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Taking stock after a very long 6 months

It's been six months since COVID-19 was declared a global pandemic and many advanced economies implemented draconian measures to slow the virus's spread. The resulting declines in economic activity over the first half of 2020 were on a previously-unthinkable scale, ranging from 7% in Australia and 10% in the US to 22% in the UK (all non-annualized). The early recovery has also been impressive, though, with re-opening in the late spring and summer teeing up for sizeable Q3 gains in many of the economies we track. But those increases won't be nearly enough to absorb economic slack, and future growth will be harder to come by.

Already there are signs of flagging momentum in the euro area, where some countries are experiencing coronavirus outbreaks rivaling those seen back in April. Australia saw a less severe contraction in GDP earlier this year thanks to its relative success in handling the virus, but rising case counts and renewed lockdown measures sapped momentum in Q3. In some jurisdictions, the fiscal support that prevented even worse economic outcomes and laid the foundation for recovery is beginning to fade. Expiry of wage subsidies in the UK could lead to a significant increase in redundancies, and Congressional gridlock in the US has allowed unemployment insurance top-ups to lapse for millions of Americans. Canada and a number of European countries have extended support programs but still face slow, bumpy recoveries and second-wave risks.

The strength of the early recovery and policy support underpinned the rally in equities. The US stock market in particular was quick to retrace earlier losses and reached a new record high in early September. High-flying tech stocks (some benefiting from pandemic trends like online shopping and work-from-home) have been key to the US markets' performance, notwithstanding a recent selloff in the sector, while less tech-heavy indices in Canada, the UK and Europe remain below pre-pandemic levels. Central banks are ensuring financial conditions remain accommodative, even as governments ramp up borrowing. Balance sheets have

Central bank near-term bias



The BoC tweaked its forward guidance on QE but Governor Macklem said any talk of exit is premature. The bank maintained its commitment to keep the overnight rate near zero until the economy has recovered.



A shift to flexible average inflation targeting and emphasis on pushing unemployment as low as possible reinforced the Fed's low-for-long messaging. Fed funds is likely to be anchored near zero for years to come, and QE is helping keep longer-term rates low.



We continue to think the BoE will increase its asset purchase target by £100 billion in November. We still expect the bank rate will be cut below zero but think that move is more likely to come early next year.



The ECB continues to deliver stimulus through asset purchases, longer-term lending and a negative deposit rate. It will evaluate the impact of those measures, and fiscal help, at upcoming meetings.



The RBA expanded its Term Funding Facility to provide additional liquidity and support the flow of credit. The central bank's yield curve target remains in place but it looks like QE isn't the preferred measure if further stimulus is needed.

Overview

..... page 1

Interest rate outlook

..... page 5

Economic outlook

..... page 6

Currency outlook

..... page 7

Central bank watch

..... page 8

The story so far

..... page 9



Highlights

▲ US household spending—particularly durables and housing—has staged a strong recovery...

▲ ...but a dip in consumer confidence in August warns of slower momentum ahead.

▲ US PCE inflation averaged 1.5% over the past decade, consistently undershooting the Fed's objective.

▲ The central bank will now target average inflation, partially making up for past misses.

expanded by anywhere from 6% (RBA) to 18% (BoC) of GDP. Where fiscal support is fading, monetary policy is set to do even more. The Fed doubled down on its low-for-long commitment, and we expect the UK will expand QE later this year before adopting negative rates early next year. We see government bond yields being pinned low throughout our forecast horizon as the recovery continues.

US household-led recovery underway...

With the US recovery looking firmer than expected in its early stages, we've marked up our Q3 GDP forecast to 30% annualized from 16% previously. Strength in the household sector is a key factor. Retail sales were back above pre-pandemic levels in July, though broader consumer spending (including services) was still down 4% from a year earlier. Rate-sensitive sectors have been a key source of growth: durable goods sales were up at a double-digits clip in June and July, existing home sales rebounded to the highest in 13 years, housing starts have picked up and homebuilders' confidence is at a record high. It's not just lower interest rates that have supported the household sector—July personal income was up 5% from February as government transfers continued to fill the hole left by lost wages and salaries.

The business sector is perking up as well—the ISM manufacturing index continued to gain ground in August with new orders hitting a 16-year high. The services index slipped back a bit but remained solidly in expansionary territory. Business investment is also firming with capex orders and shipments rebounding to pre-pandemic levels in July.

...but a few clouds on the horizon

The US economy added another 1.4 million jobs in August—non-farm payrolls have now retraced about half of March and April's losses—but the consumer outlook isn't all rosy. The Conference Board's latest consumer confidence reading dropped below its April low-point. A resurgence in coronavirus cases over the summer and political gridlock (Congress still unable to agree on another round of stimulus, with unemployment insurance top-ups having expired at the end of July) likely dented sentiment. On the latter, President Trump diverted some disaster relief funding to offer a \$300/week UI top-up (half the previous federal top-up). Most states have received federal approval to deliver this "lost wages assistance" though in many cases the extra benefit payments have yet to reach claimants. There were still nearly 30 million Americans claiming unemployment insurance (state and federal) as of mid-August. Less fiscal support, still-high unemployment, and uncertainty about COVID-19 and the election all set up for slower growth as 2020 draws to a close.

Fed attempts FAIT, reinforcing low-for-long message

Fed Chair Powell made a splash at Jackson Hole by announcing some significant changes to the Fed's monetary policy goals and strategy. Most notably, the central bank is shifting to flexible average inflation targeting (FAIT). In this new framework, past deviations from the 2% target will be partially made up for in subsequent periods. Another change saw the Fed emphasizing that its maximum employment objective (the second half of its dual mandate) is "broad-based and inclusive". This is a nod to learnings from the central bank's community outreach over the past year and a half, which found that strong labour market conditions were particularly beneficial to low- and moderate-income communities. Given the recent experience with low levels of unemployment that did not result in significant inflationary pressure, the Fed will set policy based on "shortfalls" rather than "deviations" from maximum employment.

How does this impact the monetary policy outlook? We think a shift to flexible average inflation targeting reinforces the Fed's low-for-long message. The Fed's latest economic projections show PCE inflation at 1.6% in 2021 and 1.7% in 2022 (both on a Q4/Q4 basis). That suggests it will be years before inflation rises to 2%, let alone exceeds that mark for long enough to bring average inflation (over an unspecified period) up to 2%.



The Fed's dot plot showed the vast majority of FOMC members see the fed funds rate remaining at its current level through the end of 2022. A shift to average inflation targeting, and emphasis on pushing the unemployment rate as low as possible, means interest rates could remain near zero for several more years beyond that (barring an unanticipated increase in inflation). That should keep the short-end of the yield curve well anchored, while longer-term yields are likely to drift modestly higher as the recovery ensues and inflation expectations gradually tick up.

Canada primed for a strong Q3 rebound

Canada's economy contracted by a record 11.5% (39% annualized) in Q2 with consumer spending, residential and business investment, and even government spending declining sharply. Much of that weakness was concentrated early in the quarter when virus containment measures were most severe—GDP increased by an average of 5.7% month-over-month in May and June as restrictions were lifted. Those gains continued in early Q3 with StatCan's preliminary estimate showing a 3% increase in economic output in July. Even with growth likely to slow as the quarter progresses, that suggests GDP will increase at a 40% annualized rate in Q3—stronger than the 33% gain we previously assumed.

We also bumped up our Q4 growth forecast slightly and see less downside risk to the consumer outlook following the government's proposed benefit changes (more on that below). Canada's COVID-19 case growth is starting to tick higher, but the country has done a relatively good job of containing the virus thus far. Outbreak severity and the tapering of government benefits are two key risks across all of the economies we track. With Canada doing fairly well on both scores it's not surprising that the Canadian dollar has strengthened over the summer—it's now sitting around 76 US cents, up from as low as 69 cents in mid-March. We aren't convinced this upward trend will persist—the loonie could be side-swiped by an uneven global recovery, US election uncertainty, and potential weakness in equity markets later this year. We have lifted our year-end forecast but still see the Canadian dollar losing some ground, slipping to about 74.5 US cents by the end of 2020.

New programs address “benefits cliff” concerns

While nearly 2/3 of the jobs lost in March and April have now been recovered, Canadian employment remains more than 5% below pre-pandemic levels. One of our concerns heading into the fall was that expanded government benefits put in place in the early stages of the pandemic would run out before the labour market recovered sufficiently—setting up for a benefits cliff that could sap recovery momentum. But the government has addressed those worries with a number of new measures. CERB benefits have been extended by another 4 weeks, after which out-of-work Canadians will transition to EI (if they meet expanded eligibility requirements) or a proposed Canada Recovery Benefit (for self-employed and gig/contract workers not eligible for EI). Both programs have a \$400/week benefits floor and will allow recipients to earn more money (through part-time work, for example) before benefits are clawed back. These initiatives will limit the income shock that many would have faced if CERB—which paid out \$73 billion in benefits to 8.7 million Canadians through late-August—was simply allowed to expire.

BoC holds policy steady as it kicks off inflation renewal

The Bank of Canada made no changes to its key policies in September—the overnight rate was held at 0.25% and QE is continuing with at least \$5 billion in GoC bond purchases each week. Recent developments were seen as generally in line with the bank's July forecasts though the early recovery in Canada and the US has been a bit firmer than expected. Still, the BoC thinks the upcoming recuperation phase will be “slow and choppy” necessitating ongoing monetary policy stimulus. A slight change in the bank's forward guidance drew some attention: rather than committing to further stimulus if needed, the statement noted QE will be “calibrated” to provide the appropriate level of

Highlights

▲ Canada's GDP gains in May-July set up for a significant Q3 rebound...

▲ ...but output will still be well below pre-pandemic levels.

▲ 1 million of the jobs lost during the pandemic have yet to be recovered, but extended government benefits will support households.

▲ Tweaks to the BoC's forward guidance don't necessarily signal a tapering of asset purchases.



Highlights

▲ The UK has re-imposed some physical distancing measures amid rising COVID-19 infections.

▲ The UK's Brexit transition period is set to end later this year, and trade talks aren't exactly going smoothly.

▲ Several European countries are seeing outbreaks as severe or worse than April's...

▲ ...putting the currency bloc's nascent recovery at risk.

support. While that suggests the program could be expanded or tapered as required, we don't think it was meant to flag an imminent change in the bank's asset purchases—particularly when read as part of a policy statement that emphasized caution over optimism. Indeed, Governor Macklem said in subsequent comments that it's still premature to talk about exiting QE. The bank's guidance on the overnight rate—it will remain at the effective lower bound until the economy returns to full capacity and inflation is sustainably at 2%—was unchanged.

While the Fed announced changes to its monetary policy goals in August, the BoC is just kicking off its own year-long inflation target renewal review. In recent comments, Senior Deputy Governor Wilkins said average inflation targeting (adopted by the Fed) would be in the “horse race” of alternative monetary policy frameworks under consideration. It was noted, though, that the BoC's flexible approach to inflation targeting (seeking to return inflation to 2% over a longer time frame if conditions warrant) already provides some of the benefits of average inflation targeting. We also think the bank's current forward guidance—committing to keep rates low until the economy is at full capacity—implicitly allows for some overshoot of the BoC's 2% midpoint target.

Brexit uncertainty, rising coronavirus cases threaten UK recovery

UK GDP rose at an average monthly pace of nearly 6% in the three months through July, retracing slightly more than half of the decline recorded in March and April. It looks like growth continued in August with PMI readings posting further gains. That should set up for a strong rebound in Q3 GDP—we're penciling in a nearly 20% gain (non-annualized) after Q2's record 20.4% drop. That would still leave economic output 7% below pre-pandemic levels, though, and it looks like gains will be harder to come by later this year. The UK is seeing the beginnings of a second wave of coronavirus cases with daily case growth accelerating sharply in early-September, prompting the re-imposition of some physical distancing measures. And despite calls for an extension, the government's furlough scheme is still set to expire at the end of October. While the number of employees on furlough has been cut in half as the economy has re-opened, about 3.5 million people were still benefiting from the scheme at the end of August. Meanwhile, Brexit uncertainty is returning to the fore with the European Council's mid-October meeting seen as a potential drop-dead date for any deal before the current transition period runs out at the end of the year. UK legislation that will reportedly undermine the Withdrawal Agreement isn't helping negotiations, and has pushed sterling lower.

With risks building toward the end of the year and fiscal stimulus waning, we think the Bank of England will need to take further action to support the economy. The BoE has said its preferred policy tools at this stage are asset purchases and forward guidance. We thought the central bank could have opted for a larger increase when it expanded QE in June, and expect a further £100 billion in purchases to be announced in November. We continue to expect the BoE will eventually lower the bank rate into negative territory—the central bank confirmed in August that negative rates are in its toolkit—but we now see such a move being put off until February 2021.

Euro area momentum slowing as virus resurgence adds risks

While UK PMIs continued to rebound in August, the same can't be said of the euro area where sentiment readings slipped. PMIs in France, Italy and Spain all posted sizeable declines with the latter two falling back into contractionary territory. All three countries saw accelerating coronavirus infections in August, with Spain's daily case growth now exceeding April's peak and France not far from that mark. We still think early momentum in the euro area's recovery will lift Q3 GDP growth to 8% (non-annualized). But survey data suggests the currency bloc is already entering a slower and bumpier phase of the recovery as relaxation of containment measures slows or is even put in reverse in some areas. A number of country-level furlough schemes have been extended, which should help avoid job losses and support household incomes, but we still see scope for a pullback in economic activity later this year. With ample monetary policy support still needed, the ECB left its key policies unchanged in September. President Lagarde welcomed the EU's ground-breaking fiscal package but still said the central bank's Pandemic Emergency Purchase Program is likely to be used in full.



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 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Three-month | 1.67 | 1.66 | 1.65 | 1.66 | 0.21 | 0.20 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 |
| Two-year | 1.55 | 1.47 | 1.58 | 1.70 | 0.42 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.35 | 0.35 |
| Five-year | 1.52 | 1.39 | 1.40 | 1.69 | 0.59 | 0.37 | 0.40 | 0.40 | 0.45 | 0.50 | 0.60 | 0.65 |
| 10-year | 1.62 | 1.47 | 1.36 | 1.70 | 0.70 | 0.53 | 0.55 | 0.60 | 0.65 | 0.70 | 0.80 | 0.90 |
| 30-year | 1.89 | 1.69 | 1.53 | 1.76 | 1.31 | 0.99 | 1.05 | 1.15 | 1.25 | 1.30 | 1.35 | 1.40 |
| United States | | | | | | | | | | | | |
| Fed funds** | 2.50 | 2.50 | 2.00 | 1.75 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Three-month | 2.40 | 2.12 | 1.88 | 1.55 | 0.11 | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Two-year | 2.27 | 1.75 | 1.63 | 1.58 | 0.23 | 0.16 | 0.20 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 |
| Five-year | 2.23 | 1.76 | 1.55 | 1.69 | 0.37 | 0.29 | 0.30 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 |
| 10-year | 2.41 | 2.00 | 1.68 | 1.92 | 0.70 | 0.66 | 0.65 | 0.75 | 0.80 | 0.85 | 0.95 | 1.00 |
| 30-year | 2.81 | 2.52 | 2.12 | 2.39 | 1.35 | 1.41 | 1.45 | 1.50 | 1.55 | 1.60 | 1.65 | 1.70 |
| United Kingdom | | | | | | | | | | | | |
| Bank rate | 0.75 | 0.75 | 0.75 | 0.75 | 0.10 | 0.10 | 0.10 | 0.10 | -0.15 | -0.15 | -0.15 | -0.15 |
| Two-year | 0.63 | 0.62 | 0.37 | 0.54 | 0.13 | -0.08 | -0.10 | -0.10 | -0.25 | -0.15 | -0.10 | -0.10 |
| 10-year | 0.99 | 0.84 | 0.49 | 0.83 | 0.34 | 0.17 | 0.15 | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 |
| 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 |
| Two-year | -0.60 | -0.73 | -0.74 | -0.59 | -0.69 | -0.69 | -0.60 | -0.60 | -0.60 | -0.60 | -0.60 | -0.60 |
| 10-year | -0.07 | -0.33 | -0.58 | -0.19 | -0.48 | -0.45 | -0.50 | -0.40 | -0.35 | -0.30 | -0.25 | -0.20 |
| Australia | | | | | | | | | | | | |
| Cash target rate | 1.50 | 1.25 | 1.00 | 0.75 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Two-year | 1.47 | 0.98 | 0.76 | 0.92 | 0.24 | 0.25 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| 10-year | 1.78 | 1.32 | 1.01 | 1.37 | 0.77 | 0.87 | 0.85 | 0.85 | 0.90 | 0.95 | 0.95 | 0.90 |
| New Zealand | | | | | | | | | | | | |
| Cash target rate | 1.75 | 1.50 | 1.00 | 1.00 | 0.25 | 0.25 | 0.25 | 0.00 | -0.25 | -0.25 | -0.25 | -0.25 |
| Two-year swap | 1.62 | 1.35 | 0.92 | 1.25 | 0.52 | 0.19 | 0.00 | -0.05 | -0.10 | -0.10 | -0.10 | -0.10 |
| 10-year swap | 2.15 | 1.78 | 1.20 | 1.78 | 0.92 | 0.72 | 0.45 | 0.50 | 0.50 | 0.50 | 0.60 | 0.65 |
| Yield curve* | | | | | | | | | | | | |
| Canada | 7 | 0 | -22 | 0 | 28 | 24 | 25 | 30 | 35 | 40 | 45 | 55 |
| United States | 14 | 25 | 5 | 34 | 47 | 50 | 45 | 55 | 60 | 65 | 70 | 75 |
| United Kingdom | 36 | 22 | 12 | 29 | 21 | 25 | 25 | 20 | 40 | 35 | 35 | 40 |
| Eurozone | 53 | 40 | 16 | 40 | 21 | 24 | 10 | 20 | 25 | 30 | 35 | 40 |
| Australia | 31 | 34 | 25 | 45 | 53 | 62 | 65 | 65 | 70 | 75 | 75 | 70 |
| New Zealand | 53 | 43 | 28 | 53 | 40 | 53 | 45 | 55 | 60 | 60 | 70 | 75 |

* 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 | 0-0.25 | 1.00-1.25 | March 15, 2020 | Eurozone | Deposit rate | -0.50 | -0.40 | September 18, 2019 |
| Canada | Overnight rate | 0.25 | 0.75 | March 27, 2020 | Australia | Cash rate | 0.25 | 0.50 | March 19, 2020 |
| United Kingdom | Bank rate | 0.10 | 0.25 | March 19, 2020 | New Zealand | Cash rate | 0.25 | 1.00 | March 16, 2020 |

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>2019</u> | <u>2020F</u> | <u>2021F</u> |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Canada* | 1.2 | 3.2 | 1.1 | 0.6 | -8.2 | -38.7 | 40.0 | 6.0 | 4.0 | 4.0 | 5.0 | 5.0 | 2.0 | 1.7 | -6.0 | 4.9 |
| United States* | 2.9 | 1.5 | 2.6 | 2.4 | -5.0 | -31.7 | 30.0 | 1.0 | 2.5 | 5.0 | 4.0 | 4.5 | 3.0 | 2.2 | -4.1 | 3.4 |
| United Kingdom | 0.7 | -0.1 | 0.5 | 0.0 | -2.2 | -20.4 | 19.3 | 1.2 | 1.6 | 1.2 | 0.3 | 0.4 | 1.3 | 1.5 | -9.1 | 6.5 |
| Euro area | 0.5 | 0.2 | 0.3 | 0.0 | -3.6 | -12.1 | 8.1 | -2.8 | 1.8 | 3.8 | 3.0 | 0.4 | 1.9 | 1.3 | -9.2 | 4.8 |
| Australia | 0.4 | 0.8 | 0.5 | 0.6 | -0.3 | -7.0 | 0.3 | 1.5 | 1.3 | 1.1 | 1.1 | 1.0 | 2.8 | 1.8 | -4.2 | 2.4 |

*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 | 1.8 | 0.0 | 0.2 | 0.2 | 0.3 | 1.3 | 1.2 | 1.4 | 2.3 | 1.9 | 0.6 | 1.0 |
| United States* | 1.6 | 1.8 | 1.8 | 2.0 | 2.1 | 0.4 | 0.9 | 0.5 | 0.8 | 2.1 | 1.7 | 2.2 | 2.4 | 1.8 | 1.0 | 1.7 |
| United Kingdom | 1.8 | 2.0 | 1.9 | 1.4 | 1.7 | 0.7 | 0.5 | 0.8 | 0.7 | 1.3 | 1.4 | 1.5 | 2.5 | 1.8 | 0.9 | 1.2 |
| Euro area | 1.4 | 1.4 | 1.0 | 1.0 | 1.1 | 0.2 | 0.2 | 0.3 | 0.3 | 1.3 | 1.3 | 1.4 | 1.8 | 1.2 | 0.4 | 1.0 |
| Australia | 1.3 | 1.6 | 1.7 | 1.8 | 2.2 | -0.3 | 1.0 | 0.9 | 1.1 | 2.3 | 2.2 | 2.2 | 1.9 | 1.6 | 1.3 | 2.0 |

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 | Jul | -0.2 | 0.5 | -0.6 | 0.7 |
| United States | Core PCE ^{1,2} | Jul | 0.3 | 1.3 | 0.7 | 0.8 |
| United Kingdom | All-items CPI | Jul | 0.5 | 1.0 | 0.6 | 0.5 |
| Euro area | All-items CPI ¹ | Aug | -0.4 | -0.2 | 0.3 | -0.5 |
| Australia | Trimmed mean CPI ¹ | Q2 | -0.1 | 1.2 | N/A | N/A |
| New Zealand | All-items CPI | Q2 | -0.5 | 1.5 | 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

| | <u>Actuals</u> | | | | | | <u>Forecast</u> | | | | | |
|---------------------|----------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|
| | <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> |
| Canadian dollar | 1.33 | 1.31 | 1.32 | 1.30 | 1.41 | 1.36 | 1.32 | 1.34 | 1.35 | 1.35 | 1.34 | 1.33 |
| Euro | 1.12 | 1.14 | 1.09 | 1.12 | 1.10 | 1.12 | 1.19 | 1.20 | 1.20 | 1.20 | 1.18 | 1.16 |
| U.K. pound sterling | 1.30 | 1.27 | 1.23 | 1.33 | 1.24 | 1.24 | 1.29 | 1.28 | 1.26 | 1.25 | 1.23 | 1.21 |
| Japanese yen | 110.9 | 107.9 | 108.1 | 108.6 | 108 | 108 | 102 | 97 | 97 | 99 | 101 | 103 |
| Australian dollar | 0.71 | 0.70 | 0.68 | 0.70 | 0.61 | 0.69 | 0.71 | 0.70 | 0.69 | 0.69 | 0.69 | 0.69 |

Canadian dollar cross-rates

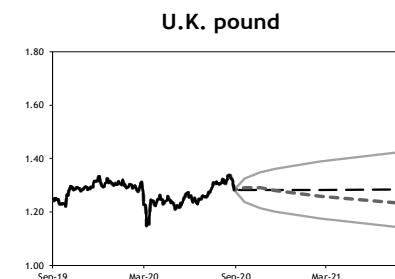
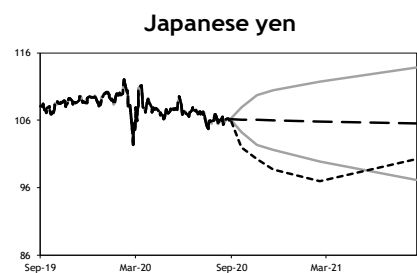
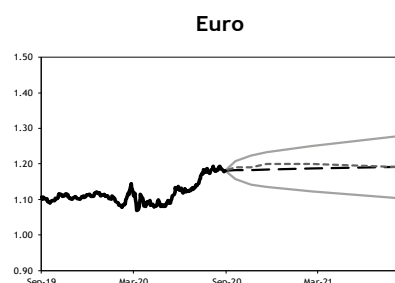
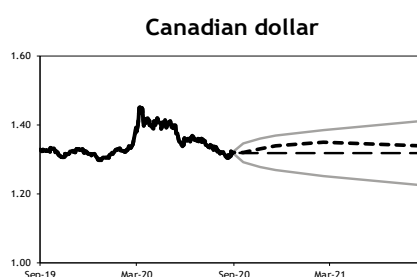
| | <u>19Q1</u> | <u>19Q2</u> | <u>19Q3</u> | <u>19Q4</u> | <u>20Q1</u> | <u>20Q2</u> | <u>20Q3</u> | <u>20Q4</u> | <u>21Q1</u> | <u>21Q2</u> | <u>21Q3</u> | <u>21Q4</u> |
|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| EUR/CAD | 1.50 | 1.49 | 1.44 | 1.46 | 1.55 | 1.53 | 1.57 | 1.61 | 1.62 | 1.62 | 1.58 | 1.54 |
| GBP/CAD | 1.74 | 1.66 | 1.63 | 1.72 | 1.75 | 1.68 | 1.71 | 1.71 | 1.71 | 1.69 | 1.65 | 1.61 |
| CAD/JPY | 83.0 | 82.4 | 81.6 | 83.6 | 76.5 | 79.5 | 77.3 | 72.4 | 71.9 | 73.3 | 75.4 | 77.4 |
| AUD/CAD | 0.95 | 0.92 | 0.89 | 0.91 | 0.86 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 |

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.



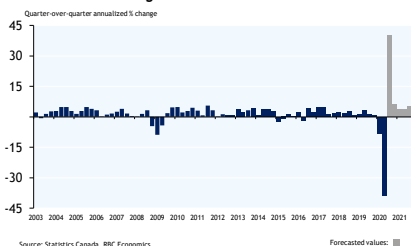
Central bank watch

Bank of Canada

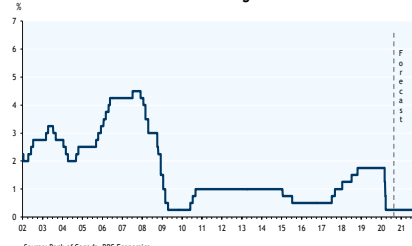
The BoC's latest policy statement noted the rebound in Q3 GDP is looking a bit stronger than projected in its July MPR. We're expecting a 40% annualized gain compared with the BoC's 31% forecast.

While recent data were described as "encouraging", the BoC maintained its view that the recuperation phase will be "slow and choppy" with accommodative monetary policy needed to support activity.

Canadian real GDP growth



Canadian overnight rate

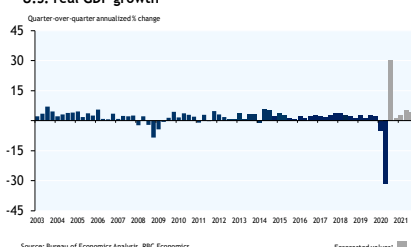


Federal Reserve

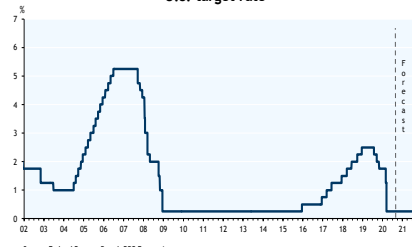
Recent data point to a stronger-than-expected early rebound and we've raised our Q3 growth forecast to 30% annualized from 16% previously. That suggests significant upside risks to the Fed's GDP forecast (-6.5% y/y in Q4/20) from June.

While the Fed will likely be lifting its 2020 growth forecast in September, we don't see the central bank wavering in its commitment to keep rates low.

U.S. real GDP growth



U.S. target rate

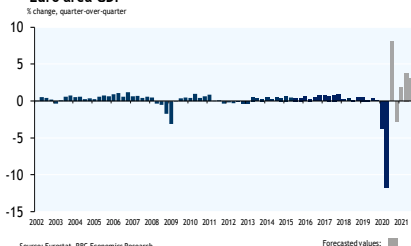


European Central Bank

The ECB's staff projections were nudged higher in September (2020 GDP -8.0% vs -8.7% previously) but President Lagarde noted uncertainty remains elevated and risks are tilted to the downside.

With the euro area likely in for a slow recovery (Q4/20 GDP -11% y/y in our forecast) we see scope for the ECB to extend QE beyond mid-2021. But such a decision won't be made for several months.

Euro area GDP



ECB Deposit rate

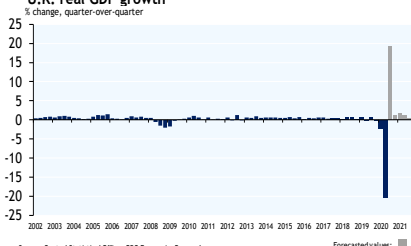


Bank of England

Near-term growth is tracking roughly in line with the BoE's August forecast but downside risks are rising amid a renewed coronavirus outbreak, expiring wage subsidy program and trade uncertainty.

The BoE has said QE and forward guidance are its preferred tools so we think its next move will be to expand QE in November. We still see the bank rate being cut below zero, but not until early next year.

U.K. real GDP growth



U.K. policy rate

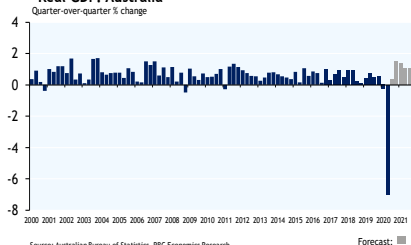


Reserve Bank of Australia

Australia saw a less severe contraction in Q2 GDP than many of its advanced economy peers. But Q3 activity will likely be close to flat thanks to renewed lockdowns in Victoria.

Rather than ramping up QE (the RBA's 0.25% target for 3-year ACGB yields remains in place) the central bank expanded its Term Funding Facility in September to support the flow of credit.

Real GDP: Australia



Australia policy rates



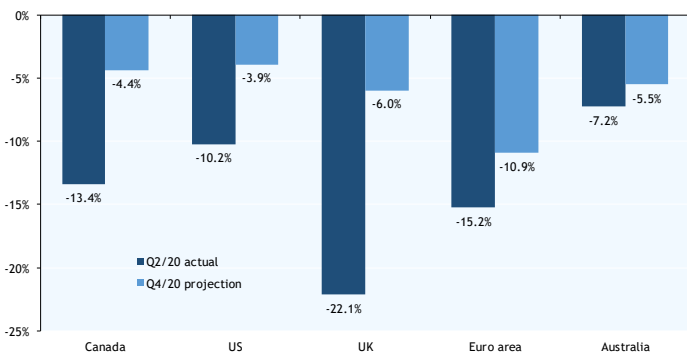
The story so far

Lockdowns and physical distancing measures aimed at containing the COVID-19 pandemic led to historic declines in economic output in the first half of 2020. The early stages of the recovery in many economies has been stronger than initially expected, but output gaps will remain sizeable heading into 2021.

US equities retraced most of March's sharp selloff by early June, and continued to push to a new record high over the summer. Stock markets in other countries are also well above their mid-March lows, but haven't benefited as much from surging tech stocks that boosted the S&P 500.

GDP declines in H1/20 and projected recovery by end-2020

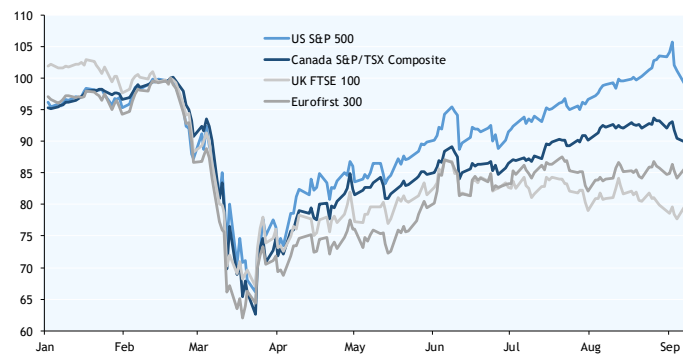
% change in real GDP vs. Q4/19



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

Equity market recoveries since pandemic selloff

re-indexed to 19-Feb-2020=100



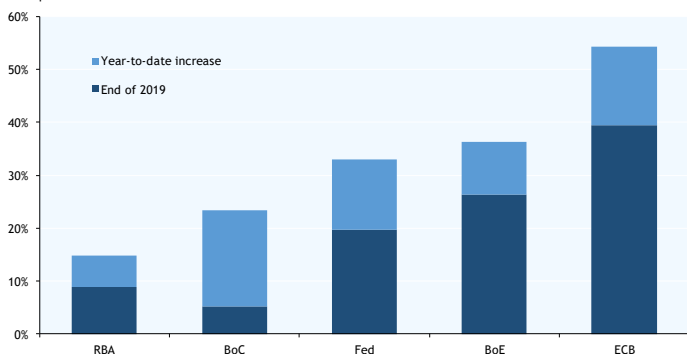
Source: S&P, TSX, Financial Times, RBC Economics

Accommodative monetary policy is supporting the economic recovery. Low rates and ample liquidity have also been a key driver of equities. Central banks have expanded their balance sheets significantly this year via quantitative easing and term lending.

A second wave of coronavirus infections remains a key risk to the outlook. Rising US case counts likely weighed on consumer sentiment in August. One Australian state's measures to contain the virus will weigh on Q3 GDP. The UK and some European countries have had to re-impose some restrictions as cases rise.

Central bank balance sheets

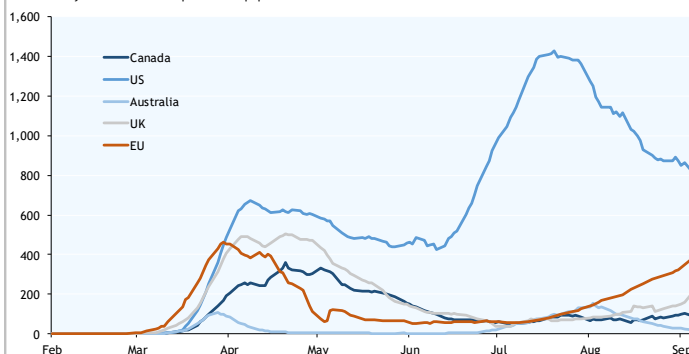
percent of 2019 GDP



Source: Haver, RBC Economics

Confirmed COVID-19 cases per million population

7-day increase in cases per million population



Source: Johns Hopkins University, RBC Economics