# FINANCIAL MARKETS MONTHLY

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Inside...



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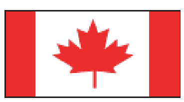
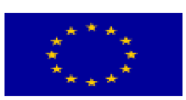
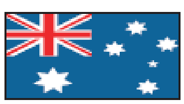
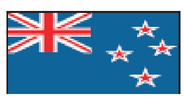
## What, me worry?

The final weeks of summer vacation were anything but quiet as markets were faced with rising geopolitical risk emanating from North Korea and continued political gridlock in the US. A bout of risk aversion toward the end of August saw gold prices breach the $1300 mark for the first time this year, while 10-year US Treasury yields dipped to levels not seen since November's presidential election. The US dollar remained under pressure, particularly against 'safer' funding currencies like the yen and euro. Equity markets generally shrugged off concerns with the S&P 500 near all-time highs thanks to another solid earnings season and decent economic data. That said, August was a bit less calm from a volatility standpoint—the VIX market volatility index jumped higher several times during the month after averaging a record low in July.

Geopolitical concerns and uncertainty surrounding NAFTA renegotiations didn't faze the Bank of Canada. Following a strong upside surprise on Q2 growth, including signs of broadening activity and better-than-expected momentum, the central bank didn't waste any time in further removing some of the "considerable" monetary policy stimulus still in the system. We think they will raise interest rates for a third time later this year, and follow that up with three more hikes in 2018. As for the Fed, we expect they'll follow through on tapering plans with an announcement at this month's meeting that they'll be trimming reinvestment as of October. We also see the European Central Bank beginning to slow their asset purchases next year. Meanwhile the Bank of England, Reserve Bank of Australia, and Reserve Bank of New Zealand aren't expected to follow their North American cousins in raising interest rates steadily next year—we see each of those three central banks holding policy steady through 2018.

### Central bank near-term bias

Three-months out, policy rate

| | | |
|---|---|---|
|  | ↗ | While most observers had their eye on October's meeting, the Bank of Canada hiked in September on the heels of Q2's impressive GDP report. With economic slack being absorbed more quickly than expected, we think tightening will continue with another move before year-end. |
|  | ↗ | The Fed is on track to announce a change in their balance sheet reinvestment policy in September. After that is out of the way, we think gradual tightening will continue with a rate hike in December. The market remains underpriced for such a move. |
|  | ↔ | The next Bank of England meeting will likely see another 6-2 split vote in favour of unchanged rates. While further exchange rate depreciation has only made the BoE's tradeoff more difficult, we continue to expect the majority will focus on slower growth rather than rising inflation. |
|  | ↔ | After the European Central Bank passed on policy changes in September, we expect October's meeting will be the one when details of their asset purchase program are outlined for next year. We look for the central bank to move from net purchases to a lower, gross purchase target. |
|  | ↔ | The Reserve Bank of Australia has expressed a bit more confidence in the economic outlook and labour market. But the return to above-trend growth won't be smooth and we see low core inflation keeping policymakers from raising rates through the end of next year. |
|  | ↔ | The Reserve Bank of New Zealand wasn't overly dovish in August despite having to mark down inflation projections. Their forward guidance gives the incoming governor some flexibility, though we continue to expect the cash rate will remain on hold through 2018. |

## Highlights

▲ The pace of consumer spending and business investment likely ticked lower in Q3 but both should remain drivers of above-trend growth in the quarter.

▲ Hurricane Harvey presents a downside risks to growth though we await further information on the extent of work stoppages.

▲ We think the Fed's heavily signalled tapering of reinvestment will be announced in September.

▲ We expect wage growth will pick up as the unemployment rate is sustained at levels below its natural rate.

## Mixed US data still consistent with above-trend growth

The second estimate of Q2 US GDP growth was revised up to an annualized 3.0% from 2.6% in the advance estimate. That represents an even sharper increase relative to the 1.2% gain recorded in Q1, although much of the weakness earlier in the year reflected an inventory drawdown. Domestic spending growth strengthened from 2.4% in Q1 to 2.7% in Q2. The latter reflected a strong increase in consumer spending, consistent with still-strong aggregate income growth, and another broadly-based increase in business investment. Both are expected to be drivers of above-trend growth again in the current quarter, though recent data hasn't been uniformly positive. Retail sales and personal spending posted solid increases in July, but weak auto sales in August raised the prospect of some payback. Meanwhile, capex shipments posted another solid increase in July, providing evidence of further improvement in M&E investment, but nonresidential construction spending moderated in the month to dampen hopes for another increase in structures investment in the quarter. All told, our forecast assumes both consumer spending and business investment will post slightly more moderate increases in Q3, resulting in GDP growth edging slightly lower to a still-strong 2.6% in the quarter.

## Monitoring the impact of Hurricane Harvey

Hurricane Harvey's landfall on the US Gulf Coast in late-August had a devastating impact on the Houston area including loss of life, flooding and destruction of property. The calculation of GDP will be influenced to the downside by work stoppages and production shutdowns—not the destruction of assets such as the housing stock. As well, it can be significantly influenced to the upside as rebuilding efforts get underway. On balance we have not incorporated any Harvey impact in our Q3 growth forecast but are treating it as a downside risk that, if evident, would likely be reversed in the following quarter. Hurricane Harvey may also have an effect on inflation readings. Shutdowns at a number of oil refineries in the affected area led to gasoline shortages, in turn causing prices to spike by double digits. While that increase will likely show up in September CPI, we expect policymakers will look through the transitory rise in energy inflation.

## Fed set to change reinvestment policy in September

Those looking for policy hints from Chair Yellen at the Fed's Jackson Hole gathering were left disappointed. Her speech focused on changes in financial sector regulation since the financial crisis with few details on the economic outlook or monetary policy. That aside, the overall tone from recent Fed speakers and minutes of the July meeting has been fairly consistent over the summer. There remains some concern that inflation has yet to pick up despite limited economic slack. However, the majority view seems to be that further, gradual removal of accommodation should continue given low unemployment and the expectation that inflation will return to 2% over the medium term. That said, we don't see the Fed raising rates again until December. Their focus at the upcoming meeting will be on reinvestment policy. We continue to expect they will announce tapering of reinvestment of their Treasury and MBS holdings in September. While the change in balance sheet policy is not seen as an active tool in tightening monetary policy, we nevertheless expect the Fed will hold off in raising rates again until later this year to judge the market impact of a shrinking balance sheet—even though the pace tapering is expected to be quite gradual.

## Still waiting on wages

An orderly market reaction to tapering would help pave the way for the Fed to continue raising rates. But another thing policymakers will be looking for is signs of rising inflation and wage pressures. In that sense, August's employment report provided limited guidance with wages stagnating at 2.5% and the unemployment rate ticking higher. The headline employment gain of 156k was also short of consensus and downward revisions to the prior two monthly increases didn't help. There is no denying that job growth has slowed, but we don't see that as a barrier to rising wages. Recent payroll growth remains well above the pace required to absorb new labour force entrants. We think sustained gains in the 120-130k range will still be enough to put downward pressure on the unemployment rate. Our analysis indicates that an unemployment rate modestly below NAIRU should result in more upward pressure on wages.

## Canadian GDP surprised to the upside (again)

Canadian GDP growth exceeded already-lofty expectations with a 4.5% annualized increase recorded in Q2. That is the fastest rate since 2011 and marks a fourth consecutive quarter of above-trend growth—also the best streak in more than three years. As with the previous quarter, Q2's gain was broadly-based but led by another sizeable jump in consumer spending. Household outlays are now up nearly 4% from a year ago, the best pace since consumer spending rebounded following the 2008/09 recession. Strong aggregate income growth, fueled by rapid job gains, has allowed households to open up their pocketbooks without dipping too much into savings. In fact, Q2's 4.6% household savings rate was close to the 10-year norm.

Consumers weren't the only sector supporting growth. Business investment posted another solid increase in Q2 and rose relative to a year ago for the first time since 2014. And net trade added half a percentage point to headline GDP growth as exports rose by nearly 10% after two quarters of lacklustre gains. We think Canada's export sector will continue to be supported by strengthening global growth and trade flows, but a disappointing July trade report indicates we might see a pause in Q3. One piece of the growth puzzle that remained surprisingly absent was government investment. Little change in public investment over the first half of the year is despite more infrastructure dollars flowing from the federal government. We still think that expenditure will show up in the second half of the year, delivering a decent boost to 2017 growth as a whole.

Canada's strong Q2 growth figure overshadowed another solid increase in monthly GDP. Output was up 0.3% in June—well above the market consensus of 0.1%—on the heels of a surprisingly robust 0.6% gain in May. Strong momentum heading into Q3 prompted us to raise our forecast for the current quarter to 2.5% from 1.9% previously. That would represent another upside surprise for the Bank of Canada. Their July forecast called for increases of 3.0% and 2.0%, in Q2 and Q3, respectively.

## That prompted another rate hike from the BoC…

The economy's better-than-expected growth numbers led the Bank of Canada to raise interest rates in September for the second time in as many meetings. While odds of another rate hike had improved in the wake of Q2's GDP report, the move still came as a surprise to market consensus—and ourselves. We hadn't heard from the central bank since July, and while their data-dependent forward guidance left the door open to a September hike, we expected they would wait until their growth forecasts were refreshed in October and more Q3 data, including their *Business Outlook Survey* and further inflation readings, were available. In the event, policymakers saw enough evidence of growth becoming more broadly-based—including the long awaited rotation toward stronger business investment and exports—to warrant some further removal of the "considerable monetary policy stimulus in place." September's 25 basis point rate hike lifted the overnight rate to 1.00%, right where it was before the bank lowered rates in 2015 in response to the oil price shock.

## …which we don't think will be the last this year

At present, inflation and wage data are not signaling an immediate need to return to a more neutral monetary policy stance. However, in raising rates at consecutive meetings, the Bank of Canada has shown that the amount of slack in the economy is a key consideration in setting policy. Given outperformance of GDP growth, we think the bank's October projections will show the economy near full capacity in the current quarter. However, with their latest statement noting the bank will be re-evaluating the economy's growth potential, policymakers have some flexibility on that front. In any case, we think limited economic slack, in conjunction with solid growth momentum and "considerable" stimulus remaining in the system, supports the case for another rate hike before the end of the year. We see that move being followed by another 75 basis points of tightening in 2018 as growth slows but remains modestly above trend. Those rate hikes would nearly keep pace with expected moves from the Fed. As such, we don't see policy divergence being a major factor for the Canadian dollar next year, leaving it close to the 80 cent mark through much of 2018. The Bank of Canada doesn't seem overly concerned with currency appreciation, attributing the recent increase to USD weakness and relative strength of the Canadian economy.

## Highlights

▲ Canada's whopping 4.5% GDP growth in Q2 was broadly based, led by consumer spending.

▲ Another strong monthly increase in June indicates good momentum heading into Q3. We have revised up our growth forecast to 2.5% for the current quarter.

▲ The Canadian economy's outperformance relative to their expectations was a major factor in the BoC raising rates again in September.

▲ With the economy near full capacity, we see the central bank tightening again in Q4 and through 2018.

## Highlights

▲ UK consumer spending slowed in Q2 as households continued to face rising inflation and stagnant wage growth.

▲ The euro area recorded broadly based growth in Q2 and we look for another above-trend increase in Q3.

▲ Australia's GDP growth rebounded in Q2 but the increase in the first half of the year was still below trend.

▲ The RBNZ continued to note that monetary policy will remain accommodative for a considerable period.

## UK Q2 GDP details confirm consumer weakness

The second estimate of Q2 UK GDP growth confirmed the economy has lost momentum this year. Details show last quarter's sub-trend 0.3% non-annualized increase reflected subdued consumer spending growth—the slowest in two and a half years—and little contribution from other areas of the private sector. The consumer slowdown is consistent with slowing real income growth, a factor that will remain in place over the second half of this year with wages showing little sign of accelerating despite a multi-decade-low unemployment rate. The Bank of England is hoping that stronger business and export sectors will fill in some of the gap left by consumers, but there has been little evidence of that so far this year. And there is little indication that growth is picking up in Q3 with purchasing managers' index readings having edged lower, on balance, in the current quarter. Subdued growth on the one hand, and low unemployment and above-target inflation on the other hand, create a difficult tradeoff for policymakers. And recent exchange rate depreciation will only put further upward pressure on import prices. The BoE opted to hold interest rates steady once again in August, although two of eight MPC members voted for a rate increase. We think that split will remain as inflation touches 3% later this year. However, we see a majority continuing to favour accommodative monetary policy with our forecast assuming Bank Rate will be held at 0.25% through next year.

## Focus turns to ECB's October meeting

Euro area Q2 GDP growth was confirmed at a non-annualized 0.6% pace, with expenditure detail showing the currency bloc's economy firing on all cylinders. Household consumption posted another solid increase, fixed capital investment more than retraced the previous quarter's decline, and exports continued to grow at a healthy clip. We expect the economy's momentum was sustained in Q3 with recent survey indicators pointing to another quarter of above-trend growth. But as in several other advanced economies, and particularly so in the euro area, strengthening activity hasn't been accompanied by rising inflation. The European Central Bank underscored that point with their updated projections marking GDP growth higher but still showing below-target inflation persisting over their forecast horizon. Given lack of progress on inflation, we expect policymakers will continue to provide stimulus next year by announcing an extension of asset purchases. We think reducing the monthly pace from €60 billion *net* to €40 billion *gross* (i.e. including reinvestment) will allow the central bank to keep the program open-ended, rather than tapering over a defined timeline, and reduce the risk of running up against constraints on the amount of assets purchased from individual countries. An open-ended program will also reinforce that rates aren't moving higher anytime soon. We previously expected such an announcement in September, but the ECB ultimately left policy unchanged and noted "the bulk of decisions" will be made in October.

## RBA sounding a bit more optimistic

Australia's Q2 GDP came in at a firm 0.8% non-annualized pace, just short of market expectations that had been revised higher in the wake of a number of solid activity reports. Growth was led by the public sector, although household spending also posted a solid increase. The latter came alongside a dip in the household savings rate to a near-decade low. That lack of savings buffer highlights a key headwind to consumer spending growth going forward, even as aggregate incomes have been helped somewhat by a better job creation. The Reserve Bank of Australia has expressed greater confidence in their forecast for GDP growth to return to an above-trend pace, with an improving non-mining capex picture offsetting worries about the strength of the household sector. Nonetheless, with core inflation likely to remain at or below the lower end of their 2-3% target range over the next year, we don't see the RBA changing monetary policy over our forecast horizon.

## RBNZ on hold at Governor Wheeler's final meeting

The Reserve Bank of New Zealand left the cash rate unchanged at 1.75% following their August meeting, the last with Governor Wheeler at the helm. Updated economic projections were roughly as expected with GDP growth little changed but inflation marked down following a disappointing Q2 print and amid a stronger exchange rate. The overall tone was less than dovish, however, as the RBNZ's interest rate projection was unchanged and the governor didn't step up his jawboning of the currency. The statement's conclusion was unchanged, noting rates "will remain accommodative for a considerable period" but with the caveat that policy may have to respond to "numerous uncertainties." That forward guidance leaves the incoming governor the option to tweak monetary policy if inflation continues to undershoot the RBNZ's target. However, we continue to expect the cash rate will be on hold through the end of 2018.

# Interest rate outlook

%, end of period

| | Actuals | | | | | | Forecast | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| **Canada** | | | | | | | | | | | | |
| Overnight | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 1.00 | 1.25 | 1.25 | 1.50 | 1.75 | 2.00 |
| Three-month | 0.45 | 0.48 | 0.53 | 0.46 | 0.52 | 0.71 | 1.00 | 1.30 | 1.25 | 1.55 | 1.80 | 2.05 |
| Two-year | 0.54 | 0.52 | 0.52 | 0.80 | 0.75 | 1.10 | 1.50 | 1.70 | 1.80 | 1.90 | 2.15 | 2.35 |
| Five-year | 0.67 | 0.57 | 0.62 | 1.15 | 1.12 | 1.40 | 1.75 | 2.00 | 2.15 | 2.40 | 2.55 | 2.70 |
| 10-year | 1.23 | 1.06 | 1.00 | 1.80 | 1.62 | 1.76 | 2.05 | 2.40 | 2.50 | 2.65 | 2.85 | 3.00 |
| 30-year | 2.00 | 1.72 | 1.66 | 2.35 | 2.30 | 2.14 | 2.40 | 2.75 | 2.85 | 3.00 | 3.15 | 3.30 |
| **United States** | | | | | | | | | | | | |
| Fed funds** | 0.50 | 0.50 | 0.50 | 0.75 | 1.00 | 1.25 | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 |
| Three-month | 0.21 | 0.26 | 0.29 | 0.51 | 0.76 | 1.03 | 1.05 | 1.30 | 1.55 | 1.80 | 2.05 | 2.30 |
| Two-year | 0.73 | 0.58 | 0.77 | 1.25 | 1.27 | 1.38 | 1.45 | 1.85 | 2.05 | 2.35 | 2.55 | 2.70 |
| Five-year | 1.21 | 1.01 | 1.14 | 2.00 | 1.93 | 1.89 | 1.85 | 2.25 | 2.45 | 2.65 | 2.85 | 3.00 |
| 10-year | 1.78 | 1.49 | 1.60 | 2.55 | 2.40 | 2.31 | 2.25 | 2.65 | 2.85 | 3.00 | 3.20 | 3.40 |
| 30-year | 2.61 | 2.30 | 2.32 | 3.15 | 3.02 | 2.84 | 2.80 | 3.15 | 3.30 | 3.45 | 3.60 | 3.75 |
| **United Kingdom** | | | | | | | | | | | | |
| Bank rate | 0.50 | 0.50 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Two-year | 0.45 | 0.13 | 0.13 | 0.08 | 0.12 | 0.36 | 0.20 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| 10-year | 1.43 | 0.89 | 0.76 | 1.24 | 1.14 | 1.26 | 1.15 | 1.30 | 1.70 | 1.85 | 1.95 | 2.00 |
| **Euro area** | | | | | | | | | | | | |
| Deposit Rate | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 | -0.40 |
| Two-year | -0.48 | -0.61 | -0.69 | -0.78 | -0.74 | -0.57 | -0.70 | -0.70 | -0.70 | -0.70 | -0.70 | -0.70 |
| 10-year | 0.15 | -0.11 | -0.12 | 0.21 | 0.33 | 0.47 | 0.50 | 0.60 | 0.65 | 0.65 | 0.70 | 0.75 |
| **Australia** | | | | | | | | | | | | |
| Cash target rate | 2.00 | 1.75 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 |
| Two-year | 1.89 | 1.59 | 1.55 | 1.86 | 1.76 | 1.78 | 1.85 | 1.75 | 1.70 | 1.70 | 1.80 | 2.00 |
| 10-year | 2.49 | 1.98 | 1.91 | 2.76 | 2.70 | 2.60 | 2.75 | 3.05 | 3.15 | 3.30 | 3.60 | 3.90 |
| **New Zealand** | | | | | | | | | | | | |
| Cash target rate | 2.25 | 2.25 | 2.00 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 |
| Two-year swap | 2.19 | 2.22 | 1.96 | 2.50 | 2.31 | 2.32 | 2.20 | 2.20 | 2.30 | 2.30 | 2.30 | 2.40 |
| 10-year swap | 2.97 | 2.65 | 2.41 | 3.58 | 3.41 | 3.35 | 3.00 | 3.40 | 3.60 | 3.75 | 4.00 | 4.25 |
| **Yield curve*** | | | | | | | | | | | | |
| Canada | 69 | 54 | 48 | 100 | 87 | 66 | 55 | 70 | 70 | 75 | 70 | 65 |
| United States | 105 | 91 | 83 | 130 | 113 | 93 | 80 | 80 | 80 | 65 | 65 | 70 |
| United Kingdom | 98 | 76 | 63 | 116 | 102 | 90 | 95 | 115 | 155 | 170 | 180 | 185 |
| Eurozone | 63 | 50 | 57 | 99 | 107 | 104 | 120 | 130 | 135 | 135 | 140 | 145 |
| Australia | 60 | 39 | 36 | 90 | 94 | 82 | 90 | 130 | 145 | 160 | 180 | 190 |
| New Zealand | 78 | 43 | 45 | 108 | 110 | 103 | 80 | 120 | 130 | 145 | 170 | 185 |

* 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 | |
|---|---|---|---|---|
| United States | Fed funds | 1.00-1.25 | 0.75-1.00 | June 15, 2017 |
| Canada | Overnight rate | 1.00 | 0.75 | September 6, 2017 |
| United Kingdom | Bank rate | 0.25 | 0.50 | August 4, 2016 |

| | | Current | Last | |
|---|---|---|---|---|
| Eurozone | Deposit rate | -0.40 | -0.30 | March 10, 2016 |
| Australia | Cash rate | 1.50 | 1.75 | August 3, 2016 |
| New Zealand | Cash rate | 1.75 | 2.00 | November 10, 2016 |

Source: Bloomberg, Reuters, RBC Economics Research

# Economic outlook

## Growth outlook

**% change, quarter-over-quarter in real GDP**

| | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 | 2015 | 2016 | 2017F | 2018F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Canada* | 2.8 | -1.4 | 4.2 | 2.7 | 3.7 | 4.5 | 2.5 | 2.0 | 2.0 | 1.8 | 1.7 | 1.7 | 0.9 | 1.5 | 3.1 | 2.2 |
| United States* | 0.6 | 2.2 | 2.8 | 1.8 | 1.2 | 3.0 | 2.6 | 2.4 | 2.4 | 2.3 | 2.0 | 2.0 | 2.9 | 1.5 | 2.2 | 2.4 |
| United Kingdom | 0.2 | 0.6 | 0.5 | 0.7 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.5 | 0.5 | 0.5 | 2.2 | 1.8 | 1.5 | 1.6 |
| Euro area | 0.5 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.9 | 1.7 | 2.0 | 1.7 |
| Australia | 1.0 | 0.8 | -0.4 | 1.1 | 0.3 | 0.8 | 0.5 | 0.8 | 0.7 | 0.6 | 0.7 | 0.6 | 2.4 | 2.5 | 2.2 | 2.7 |
| New Zealand | 0.7 | 0.8 | 0.8 | 0.4 | 0.5 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 2.5 | 3.1 | 2.6 | 2.6 |

*annualized

## Inflation outlook

**% change, year-over-year**

| | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 | 2015 | 2016 | 2017F | 2018F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Canada | 1.5 | 1.6 | 1.2 | 1.4 | 1.9 | 1.3 | 1.4 | 1.3 | 1.0 | 1.7 | 1.9 | 2.0 | 1.1 | 1.4 | 1.5 | 1.7 |
| United States | 1.1 | 1.0 | 1.1 | 1.8 | 2.5 | 1.9 | 1.8 | 1.6 | 1.2 | 1.8 | 2.0 | 1.9 | 0.1 | 1.3 | 2.0 | 1.7 |
| United Kingdom | 0.3 | 0.4 | 0.7 | 1.2 | 2.1 | 2.7 | 2.8 | 3.0 | 2.7 | 2.6 | 2.6 | 2.5 | 0.0 | 0.7 | 2.7 | 2.6 |
| Euro area | 0.0 | -0.1 | 0.3 | 0.7 | 1.8 | 1.5 | 1.4 | 1.3 | 1.2 | 1.3 | 1.5 | 1.4 | 0.0 | 0.2 | 1.5 | 1.4 |
| Australia | 1.3 | 1.0 | 1.3 | 1.5 | 2.1 | 1.9 | 2.1 | 2.3 | 2.4 | 2.7 | 2.4 | 2.3 | 1.5 | 1.3 | 2.1 | 2.5 |
| New Zealand | 0.4 | 0.4 | 0.4 | 1.3 | 2.2 | 1.7 | 2.3 | 2.3 | 1.7 | 1.7 | 1.8 | 1.8 | 0.3 | 0.6 | 2.3 | 1.8 |

Source: Statistics Canada, Bureau of Labor Statistics, Bank of England, European Central Bank, Reserve Bank of Australia, Reserve Bank of New Zealand, RBC Economics Research

# Inflation tracking

### Inflation Watch

| | Measure | Current period | Period ago | Year ago | Three-month trend | Six-month trend |
|---|---|---|---|---|---|---|
| Canada | CPI ex food & energy[1] | Jul | 0.2 | 1.5 | 1.1 | 1.4 |
| United States | Core PCE[1,2] | Jul | 0.1 | 1.4 | 1.1 | 1.3 |
| United Kingdom | All-items CPI | Jul | -0.1 | 2.6 | 3.0 | 3.1 |
| Euro area | All-items CPI[1] | Aug | 0.2 | 1.5 | 0.6 | 1.3 |
| Australia | Trimmed mean CPI[1] | Q2 | 0.5 | 1.8 | N/A | N/A |
| New Zealand | All-items CPI | Q2 | 0.0 | 1.7 | N/A | N/A |

1 Seasonally adjusted measurement.
2 Personal consumption expenditures less food and energy price indices.

Source: Statistics Canada, US Bureau of Labor Statistics, Bank of England, European Central Bank, Reserve Bank of Australia, Reserve Bank of New Zealand, RBC Economics Research

# Currency outlook

Level, end of period

| | Actuals | | | | | | Forecast | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
| Canadian dollar | 1.30 | 1.29 | 1.31 | 1.34 | 1.33 | 1.30 | 1.21 | 1.24 | 1.27 | 1.26 | 1.26 | 1.26 |
| Euro | 1.14 | 1.11 | 1.12 | 1.05 | 1.07 | 1.14 | 1.16 | 1.12 | 1.09 | 1.06 | 1.08 | 1.12 |
| U.K. pound sterling | 1.44 | 1.33 | 1.30 | 1.24 | 1.26 | 1.30 | 1.30 | 1.20 | 1.16 | 1.18 | 1.24 | 1.32 |
| New Zealand dollar | 0.69 | 0.71 | 0.73 | 0.69 | 0.70 | 0.73 | 0.75 | 0.75 | 0.72 | 0.70 | 0.69 | 0.69 |
| Japanese yen | 112.6 | 103.2 | 101.3 | 117.0 | 111.4 | 112.4 | 107.0 | 103.0 | 100.0 | 102.0 | 104.0 | 106.0 |
| Australian dollar | 0.77 | 0.75 | 0.77 | 0.72 | 0.76 | 0.77 | 0.80 | 0.80 | 0.77 | 0.74 | 0.73 | 0.73 |

### Canadian dollar cross-rates

| | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 | 17Q3 | 17Q4 | 18Q1 | 18Q2 | 18Q3 | 18Q4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EUR/CAD | 1.48 | 1.43 | 1.48 | 1.41 | 1.42 | 1.48 | 1.40 | 1.39 | 1.42 | 1.34 | 1.36 | 1.41 |
| GBP/CAD | 1.87 | 1.72 | 1.70 | 1.66 | 1.67 | 1.69 | 1.58 | 1.49 | 1.47 | 1.48 | 1.56 | 1.66 |
| NZD/CAD | 0.90 | 0.92 | 0.96 | 0.93 | 0.93 | 0.95 | 0.91 | 0.93 | 0.91 | 0.88 | 0.87 | 0.87 |
| CAD/JPY | 86.6 | 79.9 | 77.2 | 87.0 | 83.7 | 86.7 | 88.4 | 83.1 | 78.7 | 81.0 | 82.5 | 84.1 |
| AUD/CAD | 1.00 | 0.96 | 1.01 | 0.97 | 1.02 | 1.00 | 0.97 | 0.99 | 0.98 | 0.93 | 0.92 | 0.92 |

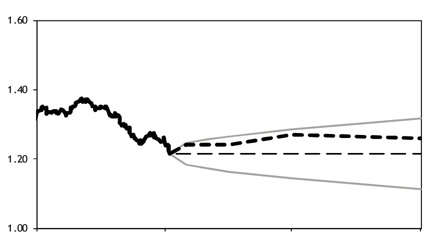
Rates are expressed in currency units per US dollar and currency units per Canadian dollar, except the euro, UK pound, Australian dollar, and New Zealand dollar, which are expressed in US dollars per currency unit and Canadian dollars per currency unit.

Source: Bloomberg, RBC Economics Research

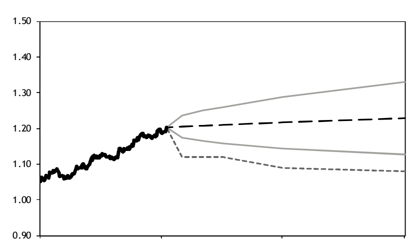
# RBC Economics outlook compared to the market

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.

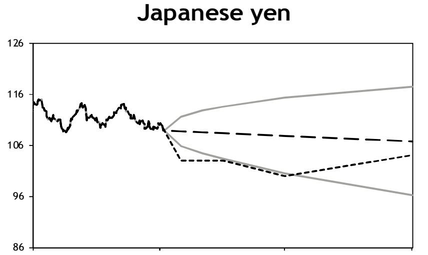
**Canadian dollar**



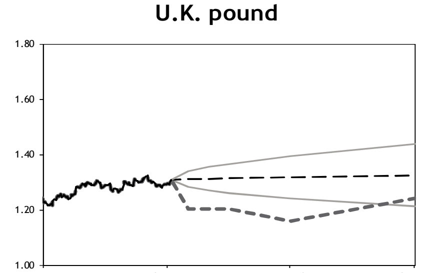

**Euro**




**Japanese yen**




**U.K. pound**

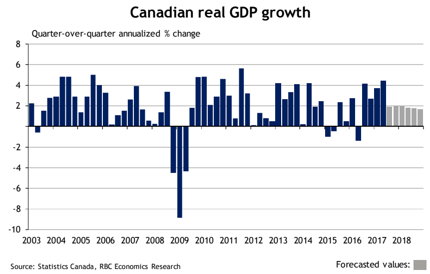


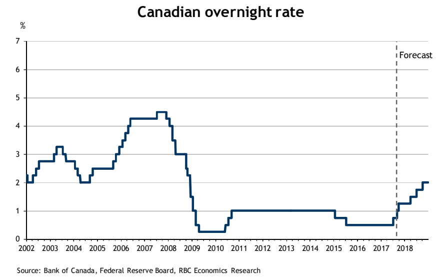
# Central bank watch

## Bank of Canada

Canada's 4.5% growth in Q2 was well ahead of the Bank of Canada's 3.0% forecast and we think Q3 growth will exceed their expectations once again.

With economic slack largely absorbed, the BoC wasted no time in further removing some of the "considerable" monetary policy accommodation in the system. Despite below-target inflation, we think the central bank will continue raising rates in Q4 in anticipation that CPI will eventually pick up.

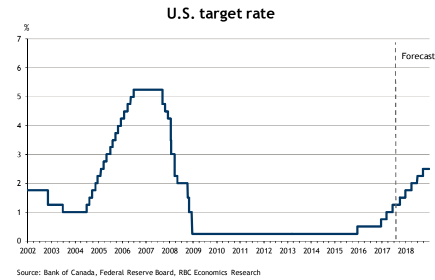



## Federal Reserve

US GDP growth rebounded in Q2 as consumer spending picked up and business investment remained strong. We expect both sectors will continue to drive above-trend growth in Q3.

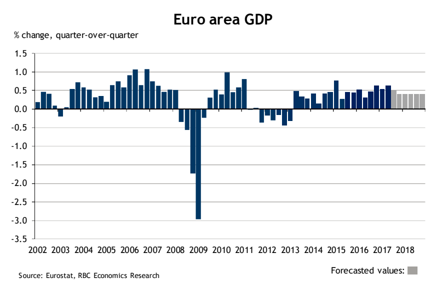
We look for the Fed to change their balance sheet policy in September then return to raising rates in December. Low inflation remains a concern but we think upward pressure will eventually emerge amid limited slack in both product and labour markets.

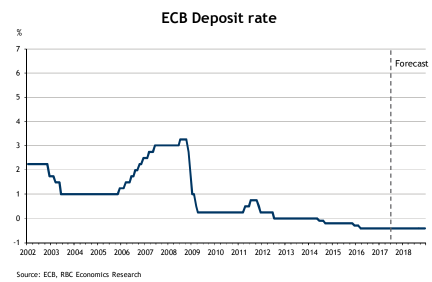




## European Central Bank

The euro area's Q2 GDP growth was broadly based across sectors and geographies. Survey data point to another above-trend increase in Q3.

The ECB has set the stage for a change in their asset purchase program in October. We think an open-ended extension is in order, albeit at a reduced pace. Given their forward guidance on interest rates, that would keep a hike off the table through 2018.

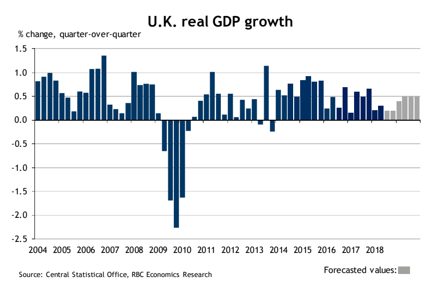


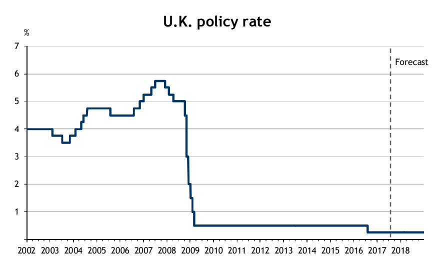




## Bank of England

Expenditure detail showed the UK economy's subtrend growth in Q2 was due to slower consumer spending. Business investment and exports provided little help.

We continue to expect disappointing GDP growth will keep the Bank of England from raising rates anytime soon. But policymakers will continue to be dogged by above-target inflation, which we see rising to 3% later this year.

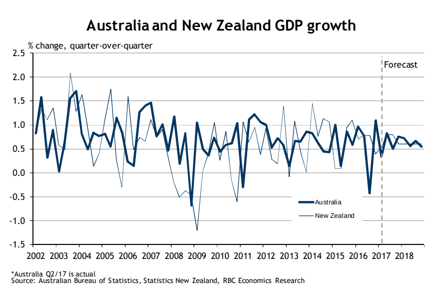


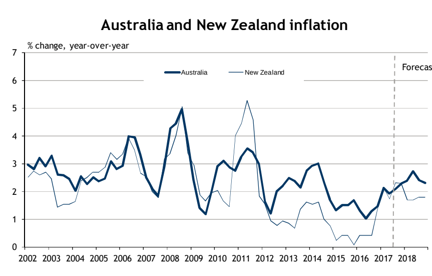




## Australia and New Zealand

Improving global growth and stronger non-mining investment have given the Reserve Bank of Australia more confidence in the economic outlook. However, headwinds remain and we think monetary policy will have to remain accommodative.

The Reserve Bank of New Zealand had to mark down their inflation forecast amid a stronger currency. But they continued to project the cash rate would be steady through next year, softening what otherwise might have been a dovish tone.

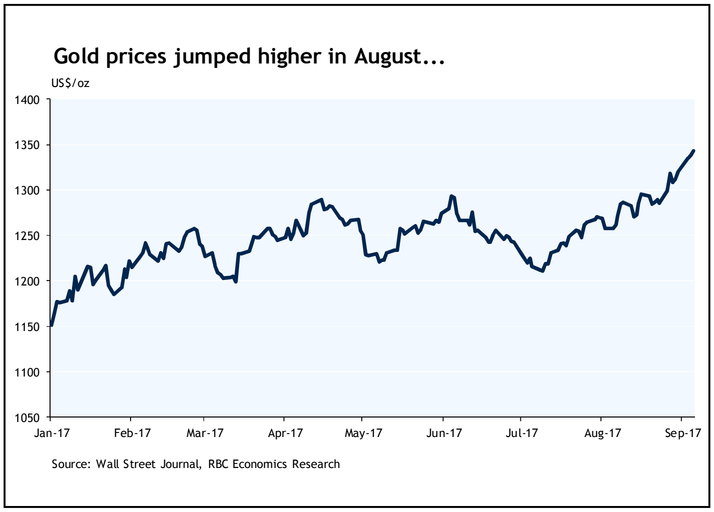


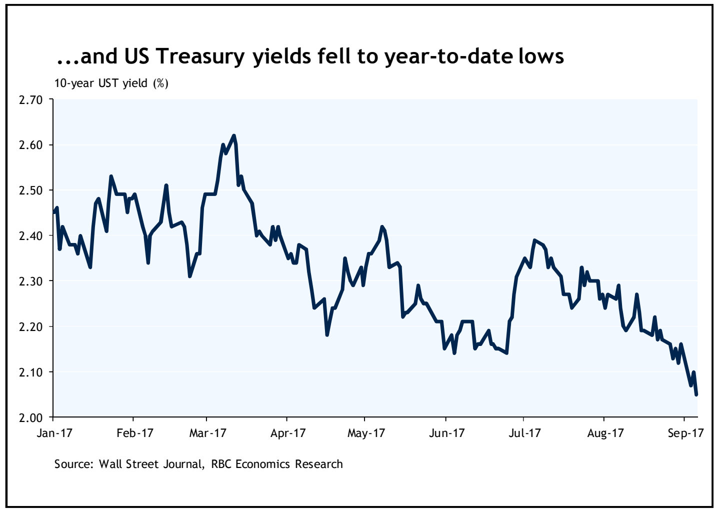



## Not exactly a quiet end to summer vacation

Geopolitical concerns centered around the Korean Peninsula drove investors into safe assets. The price of gold broke above $1300 for the first time this year.

US Treasury yields fell to their lowest levels since last November's presidential election as markets priced low odds of Fed rate hikes and investors searched for safe assets.




After hitting record lows in July, the VIX market volatility index showed a bit more action in August, spiking higher several times in the month but by no means rising to levels seen in past periods of stress.

Despite a rise in risk aversion toward the end of the month, equity markets were back near record highs by the end of August. A solid earnings season and better growth in a number of advanced economies likely helped.