4

*Seasonally adjusted annualized rates

Inflation outlook

% change, year-over-year

	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	<u>23Q1</u>	<u>23Q2</u>	<u>23Q3</u>	<u>23Q4</u>
Canada	1.4	3.3	4.1	4.7	5.3	5.6	4.3	3.3	2.3	1.8	2.1	2.2
United States	1.9	4.8	5.3	6.7	7.8	7.3	6.0	4.4	2.7	1.9	2.3	2.5
United Kingdom	0.6	2.0	2.8	4.9	5.8	8.1	7.4	6.3	4.6	2.5	2.2	2.2
Euro Area	1.1	1.8	2.8	4.6	5.5	5.9	5.9	5.8	4.6	4.3	3.8	3.3
Australia	1.1	3.8	3.0	3.5	4.2	4.4	4.4	3.8	3.1	2.9	2.7	2.6

Exchange rates

End of period

	<u>21Q1</u>	<u>21Q2</u>	<u>21Q3</u>	<u>21Q4</u>	<u>22Q1</u>	<u>22Q2</u>	<u>22Q3</u>	<u>22Q4</u>	<u>23Q1</u>	<u>23Q2</u>	<u>23Q3</u>	<u>23Q4</u>
AUD/USD	0.76	0.75	0.72	0.73	0.72	0.70	0.68	0.67	0.67	0.67	0.67	0.67
USD/CAD	1.26	1.24	1.27	1.26	1.26	1.27	1.27	1.27	1.28	1.30	1.32	1.34
EUR/USD	1.17	1.19	1.16	1.14	1.11	1.10	1.09	1.08	1.07	1.08	1.08	1.09
USD/JPY	110.7	111.1	111.3	115.1	112.0	113.0	115.0	117.0	118.0	119.0	120.0	120.0
USD/CHF	0.94	0.93	0.93	0.91	0.92	0.92	0.94	0.96	0.99	1.00	1.02	1.04
GBP/USD	1.38	1.38	1.35	1.35	1.32	1.28	1.21	1.19	1.18	1.19	1.20	1.21

Note: Exchange rates are expressed in units per USD, with the exception of the euro, GBP and AUD which are expressed in USD per local currency unit.

Source: Reuters, RBC Economics forecasts

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