

March 6, 2020
rbc.com/economics

Virus sends equities, forecasts tumbling

Financial markets have been in turmoil in the last two weeks with the coronavirus outbreak threatening to reach pandemic proportions. Just as growth in new cases in China started to slow in mid-February, fresh outbreaks in countries like Japan, South Korea, Italy and Iran raised new concerns. Investors worried that containment measures used to slow the virus' spread in China—the result of which was a sharp decline in economic activity in February according to the country's latest PMI readings—would need to be applied elsewhere. With the outbreak's impact shifting from supply chain disruptions in Asia to potential dislocation across a number of economies, investors dumped riskier assets. The S&P 500 fell by 11.5% in the final week of February—its worst week since the global recession—and has not recovered in volatile March trading. Corporate spreads have also widened.

Money was plowed into government bonds, sending 10-year US Treasury yields below 0.8% for the first time while yields in other countries also hit record lows. Yield curves steepened in countries where central banks are judged to have ample room to lower interest rates. The RBA was first out of the gate with a 25 basis point cut, which the Fed followed with an emergency 1/2 percent reduction that was matched by the BoC a day later. With further easing on the table, both from those that have already acted and those that have yet to join (we see the BoE and ECB moving in the coming weeks), it's too early to say yields have bottomed out.

Relatedly, there is significant uncertainty about the scale and duration of the coronavirus' economic impact. The OECD revised its global growth forecast down by 0.5% but said a more significant outbreak could see growth cut in half relative to last year's pace (which was already a post-recession low). The resulting drop-off in demand for commodities—oil prices down some 25% year-to-date—saw OPEC propose its largest production cut since 2008 though it's unclear whether Russia will play along.

Central bank near-term bias



The BoC lowered the overnight rate by 50 basis points at its March meeting and left the door wide open to further easing. We expect another 25 basis point cut in April.



Even after a surprise 50 basis point rate cut in early-March, markets are pricing in a similar move at the Fed's upcoming meeting on March 18. We expect a 25 basis point reduction at that meeting.



We think it's just a matter of time before the BoE lowers its policy rate. The MPC doesn't meet until late-March but we think there's potential for a 25 basis point cut before then.



The ECB is likely to take its deposit rate further into negative territory with a 10 basis point cut in March. We expect additional QE and tweaks to TLTROs will be among the central bank's more "targeted" measures.



The RBA abandoned its earlier patient stance and cut its cash rate by 25 basis points in early-March. With other central banks doing even more, we think the RBA will cut again in April.

Overview

..... page 1

Interest rate outlook

..... page 5

Economic outlook

..... page 6

Currency outlook

..... page 7

Central bank watch

..... page 8

More coronavirus impact on financial markets

..... page 9



Highlights

▲ The Fed's emergency 1/2 percent rate cut was its first move between meetings since 2008.

▲ The emergency cut and Powell's press conference didn't satisfy investors.

▲ Further easing is likely, but fiscal policy can be a more effective tool to address the impact of the coronavirus outbreak.

▲ The US economy carried good momentum into 2020 but we expect growth will slow sharply in Q2.

Fed's emergency rate cut failed to calm markets

After a terrible week in equity markets at the end of February, investors were looking for decisive action from central banks and priced in significant near-term easing, particularly by the Fed. Markets rallied on reports that G7 finance ministers and central bank governors were discussing a coordinated response, but sold off when the meeting failed to deliver any explicit policy commitments. Just hours later, the Fed acted unilaterally by announcing an emergency 50 basis point rate cut, two weeks ahead of its next scheduled meeting.

If the move was meant to calm financial markets, it failed—the S&P 500 ended up losing nearly 3% on the day. Why wasn't a large, surprise rate cut enough to buoy sentiment? While the Fed's forward guidance that it will "use its tools and act as appropriate to support the economy" suggests the door is open to further easing, Chair Powell's comment that the Fed likes its current policy stance wasn't exactly the commitment to action investors were hoping for. Powell also didn't provide details on any other measures the central bank might take to ensure sufficient liquidity in the financial system or the availability of credit to borrowers facing a cash crunch.

More easing likely, but lower rates aren't the only solution

Even after the Fed's 50 basis point cut, markets are pricing significant easing from the Fed over the coming months. There's no shortage of uncertainty around the scale and duration of the economic impact of the coronavirus outbreak, or the central bank's response. At this stage, we're penciling in another 25 basis point rate cut by the Fed in the near-term, and acknowledge that there's risk of even more easing. How much heavy lifting the Fed has to do will depend on the response from other policymakers—as Chair Powell said, monetary policy is only part of what needs to be a multi-faceted approach by policymakers. While lower rates might bolster sentiment in financial markets (even if that wasn't the case with the Fed's surprise rate cut) and help shore up business and consumer confidence, fiscal stimulus can be better tailored to address the effects of an outbreak.

The Trump administration hasn't exactly been forthcoming in that regard, though the president did sign off on an \$8.3 billion emergency spending bill. It's objective, though, is more to address the early stages of the outbreak (pledging more than \$3 billion for R&D of vaccines, treatments and testing and more than \$1 billion for international efforts to help contain the virus' spread) rather than the coming economic fallout. As the economic impact of COVID-19 becomes clearer, we think more significant, targeted measures to support affected households and businesses could be on the way.

Waiting on the economic impact of COVID-19

The US economy is entering this period of uncertainty with decent momentum. GDP growth averaged 2.1% (annualized) over the second half of last year. And improving business and consumer sentiment and solid payroll growth in January and February suggests activity remained solid prior to the coronavirus outbreak in the US. Even with economic disruption likely to increase in March, we think Q1 growth will come in close to trend at 1.7%. The economic hit is likely to be concentrated in Q2 when efforts to contain the outbreak are likely disrupt economic activity, adding to supply chain and confidence shocks. Our early estimate is for growth to be cut in half to 0.8% in the upcoming quarter, though at this stage we can't rule out a flat or even negative print for Q2 GDP.

Our forecast assumes economic activity will begin to recover over the second half of the year, both as the outbreak fades and policy support takes effect. We think GDP growth could rebound to a 2% pace in the second half of the year. That likely won't be enough for the Fed to immediately reverse rate cuts (November's election also complicates things) so we expect fed funds will remain in a 0.75-1.00% range through the end of the year. As the recovery takes hold, we expect Treasury yields will trend modestly higher over the second half of 2020 but aren't likely to reach last year's close of around 1.9%.



BoC follows Fed's lead with 50 basis point cut

At its scheduled meeting the day after the Fed's emergency rate cut, the Bank of Canada followed the Fed's lead and lowered its overnight rate by 1/2 percent to 1.25%. That was at the upper end of market expectations—for our part, we had revised our call to a 25 basis point reduction in March and again in April. While the Fed's sizeable cut may have forced the BoC's hand to some extent, it's also likely that Governing Council opted for a larger move to get ahead of what it called "a material negative shock to the Canadian and global outlooks" from COVID-19. The bank noted that business activity has fallen sharply in some regions (outside of Canada) and supply chains have been disrupted. Resulting declines in commodity prices and tightening financial conditions will weigh on the domestic economy, and as the virus spreads, the BoC said it's likely that lower business and consumer confidence will further depress activity.

Alongside its rate cut, we think the BoC 'said the right things' in an effort to shore up confidence. The policy statement clearly left the door open to additional easing, noting the bank "stands ready to adjust monetary policy further if required." It also said it "will continue to ensure the Canadian financial system has sufficient liquidity" and coordinate with other G7 central banks and fiscal authorities. Compared with the Fed a day earlier the differences were subtle, but we think the BoC's apparent readiness to lower rates further and/or supply liquidity was the kind of message investors wanted to hear. It didn't seem to have a sustained impact on markets, though.

BoC ignoring household vulnerabilities?

We expect the BoC will act on its guidance and lower the overnight rate again in April (this time by a more conventional 25 basis points). There is risk of further easing, but as with the Fed we think other policymakers—including fiscal authorities—will need to step up to the plate to ease the impact of the outbreak and any containment measures. Deputy Prime Minister Freeland is chairing a coronavirus cabinet committee, and Finance Minister Morneau said the government will provide support to Canadians who have to be quarantined. Details have been light, though, and it's unclear whether a more fulsome plan will be held off until the upcoming federal budget (likely late-March or early-April). Easing the burden on monetary policy is desirable given already elevated household vulnerabilities, even if—as Governor Poloz argued in the case of a confidence shock—lower interest rates "will actually help to stabilize the housing market, rather than contribute to froth."

More transitory disruptions hit Canada's economy

The COVID-19 outbreak was a key driver of the BoC's decision to lower rates—particularly the size of the move. But a softer growth backdrop outside of potential coronavirus effects was also a factor. While GDP growth in Q4/19 was in line with the BoC's expectations (coming in at a three-and-a-half year low of 0.3%) it noted the composition was different with both business investment and exports weakening. The central bank had been encouraged by stronger investment in Q3/19 but that was fully retraced in Q4/19, and Statistics Canada's annual survey of capex intentions showed private investment was expected to increase by just 1% this year (the slowest since 2016).

Canada's economy also continues to be beset by transitory factors. A Canadian rail strike, US auto strike, pipeline shutdown, and early winter on the Prairies all trimmed Q4/19 growth (though we agree with the BoC's assessment that growth would have been below 1% even without those factors). In Q1/20, we think rail blockades that lasted more than two weeks in February—disrupting shipments across the country and leading to complaints from businesses and layoffs at some rail operators—shaved about 0.3 ppts off annualized GDP growth. Teachers' strikes in Ontario and winter storms also weighed on activity. For a central bank that was already contemplating easing, a sluggish start to the year would likely have prompted a rate cut (we had said April) regardless of the

Highlights

▲ The BoC waited for its scheduled meeting to cut rates by 50 basis points.

▲ The federal government is coordinating a response to the outbreak but details of any fiscal measures have been limited.

▲ Canada's economy was already beset by temporary headwinds prior to the outbreak.

▲ We think Canadian GDP growth will slow to just 0.3% in Q2, which we expect would be a third straight quarter of sub-1% growth.



Highlights

▲ The UK's post-election improvement in business and consumer sentiment is likely to be swamped by coronavirus concerns.

▲ We expect UK GDP growth will be flat in Q2 while the euro area economy will contract by 0.2% in the quarter.

▲ We expect a modest rate cut from the ECB, but it will have to rely more on QE and other tools with the deposit rate already so low.

▲ Australian GDP growth will slow from Q4/19's 0.5% pace as bushfires and the coronavirus outbreak take their toll.

coronavirus outbreak. Adding in the anticipated effects of the outbreak and containment measures (again, these estimates are subject to a high degree of uncertainty) we think Canadian GDP won't see much of a rebound in Q1/20 (+0.8% annualized) before growth slows again in Q2/20 (+0.3%). Even with an assumed return to near-2% growth in the second half of the year, GDP for 2020 as a whole would be up just 1% from last year.

BoE to join in with rate cut... sooner than later

We think it's only a matter of time before the Bank of England joins others in easing monetary policy. Recall that in January the central bank saw signs that global growth was picking up and UK business sentiment was improving following December's election. But if those green shoots weren't sustained, the BoE said it "might need to reinforce" the economy's expected recovery. While UK PMI data still looked solid in February, we think sentiment will weaken sharply in March with the intensification of the coronavirus outbreak outside of China, including in the UK and its trading partners in Europe. With global growth forecasts being cut and containment measures likely to reduce economic activity in the UK (we are penciling in flat GDP in Q2, bookended by modest 0.2% gains in Q1 and Q3) it seems like a foregone conclusion that the BoE will act on its guidance to support the economy.

Its next meeting isn't scheduled until March 26 (a trial by fire for new governor Andrew Bailey) but we think there's potential for the BoE to act before then. While the central bank's response in the wake of the 2016 referendum included asset purchases in addition to lowering rates, we think a 25 basis point rate cut will be the extent of the BoE's initial response to the coronavirus outbreak. We are penciling in a further cut in August—when an end-of-year deadline for the UK and EU to agree on a future trading relationship will come into view, adding an additional layer of uncertainty—but acknowledge that a follow-up move could come sooner if the economic backdrop deteriorates sharply.

ECB rate cut to come with more "targeted" measures

The ECB (along with the BoJ) has less policy room than its G7 counterparts, but we still expect it will lower its deposit rate further into negative territory with a 10 basis point rate cut in March. We doubt that will be the central bank's only response. A statement by President Lagarde said the ECB stands ready to take "appropriate and targeted measures, as necessary" to manage the coronavirus outbreak. We think a "targeted" approach could include additional quantitative easing, with purchases skewed more toward the corporate sector, as well as more attractive conditions for targeted longer-term refinancing operations (TLTROs). Those measures could help address wider corporate spreads and higher funding costs.

Euro area PMI data were showing some improvement in business sentiment early this year, particularly in the beleaguered manufacturing sector. We think that modest bit of momentum will have been enough for GDP growth to tick higher to 0.2% in Q1. But with a coronavirus outbreak already taking hold in Italy and containment measures in other countries likely to add to supply chain disruptions, we expect that increase will be retraced with a 0.2% decline in Q2 GDP. A modest recovery in the second half of the year would leave 2020 growth at just 0.5%, the slowest pace since the euro crisis.

RBA first out of the gate, with further easing to come

The Australian economy's sensitivity to global growth and the Chinese economy, along with a rising number of domestic cases, prompted a swift policy response from the previously patient RBA. The central bank cut its cash rate by 25 basis points to a record-low 0.50% and left the door open to further easing. We expect another rate cut in April. The policy statement noted that a fiscal response is in the works, which along with expected action from other central banks (who hadn't moved at the time of the RBA's meeting) likely eased the path for the RBA to cut. Between disruptions related to the devastating bushfires and the coronavirus outbreak, we expect Australian GDP growth will be substantially slower in the first half of 2020. Domestic demand was already soft with a muted 0.1% increase in Q4/19, though headline GDP was a bit stronger at 0.5%.



Interest rate outlook

%, end of period

| | Actuals | | | | Forecast | | | | | | | |
|-----------------------|---------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|
| | 19Q1 | 19Q2 | 19Q3 | 19Q4 | 20Q1 | 20Q2 | 20Q3 | 20Q4 | 21Q1 | 21Q2 | 21Q3 | 21Q4 |
| Canada | | | | | | | | | | | | |
| Overnight | 1.75 | 1.75 | 1.75 | 1.75 | 1.25 | 1.00 | 1.00 | 1.00 | 1.25 | 1.50 | 1.50 | 1.50 |
| Three-month | 1.67 | 1.66 | 1.65 | 1.66 | 1.05 | 0.85 | 0.90 | 1.00 | 1.30 | 1.45 | 1.40 | 1.40 |
| Two-year | 1.55 | 1.47 | 1.58 | 1.70 | 0.75 | 0.90 | 1.00 | 1.20 | 1.35 | 1.50 | 1.50 | 1.50 |
| Five-year | 1.52 | 1.39 | 1.40 | 1.69 | 0.75 | 0.90 | 1.00 | 1.30 | 1.45 | 1.55 | 1.60 | 1.60 |
| 10-year | 1.62 | 1.47 | 1.36 | 1.70 | 0.85 | 1.00 | 1.20 | 1.45 | 1.55 | 1.60 | 1.65 | 1.70 |
| 30-year | 1.89 | 1.69 | 1.53 | 1.76 | 1.10 | 1.35 | 1.45 | 1.65 | 1.70 | 1.75 | 1.80 | 1.80 |
| United States | | | | | | | | | | | | |
| Fed funds** | 2.50 | 2.50 | 2.00 | 1.75 | 1.00 | 1.00 | 1.00 | 1.00 | 1.25 | 1.50 | 1.75 | 2.00 |
| Three-month | 2.40 | 2.12 | 1.88 | 1.55 | 0.90 | 0.90 | 0.90 | 0.90 | 1.15 | 1.40 | 1.65 | 1.90 |
| Two-year | 2.27 | 1.75 | 1.63 | 1.58 | 0.75 | 1.00 | 1.10 | 1.30 | 1.40 | 1.55 | 1.70 | 1.90 |
| Five-year | 2.23 | 1.76 | 1.55 | 1.69 | 0.80 | 1.05 | 1.15 | 1.35 | 1.45 | 1.60 | 1.75 | 1.95 |
| 10-year | 2.41 | 2.00 | 1.68 | 1.92 | 1.00 | 1.25 | 1.50 | 1.65 | 1.75 | 1.90 | 2.00 | 2.00 |
| 30-year | 2.81 | 2.52 | 2.12 | 2.39 | 1.65 | 1.90 | 2.10 | 2.20 | 2.25 | 2.35 | 2.40 | 2.40 |
| United Kingdom | | | | | | | | | | | | |
| Bank rate | 0.75 | 0.75 | 0.75 | 0.75 | 0.50 | 0.50 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Two-year | 0.63 | 0.62 | 0.37 | 0.54 | 0.10 | 0.10 | 0.00 | 0.10 | 0.15 | 0.20 | 0.25 | 0.25 |
| 10-year | 0.99 | 0.84 | 0.49 | 0.83 | 0.20 | 0.20 | 0.10 | 0.20 | 0.25 | 0.40 | 0.50 | 0.60 |
| Euro area | | | | | | | | | | | | |
| Deposit Rate | -0.40 | -0.40 | -0.50 | -0.50 | -0.60 | -0.60 | -0.60 | -0.60 | -0.60 | -0.60 | -0.60 | -0.60 |
| Two-year | -0.60 | -0.73 | -0.74 | -0.59 | -0.80 | -0.75 | -0.70 | -0.70 | -0.70 | -0.70 | -0.70 | -0.70 |
| 10-year | -0.07 | -0.33 | -0.58 | -0.19 | -0.70 | -0.65 | -0.60 | -0.50 | -0.45 | -0.40 | -0.35 | -0.30 |
| Australia | | | | | | | | | | | | |
| Cash target rate | 1.50 | 1.25 | 1.00 | 0.75 | 0.50 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Two-year | 1.47 | 0.98 | 0.76 | 0.92 | 0.40 | 0.30 | 0.20 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 |
| 10-year | 1.78 | 1.32 | 1.01 | 1.37 | 0.80 | 1.05 | 1.20 | 1.15 | 1.15 | 1.20 | 1.20 | 1.20 |
| New Zealand | | | | | | | | | | | | |
| Cash target rate | 1.75 | 1.50 | 1.00 | 1.00 | 0.75 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Two-year swap | 1.62 | 1.35 | 0.92 | 1.25 | 0.75 | 0.75 | 0.80 | 0.80 | 0.80 | 0.85 | 0.85 | 0.90 |
| 10-year swap | 2.15 | 1.78 | 1.20 | 1.78 | 1.15 | 1.40 | 1.60 | 1.75 | 1.80 | 1.90 | 1.95 | 1.90 |
| Yield curve* | | | | | | | | | | | | |
| Canada | 7 | 0 | -22 | 0 | 10 | 10 | 20 | 25 | 20 | 10 | 15 | 20 |
| United States | 14 | 25 | 5 | 34 | 25 | 25 | 40 | 35 | 35 | 35 | 30 | 10 |
| United Kingdom | 36 | 22 | 12 | 29 | 10 | 10 | 10 | 10 | 10 | 20 | 25 | 35 |
| Eurozone | 53 | 40 | 16 | 40 | 10 | 10 | 10 | 20 | 25 | 30 | 35 | 40 |
| Australia | 31 | 34 | 25 | 45 | 40 | 75 | 100 | 95 | 90 | 90 | 85 | 80 |
| New Zealand | 53 | 43 | 28 | 53 | 40 | 65 | 80 | 95 | 100 | 105 | 110 | 100 |

* Two-year/10-year spread in basis points, **Top of 25 basis point range

Source: Reuters, RBC Economics Research

Central bank policy rate

%, end of period

| | | Current | Last | | | | Current | Last | |
|----------------|----------------|-----------|-----------|----------------|-------------|--------------|---------|-------|--------------------|
| United States | Fed funds | 1.00-1.25 | 1.50-1.75 | March 3, 2020 | Eurozone | Deposit rate | -0.50 | -0.40 | September 18, 2019 |
| Canada | Overnight rate | 1.25 | 1.75 | March 4, 2020 | Australia | Cash rate | 0.50 | 0.75 | March 4, 2020 |
| United Kingdom | Bank rate | 0.75 | 0.50 | August 1, 2018 | New Zealand | Cash rate | 1.00 | 1.50 | August 6, 2019 |

Source: Bloomberg, Reuters, RBC Economics Research



Economic outlook

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* | 1.0 | 3.4 | 1.1 | 0.3 | 0.8 | 0.3 | 1.9 | 2.1 | 2.2 | 2.2 | 1.7 | 1.6 | 2.0 | 1.6 | 1.0 | 1.9 |
| United States* | 3.1 | 2.0 | 2.1 | 2.1 | 1.7 | 0.8 | 1.9 | 2.3 | 2.3 | 1.6 | 1.5 | 1.5 | 2.9 | 2.3 | 1.7 | 1.9 |
| United Kingdom | 0.6 | -0.1 | 0.5 | 0.0 | 0.2 | 0.0 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3 | 1.4 | 0.6 | 1.3 |
| Euro area | 0.4 | 0.2 | 0.3 | 0.1 | 0.2 | -0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.9 | 1.2 | 0.5 | 1.0 |
| Australia | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 2.7 | 1.8 | 2.1 | 3.1 |

*annualized

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>2019</u> | <u>2020F</u> | <u>2021F</u> |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Canada* | 1.6 | 2.1 | 1.9 | 2.1 | 2.0 | 1.3 | 1.4 | 1.6 | 1.6 | 2.0 | 2.1 | 2.1 | 2.3 | 1.9 | 1.6 | 1.9 |
| United States* | 1.6 | 1.8 | 1.8 | 2.0 | 2.1 | 1.7 | 1.8 | 1.9 | 2.1 | 2.5 | 2.4 | 2.3 | 2.4 | 1.8 | 1.9 | 2.3 |
| United Kingdom | 1.8 | 2.0 | 1.9 | 1.4 | 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 | 1.0 | 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 | 1.8 | 2.3 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 1.9 | 1.6 | 2.3 | 2.1 |

Source: Statistics Canada, Bureau of Economic Analysis, Bureau of Labor Statistics, Office for National Statistics, Statistical Office of the European Communities, Australian Bureau of Statistics, Statistics New Zealand, RBC Economics Research

Inflation tracking

Inflation Watch

| | <u>Measure</u> | <u>Current period</u> | <u>Period ago</u> | <u>Year ago</u> | <u>Three-month trend</u> | <u>Six-month trend</u> |
|----------------|-----------------------------------|-----------------------|-------------------|-----------------|--------------------------|------------------------|
| Canada | CPI ex food & energy ¹ | Jan | 0.2 | 1.9 | 0.7 | 1.7 |
| United States | Core PCE ^{1,2} | Jan | 0.1 | 1.6 | 1.3 | 1.7 |
| United Kingdom | All-items CPI | Jan | -0.3 | 1.8 | 0.0 | 1.6 |
| Euro area | All-items CPI ¹ | Feb | 0.0 | 1.2 | 1.3 | 1.1 |
| Australia | Trimmed mean CPI ¹ | Q4 | 0.4 | 1.6 | N/A | N/A |
| New Zealand | All-items CPI | Q4 | 0.5 | 1.9 | N/A | N/A |

¹ Seasonally adjusted measurement.

² Personal consumption expenditures less food and energy price indices.

Source: Statistics Canada, Bureau of Labor Statistics, Office for National Statistics, Statistical Office of the European Communities, Australian Bureau of Statistics, Statistics New Zealand, RBC Economics Research

Currency outlook

Level, end of period

| | Actuals | | | | Forecast | | | | | | | |
|---------------------|---------|-------|-------|-------|----------|------|------|------|------|------|------|------|
| | 19Q1 | 19Q2 | 19Q3 | 19Q4 | 20Q1 | 20Q2 | 20Q3 | 20Q4 | 21Q1 | 21Q2 | 21Q3 | 21Q4 |
| Canadian dollar | 1.33 | 1.31 | 1.32 | 1.30 | 1.34 | 1.35 | 1.36 | 1.38 | 1.37 | 1.36 | 1.35 | 1.35 |
| Euro | 1.12 | 1.14 | 1.09 | 1.12 | 1.14 | 1.17 | 1.19 | 1.20 | 1.17 | 1.16 | 1.15 | 1.14 |
| U.K. pound sterling | 1.30 | 1.27 | 1.23 | 1.33 | 1.30 | 1.26 | 1.25 | 1.25 | 1.23 | 1.22 | 1.22 | 1.21 |
| Japanese yen | 110.9 | 107.9 | 108.1 | 108.6 | 105 | 100 | 95 | 95 | 97 | 99 | 101 | 103 |
| Australian dollar | 0.71 | 0.70 | 0.68 | 0.70 | 0.67 | 0.66 | 0.65 | 0.65 | 0.65 | 0.65 | 0.65 | 0.65 |

Canadian dollar cross-rates

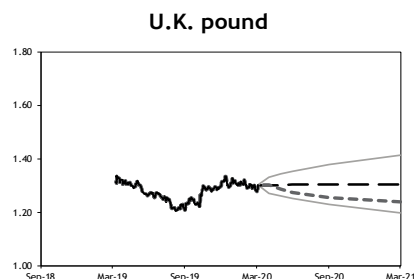
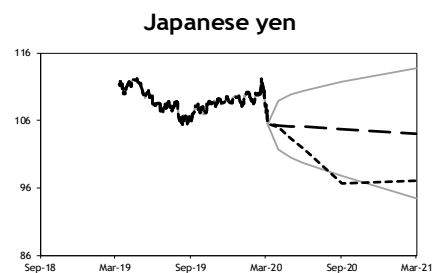
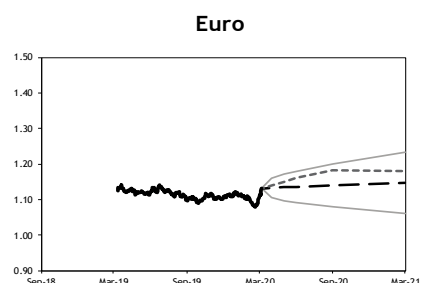
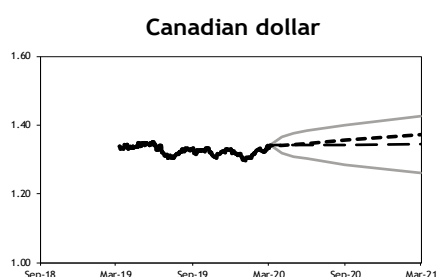
| | 19Q1 | 19Q2 | 19Q3 | 19Q4 | 20Q1 | 20Q2 | 20Q3 | 20Q4 | 21Q1 | 21Q2 | 21Q3 | 21Q4 |
|---------|------|------|------|------|------|------|------|------|------|------|------|------|
| EUR/CAD | 1.50 | 1.49 | 1.44 | 1.46 | 1.53 | 1.58 | 1.62 | 1.66 | 1.60 | 1.58 | 1.55 | 1.54 |
| GBP/CAD | 1.74 | 1.66 | 1.63 | 1.72 | 1.74 | 1.70 | 1.70 | 1.73 | 1.69 | 1.66 | 1.65 | 1.64 |
| CAD/JPY | 83.0 | 82.4 | 81.6 | 83.6 | 78.4 | 74.1 | 69.9 | 68.8 | 70.8 | 72.8 | 74.8 | 76.3 |
| AUD/CAD | 0.95 | 0.92 | 0.89 | 0.91 | 0.90 | 0.89 | 0.88 | 0.90 | 0.89 | 0.88 | 0.88 | 0.88 |

Rates are expressed in currency units per US dollar and currency units per Canadian dollar, except the euro, UK pound, Australian dollar, and New Zealand dollar, which are expressed in US dollars per currency unit and Canadian dollars per currency unit.

Source: Bloomberg, RBC Economics Research

RBC Economics outlook compared to the market

The following charts track historical exchange rates plus the forward rate (dashed line) compared to the RBC Economics forecast (dotted line) out one year. The cone for the forecast period frames the forward rate with confidence bounds using implied option volatilities as of the date of publication.



Central bank watch

Bank of Canada

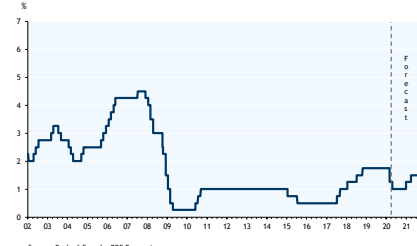
Transitory and one-off factors, in addition to the coronavirus outbreak, are likely to keep Canadian GDP growth subdued (averaging 0.5%) in H1/20 after a paltry 0.3% gain in Q4/19.

It sounds like the BoC would have cut rates anyways, but a more decisive 50 basis point move (with more to come in April, we think) was driven by concerns about the coronavirus' economic impact.

Canadian real GDP growth



Canadian overnight rate

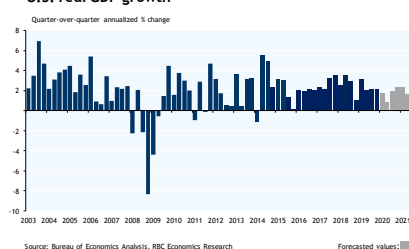


Federal Reserve

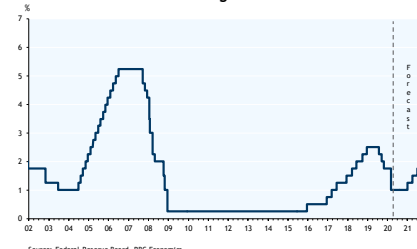
The US economy carried decent momentum into 2020 and we expect growth will be close to trend at 1.7% in Q1 before the coronavirus outbreak's impact becomes more apparent in Q2 (0.8%).

We expect the Fed to lower rates further at its March meeting, having already announced an emergency 1/2 percent reduction at the start of the month. Markets are hoping for even more easing.

U.S. real GDP growth



U.S. target rate

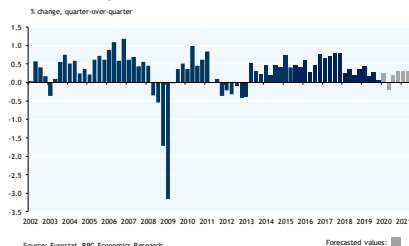


European Central Bank

Euro area PMI data improved through February but will likely take a dive in March with the coronavirus outbreak intensifying. The currency bloc is likely to see a negative print in Q2 GDP.

The ECB is likely to take its deposit rate even deeper into negative territory but will also rely on QE and TLTROs which might better address widening spreads higher funding costs.

Euro area GDP



ECB Deposit rate



Bank of England

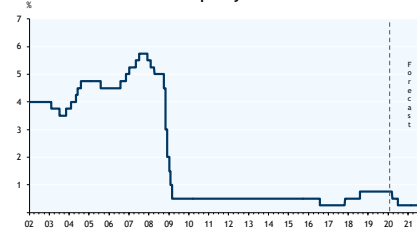
The UK's post-election pickup in business and consumer confidence will likely be swamped by coronavirus concerns. We think GDP growth could be flat in Q2.

We think the BoE will follow other central banks in lowering rates, potentially even before its late-March meeting. We're penciling in another cut in August but there's risk it comes sooner.

U.K. real GDP growth



U.K. policy rate

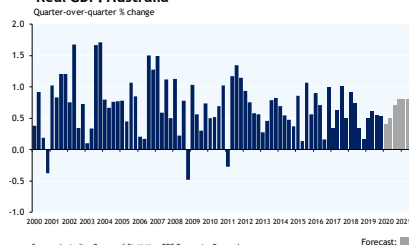


Reserve Bank of Australia

Already-soft domestic demand (up just 0.1% in Q4/19) will be compounded by the economic impacts of bushfires and the coronavirus outbreak.

The previously-patient RBA was first out of the gate with a 25 basis point rate cut and we're assuming another move in April. Any additional easing is likely to be contingent on the scale of the outbreak and fiscal response.

Real GDP: Australia



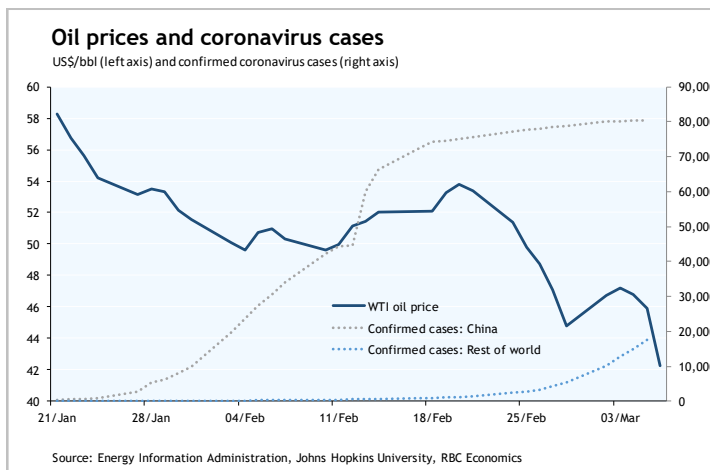
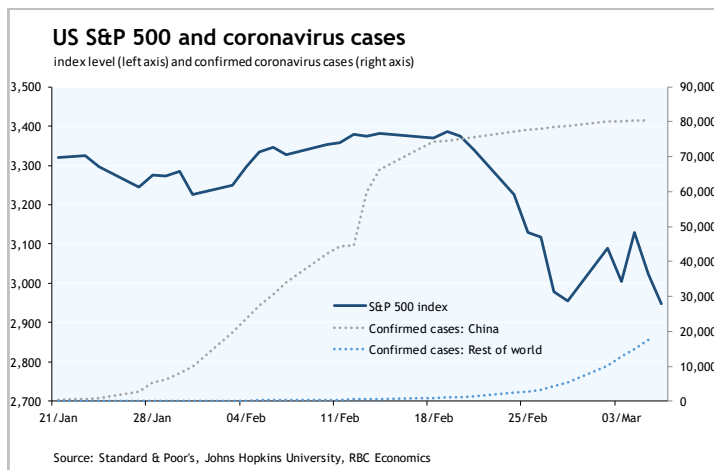
Australia policy rates



More coronavirus impact on financial markets

The last week of February was the S&P 500's worst since 2008 with an 11.5% decline wiping out gains since the end of October 2019. Markets were choppy in the first week of March (Biden's Super Tuesday victories provided some temporary relief) but on net equities failed to recover.

Concerns about global growth (the OECD marked its 2020 forecast down by 0.5 percent but outlined an even worse scenario) sent commodity prices tumbling. Oil prices fell to their lowest level since late-2018 and the apparent failure of OPEC and Russia to coordinate on production cuts added to the pressure.



Demand for safe assets, expectations of central bank easing, and a sharp decline in breakeven inflation pushed US Treasury yields down to record lows, and then even lower. Long-term government bond yields in several other advanced economies also hit new lows in early-March.

Central banks have been first to respond to the coronavirus outbreak and we expect further easing in the coming months. But given monetary policy isn't particularly well-suited to dealing with a virus outbreak, we expect fiscal authorities will add more targeted support.

