THE YIELD CURVE

FOCUS ECONOMICS ANALYST FORECAST AWARDS 2017
#1 BEST OVERALL FORECASTER - CANADA

Central Banks and Investors Are on Different Wavelengths

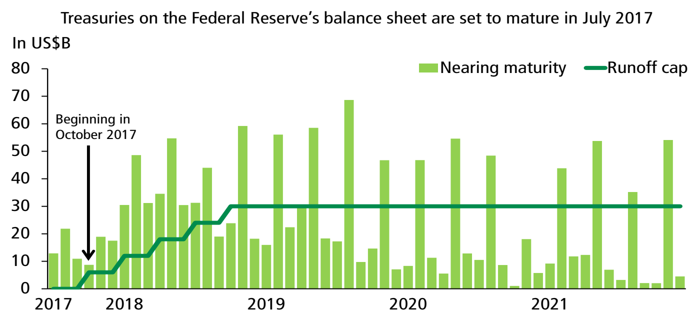
HIGHLIGHTS

- The Federal Reserve (Fed) carried out a third consecutive quarterly key rate increase at its June 14 meeting. As a further signal of its confidence, the Fed gave more details about how it planned to soon begin shedding its bond holdings.
- Other central banks have also adopted a more optimistic tone, including the European Central Bank, which no longer plans to further cut its rates.
- As doubts over the solidity of Canada's recovery seem to be dissipating and excess capacity is quickly diminishing, the Bank of Canada has openly questioned whether the two rate cuts in 2015 should be reversed. We now expect a first increase to Canada's key rates in October 2017, and even a rate hike as early as July can't be ruled out.
- In this context, it's surprising that long-term bond yields have generally been dropping since the start of 2017, with U.S. 10-year yields recently falling to around 2.15%.
- The Fed has been more aggressive in its monetary tightening than the markets have anticipated in the last few quarters and all signs point to this trend continuing. We expect the U.S. 10-year yield to reach 2.70% by the end of 2017 and 3.35% by the end of 2018.

Much has changed in the past year. In the first half of 2016, fears of a secular stagnation were rampant, spurring an increasing number of central banks to resort to negative interest rates. The surprise vote in favour of Brexit heightened concerns and the U.S. monetary tightening cycle appeared to be compromised after just one rate hike of 0.25% in December 2015, leading many to wonder whether new quantitative measures would be necessary.

It's thus remarkable to observe that the Federal Reserve (Fed) carried out a third consecutive quarterly key rate increase at its June 14 meeting. As a further signal of its confidence, the Fed gave more details about how it planned to soon begin shedding its bond holdings in the second half of 2017, although it did not set an exact date. In our opinion, the likeliest scenario is for the balance sheet reduction to begin in October (graph 1).

GRAPH 1
The Federal Reserve should begin to gradually reduce its balance sheet soon



Sources: Bloomberg, Federal Reserve and Desjardins, Economic Studies

CONTENTS

François Dupuis, Vice-President and Chief Economist • Mathieu D'Anjou, Senior Economist
Benoit P. Durocher, Senior Economist • Francis Généreux, Senior Economist • Jimmy Jean, Senior Economist • Hendrix Vachon, Senior Economist
Desjardins, Economic Studies: 514-281-2336 or 1 866-866-7000, ext. 5552336 • desjardins.economics@desjardins.com • desjardins.com/economics

NOTE TO READERS: The letters k, M and B are used in texts and tables to refer to thousands, millions and billions respectively.

Other central banks have also adopted a more optimistic tone, including the European Central Bank, which no longer plans to further cut its rates, and several Bank of England policymakers are in favour of immediate monetary tightening despite the uncertainty surrounding Brexit. The change in tone has been particularly dramatic in Canada, where Bank of Canada leaders have openly questioned whether the two 2015 rate cuts should be reversed. As the Canadian economy's excess capacity is quickly disappearing, we now expect a first increase to Canadian key rates in October 2017, but even a rate hike as early as July can't be ruled out.

As we mentioned in March, this widespread change in attitude by central banks is primarily linked to the fact that higher oil prices have enabled inflation to return closer to target levels. The strong performance of the global economy, which is set to post its highest growth in six years in 2017, as well as those of labour markets in several countries and the financial markets have also been welcome signs.

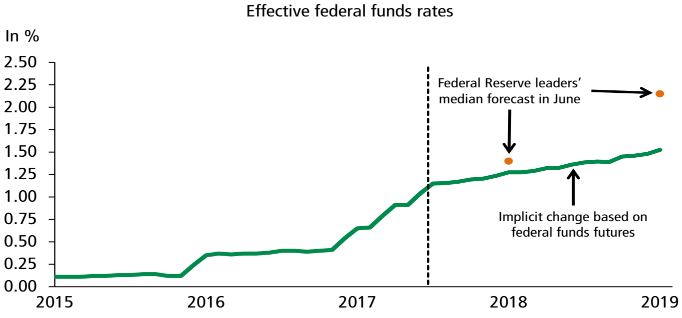
Bond Investors Are Much More Skeptical

The positive performance of several stock markets since the start of the year is in keeping with improved global economic outlooks. A surge in corporate earnings in the past year has also certainly spurred the stock markets.

In this context, it's surprising that long-term bond yields have generally been dropping since the start of 2017, with U.S. 10-year yields recently falling to around 2.15%. As short-term yields are on an upward trend due to the tightened monetary policy, the slope of the yield curve has flattened significantly. In the past, this has often signalled an economic slowdown.

Federal funds futures clearly illustrate the growing disconnect between the bond market and the Fed. While Fed leaders continue to signal an additional rate increase of 0.25% by the end of the year and three additional rate hikes next year, futures are only pricing a 0.35% increase by the end of 2018 (graph 2).

GRAPH 2
The markets anticipate little further monetary firming in the United States



Sources: Datastream, Bloomberg and Desjardins, Economic Studies

As the U.S. job market's excess capacity appears to be nearly depleted, a significant economic slowdown or strong deflationary pressures would be needed to convince the Fed to suddenly slow down its monetary tightening.

Will the Second Half of 2017 Mirror That of 2016?

Investor skepticism is based on a few factors. First, the difficulties of the Trump administration in implementing significant tax cuts and another drop in oil prices have dampened inflation expectations. The most recent U.S. economic figures were also a bit disappointing, particularly with regard to inflation. As a result, the Fed's most recent statement stressed that it would keep a close eye on prices. In this context, we now expect the Fed to wait until December to raise its key rates, opting to only announce the start of its balance sheet reduction in September.

However, the economic and financial situation remains positive overall and we see little reason to expect a sustained drop in economic growth or inflation, either in the United States or worldwide. The Fed has been more aggressive in its monetary tightening than the markets have anticipated in the last few quarters and all signs point to this trend continuing. Similar to last year, investors will eventually have to adjust their expectations regarding the U.S. monetary policy, which could lead to a significant rise in long-term yields. Although the resilience of the last few months has led us to be more cautious in our interest rate scenarios, we expect the U.S. 10-year yield to reach 2.70% by the end of 2017 and 3.35% by the end of 2018.

François Dupuis, Vice-President and Chief Economist
Mathieu D'Anjou, CFA, Senior Economist

Federal Reserve (Fed)

Between Strong Growth and Low Inflation

FORECASTS
After three consecutive quarterly increases, we should see a pause between now and the end of the year, likely in September. The top end of the federal funds rate target range should reach 1.50% by the end of the year. For 2018, three more 25-point increases should bring the top of the range to 2.25% in December.

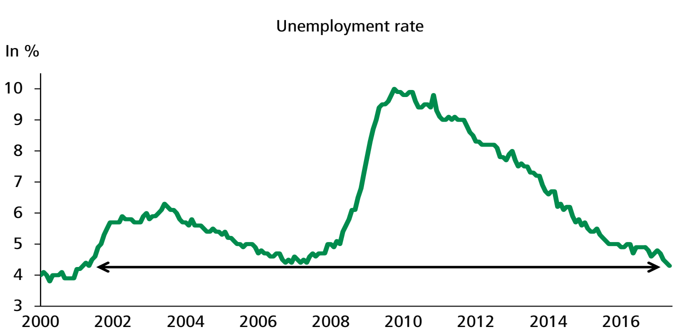
The Fed has raised its key rates four times in the current cycle. In this context, rates have risen throughout the last three quarterly meetings where Janet Yellen participated in a press conference and/or Fed leaders have published their new forecasts. This quarterly routine appears to be a new cruising speed that could well be considered "gradual" as the Fed often refers to it. Is this quarterly pace realistic? It may not be impossible, but we have our doubts.

After a poor performance in the first quarter (which did not prevent the Fed from tightening its monetary policy), the U.S. economy should post a solid rebound in the spring. Annualized quarterly growth of real GDP should jump from 1.2% to over 3.0%. Real consumption should easily compensate for the winter's anemic growth of 0.6%. It's also worth noting that the jobless rate dropped to its lowest level in 16 years (graph 3). That said, a number of economic indicators remain disappointing; housing starts, manufacturing production and retail sales all underperformed in May.

Furthermore, inflationary pressures appear weaker than expected. The annual change in the total consumer price index (CPI) dropped from 2.7% in February to 1.8% in May. At the same time, annual change in the core CPI, which excludes food and energy, slipped from 2.3% to 1.7%. If housing is also excluded, inflation dropped for three consecutive months, a first since 2008, and its annual change fell to its lowest level since January 2004 (graph 4). A number of unusual factors, such as a drop in prices of cell phone services, contributed to this situation. In the short term, we expect inflation to stabilize. However, increases should be lower than even the most recent expectations. Forecasts for oil prices are lower and the likelihood of the Trump administration implementing protectionist policies appears slimmer.

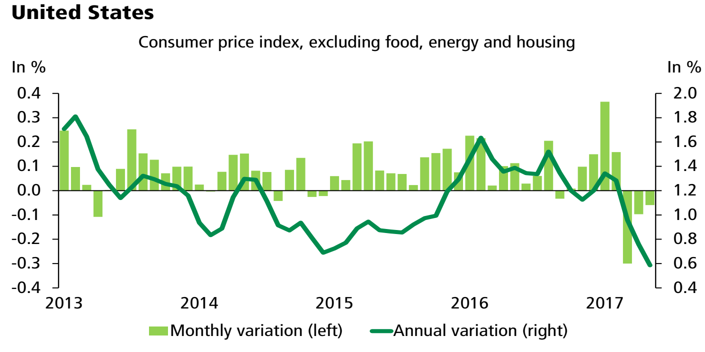
Finally, Fed leaders themselves are forecasting a quarterly pause in the monetary tightening planned for 2017 and 2018. This year's pause could occur in September, which would enable the Fed to launch its balance sheet normalization policy, the details of which were released at its last meeting.

GRAPH 3
U.S. jobless rate fell below the lowest point of the previous cycle



Sources: Bureau of Labor Statistics and Desjardins, Economic Studies

GRAPH 4
Core inflation, excluding housing, is losing speed in the United States



Sources: Bureau of Labor Statistics and Desjardins, Economic Studies

Bank of Canada (BoC)

Key Rate Hike Will Likely Be Ordered in the Fall

FORECASTS

As doubts over the solidity of Canada's recovery seem to be dissipating and excess capacity is quickly diminishing, the BoC has openly questioned whether the two rate cuts in 2015 should be reversed. We now expect a first increase to Canada's key rates in October 2017, and even a rate hike as early as July can't be ruled out.

The Canadian economy has seen very strong growth since mid-2016. After gains of 4.2% and 2.7% (annualized) in the third and fourth quarters of 2016, respectively, real GDP grew 3.7% in the first quarter of 2017.

The pace is well above the growth potential, which the BoC established at between 1.1% and 1.5% for 2016 and between 1.0% and 1.6% for 2017. As such, the negative output gap in place since the Great Recession of 2008–2009 was absorbed fairly quickly. The average of the two BoC measures went from -2.1% in the second quarter of 2016 to only -0.8% in the first quarter of 2017 (graph 5).

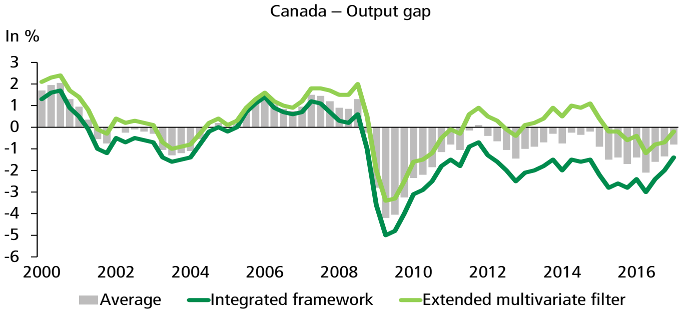
The same phenomenon was observed in the industrial capacity utilization rate for the Canadian economy, which returned to 83.3% in the first quarter of 2017 according to Statistics Canada. The utilization rate has thus moved above its historical average for the first time since the Great Recession.

In the labour market, although certain measures indicate that salary growth remains relatively weak, the situation could change. The larger unemployment rate, which includes discouraged searchers, waiting workers and involuntary part-time workers, fell again in May, reaching its lowest level since October 2008 (graph 6).

The gradual absorption of excess production capacity is good news for the Canadian economy. However, it implies that upside pressure on prices could sharpen in the coming years. Nevertheless, inflationary pressures appear to be holding steady for now. Meanwhile, annual changes in the BoC's three benchmark indexes have dropped slightly since mid-2016.

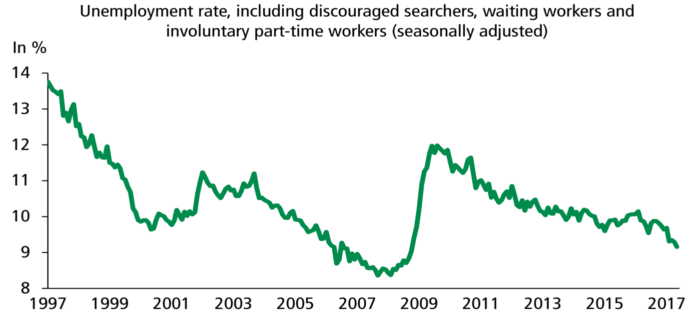
Narrowing regional disparities across the country are another positive factor for monetary authorities. On the one hand, real GDP growth should remain fairly strong in Ontario, British Columbia and Quebec. On the other hand, the stabilization of the energy sector will enable oil-producing provinces (Alberta, Saskatchewan and Newfoundland and Labrador) to rebound and achieve economic growth that is closer to the national average in 2017.

GRAPH 5
Strong growth in recent quarters helped reduce the negative output gap



Sources: Statistics Canada, Bank of Canada and Desjardins, Economic Studies

GRAPH 6
Conditions are improving in the Canadian labour market



Sources: Statistics Canada and Desjardins, Economic Studies

Overseas Central Bank

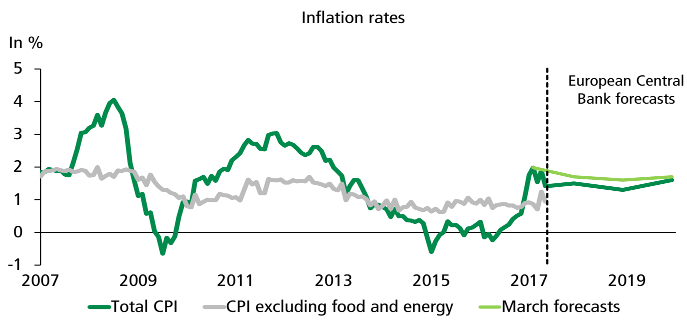
The European Central Bank Is More Optimistic, But Continues to Act Cautiously

EUROPEAN CENTRAL BANK (ECB)

The ECB feels that the risks to the economy have been mitigated and has raised its economic growth forecasts. It adjusted its official statement in June slightly to exclude further key rate cuts. However, it remained somewhat cautious by repeating that it could increase its net asset purchases, if necessary.

This change in tone by the ECB was preceded by several positive results on the economic front in Europe and a significant reduction in political risks, particularly due to Emmanuel Macron's election in France. That said, inflation remains very low and the ECB does not expect it to rise very quickly (graph 7). It therefore adjusted its forecasts downward in June. It appears likely that asset purchases will continue as planned until the end of the year. A gradual reduction of purchases should follow. We shouldn't see key rate increases begin until much later, likely not before the end of 2018.

GRAPH 7
No quick improvement expected for inflation in the euro zone

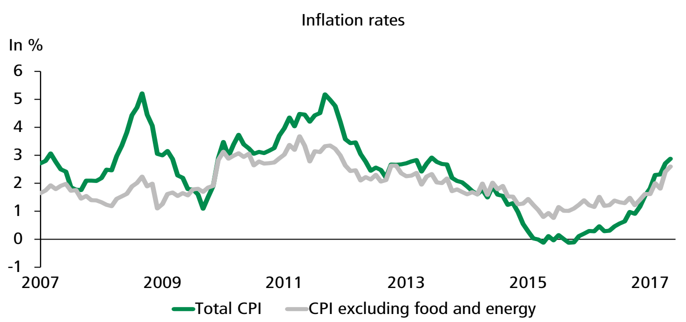


CPI: consumer price index
Sources: Datastream and Desjardins, Economic Studies

BANK OF ENGLAND (BoE)

The inflation rate continues to rise in the United Kingdom and has now reached close to 3% (graph 8). This puts the BoE in a difficult position and three of the eight members of its Monetary Policy Committee voted in favour of an interest rate hike in June. However, it would be surprising to see the BoE raise its rates just as the British economy is beginning to show signs of slowing down. Moreover, rising prices are largely linked to the pound's depreciation over the last year. This situation could resolve itself and have little impact on expectations. Lastly, Brexit negotiations will likely be more difficult with the Conservatives having recently lost their majority.

GRAPH 8
Inflation is nearing 3% in the United Kingdom

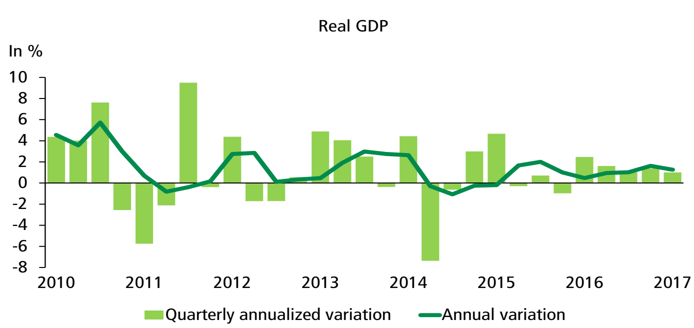


CPI: consumer price index
Sources: Datastream and Desjardins, Economic Studies

BANK OF JAPAN (BoJ)

The Japanese economy has been on a positive trajectory for the last several quarters (graph 9). Nevertheless, inflation remains very low and the BoJ has shown no signs of relaxing its monetary policy any time soon. It would still like to see inflation stay around 2% before taking its foot off the gas. In addition, with the pace of its securities purchases now aiming to achieve a target yield of approximately 0% on Japan's 10-year bond, the BoJ could step up its purchases if the global trend for bond yields makes a rebound.

GRAPH 9
The Japanese economy appears more stable



Sources: Cabinet Office and Desjardins, Economic Studies

Bond Market

Excessive Skepticism on the Bond Markets

FORECASTS

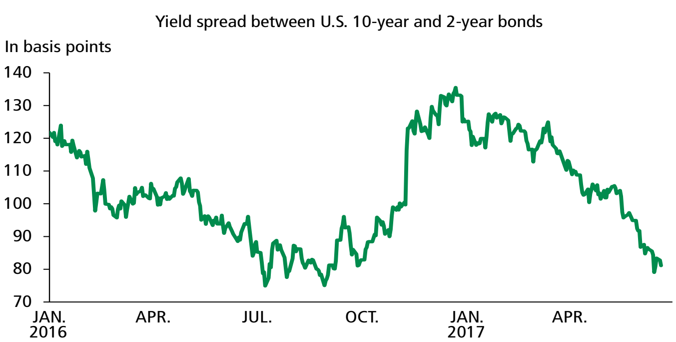
The Federal Reserve (Fed) has completed two of its three rate hikes planned for this year. We expect the third hike to take place in December. The Fed should begin reducing its balance sheet in the fall. These conditions are favourable to yields reversing much of the losses posted in the last few months. The U.S. 10-year yield should close the year at 2.70%

In Canada, the economy isn't slowing down and the Bank of Canada (BoC) has changed its tone, suggesting that a rate hike could occur sooner than anticipated. Short-term yield spreads could narrow further, but the adjustment seems to be over for the most part. The BoC will maintain a very gradual approach and Canadian yields should rise at a comparable pace to U.S. yields in the second half of the year. The 10-year yield should end the year at around 2.05%.

U.S. FEDERAL BONDS

The drop in long-term bond yields this past spring was brutal. After posting 2.65% on March 13, the U.S. 10-year yield recently tumbled to below 2.20%. This was also the case for 30-year yields, which dropped to around 2.80% from 3.20% in mid-March. It was a completely different story for short-term yields. With the Fed carrying out its third key rate increase in as many quarters, 3-month and 2-year yields were pushed upward. For example, 2-year bond posted a yield of 1.35% on June 19, just a few basis points shy of its March 14 peak. The U.S. bond curve therefore flattened dramatically (graph 10). After hitting 136 basis points at the end of 2016, the spread between the 10-year and 2-year yields has now shrunk to 80 basis points.

GRAPH 10
The U.S. yield curve has flattened significantly in 2017



Sources: Bloomberg and Desjardins, Economic Studies

The flattening curve says a lot about investor expectations: there is clearly still a fair amount of skepticism. This is evident in anticipations regarding key rates, which are illustrated by the federal funds curve. Currently, the curve is extremely flat as the futures markets are in line with a scenario in which the next rate hike will occur in roughly a year. Such low monetary policy expectations make it difficult for longer-term yields to rise. The other message the markets are sending is that inflation will remain low. Compensation measures for inflation on the markets have recently decreased for a number of reasons. Deflated expectations of U.S. political reforms with inflationary potential have played a role. However, inflation anticipations, even for horizons as long as ten years, also tend to react to the latest inflation numbers, which were rather disappointing in the United States.

The markets could also be counting on the economy and inflation reacting poorly to the Fed's planned monetary tightening, regardless of how gradual it is. Aside from inflation, the decidedly relaxed monetary policies elsewhere are major factors keeping bond yields firmly anchored. The European Central Bank will continue to expand its balance sheet for roughly another year, and we will have to wait even longer before its deposit rate drags itself out of negative territory. Meanwhile, despite some positive signs regarding inflation in Japan, the Bank of Japan is not yet ready to institute its normalization policy.

Despite these considerations, we feel that investor skepticism is a bit exaggerated. Global growth is tangibly improving. In the euro zone, the GDP grew for the third consecutive quarter since the start of the year and consumer confidence indicators remain high. China's controlled slowdown is still on track and, despite a certain level of concern in this regard, the credit tightening measures carried out by its central bank have not caused excessive disruptions. The volume of international trade is up, which is a good omen for investment. Weakening populism, confirmed by Emmanuel Macron's victory in France, is another promising factor for consumer confidence and investment. If these conditions hold up and global growth continues to improve, other major central banks will eventually head for the exit. While this won't happen overnight, long-term bond investors seem to be more convinced that it will never occur. The curve flattening could taper off, provided anticipations are adjusted. We are banking on a rise in 10-year yields, which should reach 2.70% by the end of the year.

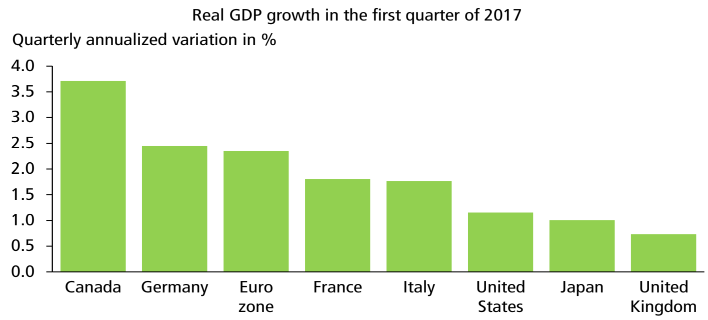
CANADIAN FEDERAL BONDS

At the start of the spring, key rate outlooks stirred up little controversy. Investors and analysts alike expected the BoC to wait until mid-2018 before ordering a rate hike. Canadian yields followed a similar trajectory to U.S. yields until late April. After that, the difficulties facing mortgage lender Home Capital scared off a number of investors, particularly foreign investors, who drew parallels to the events leading up to the U.S. financial crisis. Donald Trump's hostile tone towards Canada, which included a threat to leave the North American Free Trade Agreement (NAFTA), was another cause for concern. As a result, short-term rate spreads widened further into negative territory and the Canadian dollar depreciated.

However, beyond these surprises, the Canadian economy and labour market maintained a brisk pace. Canada posted one of the highest levels of growth among developed countries in the first quarter of the year (graph 11). Companies continued to hire at a sustained level and, more recently, improvements in hours worked and hourly wages have been observed. Meanwhile, the provinces that were negatively impacted by the oil price shock emerged from their torpor, which led the BoC to dramatically change its tone. After moving up the target date for the output gap to close to the first half of 2018 (it was previously projected for mid-year), the BoC announced in its May statement that the adjustment to the oil shock was essentially over. Then in June, Senior Deputy Governor Carolyn Wilkins caused a stir by stating that the BoC would be assessing whether the considerable monetary stimulus in place was still required. Short-term yields reacted by rising sharply (graph 12), while investors and analysts alike now anticipate a key rate hike in the next few months.

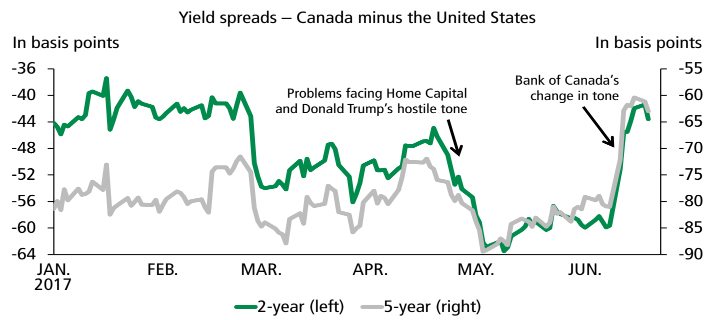
We've adjusted our scenario for key rates, which now calls for monetary tightening to begin in October. At press time, the markets were counting on a rate increase in September. Nevertheless, the implied probabilities of a rate hike in July are high, which shows how difficult it is to accurately interpret the signals recently sent by the BoC. The change in tone in the spring followed by an increasingly insistent message since its last meeting suggest that a rate hike at its July 12 meeting is plausible. In addition, Governor Stephen Poloz stated that the two rate cuts carried out in 2015 had done their job. However, core inflation remains far from its target and measures monitored by the BoC have been on a downward trend since mid-2016. In this context, the BoC may wait until the fall and continue to further prepare the markets by adjusting its statement. We are banking on this last scenario while remaining aware that the figures for the next few weeks could cause the pendulum to swing towards a rate hike in July.

GRAPH 11
Economic growth was particularly strong in Canada



Sources: Datastream and Desjardins, Economic Studies

GRAPH 12
Canadian and U.S. yield spreads have narrowed significantly



Sources: Bloomberg and Desjardins, Economic Studies

That said, even if it begins earlier than planned, the normalization of Canadian rates will occur very slowly, similar to the situation in the United States. The BoC should not announce a second rate increase until the spring of 2018 and we will likely have to wait until the following fall for the third increase. This will give the BoC a year to raise its key rate by 75 basis points. By comparison, the Fed, which hardly appears rushed, carried out as many rate hikes in roughly six months. Canada–U.S. yield spreads have narrowed recently, which is a natural reaction to the change in expectations. However, they may be unable to shrink much further between now and the end of the year if the prospect of a second rate hike remains in the distant future. Our scenario for next year calls for three rate hikes by the Fed and two by the BoC, which would widen 2-year spreads slightly. As for longer-term bonds, we anticipate an upward trajectory similar to that in the United States. The 10-year bond yields should end the year slightly above 2%.

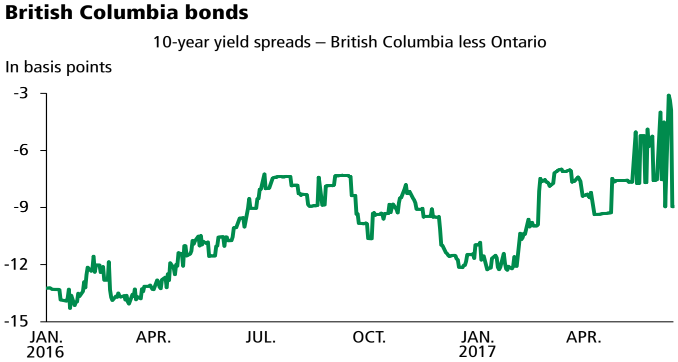
PROVINCIAL AND CORPORATE BONDS

Yield spreads between provincial bonds and federal bonds did not change significantly over the course of the spring. As a result, provinces saw a marked drop in borrowing costs. For example, Ontario's 10-year bond yield practically erased its gain following Donald Trump's election. Quebec's 10-year bond followed a similar trend, but in a slightly more pronounced way.

Since last fall, Quebec's 10-year bond yield has fallen below that of Ontario. In its budget tabled in the spring, the Quebec government banked on a balanced budget in 2017–2018 for the third consecutive year, and it granted small tax cuts. While Ontario also achieved a balanced budget, it did so later. In the meantime, Ontario's expansive investment program increased the province's debt level. By comparison, Quebec's debt shrank $610M during the last fiscal year, its first drop since 1959. The increased economic growth observed in the last few quarters bolstered Quebec's favourable budget situation. This was confirmed when Standard & Poor's raised the province's credit rating from A+ to AA- on June 15, its first rating increase since 2006 and the first time Quebec was awarded a higher rating than Ontario by a credit rating agency. Fundamentally, we believe that the yield spread between Quebec and Ontario will remain low in the next few quarters. There will likely be more volatility in early 2018 as, barring an about-face, both provinces will be holding elections that year.

Meanwhile, if there is a place where elections have caused recent volatility, it's British Columbia (graph 13). After a few weeks of suspense, it was confirmed that Christy Clark's Liberal Party lost the chance to form a new majority government by one seat. The New Democratic Party and the Green Party have joined forces with a view to forming the next government. This shift to the left of the political spectrum has narrowed the negative spread between British Columbia and Ontario somewhat. However, the province benefits from the healthiest level of public financing in the country and any deterioration should be fairly minor in the grand scheme of things.

GRAPH 13
Post-election uncertainty caused unusual volatility for British Columbia bonds



Sources: Bloomberg and Desjardins, Economic Studies

As for corporate bonds, the situation has changed very little. Yield spreads remain extremely low despite the U.S. monetary tightening. Even for high-yield bonds, despite the jolts caused by oil price drops, the index posted a 5% return since the start of the year. As is the case for the stock markets, valuations are stretched, the result of a relentless quest for higher yields. At the very least, improved profitability in a context of renewed global growth should help fend off any shocks, but a correction remains a possibility.

TABLE 1
Key interest rates

END OF PERIOD IN %	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2f	2017 Q3f	2017 Q4f	2018 Q1f	2018 Q2f	2018 Q3f	2018 Q4f
United States												
Federal funds	0.50	0.50	0.50	0.75	1.00	1.25	1.25	1.50	1.75	1.75	2.00	2.25
Canada												
Overnight funds	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	0.75	1.00	1.00	1.25
Zone euro												
Refinancing rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
United Kingdom												
Base 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
Japan												
Main key rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10

f: forecasts
Sources: Datastream and Desjardins, Economic Studies

TABLE 2
Schedule and key rates

Date	Central banks	Decision	Rate
March			
16	Bank of England	s.q.	0.25
16	Bank of Norway	s.q.	0.50
16	Swiss National Bank	s.q.	-0.75
22	Reserve Bank of New Zealand	s.q.	1.75
30	Bank of Mexico	+25 b.p.	6.50
April			
4	Reserve Bank of Australia	s.q.	1.50
12	Bank of Korea	s.q.	1.25
12	Bank of Brazil	-100 b.p.	11.25
12	Bank of Canada	s.q.	0.50
26	Bank of Japan	s.q.	-0.10
27	European Central Bank	s.q.	0.00
27	Bank of Sweden	s.q.	-0.50
May			
2	Reserve Bank of Australia	s.q.	1.50
3	Federal Reserve	s.q.	1.00
4	Bank of Norway	s.q.	0.50
10	Reserve Bank of New Zealand	s.q.	1.75
11	Bank of England	s.q.	0.25
18	Bank of Mexico	+25 b.p.	6.75
24	Bank of Korea	s.q.	1.25
24	Bank of Canada	s.q.	0.50
31	Bank of Brazil	-100 b.p.	10.25
June			
6	Reserve Bank of Australia	s.q.	1.50
8	European Central Bank	s.q.	0.00
14	Federal Reserve	+25 b.p.	1.25
15	Bank of England	s.q.	0.25
15	Bank of Japan	s.q.	-0.10
15	Swiss National Bank	s.q.	-0.75
21	Reserve Bank of New Zealand	s.q.	1.75

s.q.: statu quo; b.p. : basis points
Source: Desjardins, Economic Studies

TABLE 3
Next meetings

Date	Central banks
June	
22	Bank of Norway
22	Bank of Mexico
July	
4	Reserve Bank of Australia
4	Bank of Sweden
12	Bank of Korea
12	Bank of Canada
19	Bank of Japan
20	European Central Bank
26	Bank of Brazil
26	Federal Reserve
August	
1	Reserve Bank of Australia
3	Bank of England
9	Reserve Bank of New Zealand
10	Bank of Mexico
30	Bank of Korea
September	
5	Reserve Bank of Australia
6	Bank of Brazil
6	Bank of Canada
7	European Central Bank
7	Bank of Sweden
14	Bank of England
14	Swiss National Bank
20	Bank of Japan
20	Federal Reserve
21	Bank of Norway
27	Reserve Bank of New Zealand
28	Bank of Mexico

Source: Desjardins, Economic Studies

TABLE 4
United States: Fixed income market

	2016				2017				2018			
END OF PERIOD IN %	Q1	Q2	Q3	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Key interest rate												
Federal funds	0.50	0.50	0.50	0.75	1.00	1.25	1.25	1.50	1.75	1.75	2.00	2.25
Treasury bills												
3-month	0.21	0.26	0.29	0.51	0.76	1.05	1.15	1.35	1.55	1.60	1.80	2.05
Federal bonds												
2-year	0.75	0.58	0.76	1.17	1.24	1.40	1.50	1.75	1.95	2.00	2.25	2.45
5-year	1.21	1.00	1.15	1.92	1.92	1.85	1.95	2.30	2.55	2.65	2.90	3.00
10-year	1.78	1.49	1.61	2.45	2.40	2.25	2.35	2.70	2.95	3.05	3.25	3.35
30-year	2.62	2.31	2.33	3.06	3.02	2.85	2.95	3.15	3.30	3.35	3.50	3.60
Yield curve slopes												
5-year - 3-month	1.00	0.74	0.86	1.41	1.16	0.80	0.80	0.95	1.00	1.05	1.10	0.95
10-year - 2-year	1.03	0.91	0.85	1.27	1.16	0.85	0.85	0.95	1.00	1.05	1.00	0.90
30-year - 3-month	2.41	2.05	2.04	2.55	2.26	1.80	1.80	1.80	1.75	1.75	1.70	1.55

f: forecasts
Sources: Datastream and Desjardins, Economic Studies

TABLE 5
Canada: Fixed income market

	2016				2017				2018			
END OF PERIOD IN %	Q1	Q2	Q3	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Key interest rate												
Overnight funds	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	0.75	1.00	1.00	1.25
Treasury bills												
3-month	0.44	0.49	0.53	0.46	0.52	0.55	0.70	0.80	0.95	1.05	1.15	1.40
Federal bonds												
2-year	0.54	0.52	0.52	0.75	0.75	0.95	1.00	1.25	1.35	1.45	1.65	1.85
5-year	0.67	0.57	0.62	1.12	1.12	1.20	1.30	1.65	1.85	2.00	2.20	2.30
10-year	1.23	1.06	1.00	1.72	1.62	1.60	1.70	2.05	2.30	2.40	2.55	2.65
30-year	2.00	1.71	1.66	2.31	2.30	2.10	2.20	2.45	2.60	2.70	2.80	2.90
Yield curve slopes												
5-year - 3-month	0.23	0.08	0.09	0.66	0.60	0.65	0.60	0.85	0.90	0.95	1.05	0.90
10-year - 2-year	0.69	0.54	0.47	0.97	0.88	0.65	0.70	0.80	0.95	0.95	0.90	0.80
30-year - 3-month	1.56	1.22	1.13	1.85	1.78	1.55	1.50	1.65	1.65	1.65	1.65	1.50
Yield spreads (Canada—United States)												
3-month	0.23	0.23	0.24	-0.05	-0.24	-0.50	-0.45	-0.55	-0.60	-0.55	-0.65	-0.65
2-year	-0.22	-0.06	-0.24	-0.43	-0.49	-0.45	-0.50	-0.50	-0.60	-0.55	-0.60	-0.60
5-year	-0.54	-0.43	-0.53	-0.80	-0.80	-0.65	-0.65	-0.65	-0.70	-0.65	-0.70	-0.70
10-year	-0.56	-0.43	-0.61	-0.73	-0.77	-0.65	-0.65	-0.65	-0.65	-0.65	-0.70	-0.70
30-year	-0.62	-0.59	-0.67	-0.75	-0.71	-0.75	-0.75	-0.70	-0.70	-0.65	-0.70	-0.70

f: forecasts
Sources: Datastream and Desjardins, Economic Studies