The Yield Curve

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Bond yields will remain very low

HIGHLIGHTS

- The surge in concerns over Brexit recently dragged North American bond yields close to February's lows. With the outcome of the June 23 referendum remaining unclear, the markets can be expected to react sharply in days that follow it.
- May's steep dip of U.S. job creation and the surge in Brexit voter intentions convinced the Federal Reserve (Fed) to keep its key rates unchanged in June.
- Another drop by the notorious "dots", which represent the level at which Fed leaders expect key rates to be appropriate in the future, and comments from Janet Yellen give the impression that a rate increase is not imminent.
- We now expect U.S. key rates to come up even more gradually, with just one 0.25% increase this year and two next year. In this context, the Bank of Canada will probably wait until the spring of 2018 before in turn kicking off monetary firming. We have substantially downgraded our forecasts for bond yields to reflect the new key rate scenarios.

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The fears, or hopes, of seeing bond yields rise substantially in 2016 have now weakened quite a bit. Investor concern spiked early in the year, then gradually dissipated, and, at the start of June, a number of risk assets, including U.S. stock markets and oil, hit peaks nearly a year old. For bond yields, the rise was much smaller. The U.S. 10-year yield oscillated in the neighbourhood of 2.20% in the final months of 2015, then tumbled to around 1.60% when the financial strains reached their highest point in February. Although the tensions have ebbed, this yield has not been able to cross the 2% mark since then. The highly aggressive monetary policies of central banks abroad and doubts about the health of the U.S. economy and the evolution of U.S. monetary policy have helped keep yields very low.

A BREXIT COULD HAVE A BIG SHORT-TERM IMPACT

The surge in concerns over Brexit recently dragged North American bond yields close to February's lows, even putting the German 10-year yield into negative territory for the first time. With all signs suggesting that the outcome of the June 23 referendum will be unclear until the very last minute, the markets can be expected to react sharply in days that follow it. After having ignored the risk for a long time, investors now seem to be making the issue their central focus. Recently, there have even been remarks that a Brexit could be worse than the Lehman Brothers collapse. In our view, this is quite exaggerated.

As many international bodies have stated, a decision to leave the European Union (EU) could have major medium- and long-term consequences for the U.K.'s economy. However, it should be clear that nothing will really change overnight if the Brexit side wins; a 2-year negotiation period is expected prior to exiting the EU. We could well see volatility and risk aversion spike, but all of the central banks would be ready to intervene to prevent that from generating a liquidity crisis. The results of the referendum could nonetheless have a major short-term impact on the financial markets, and a Brexit could temporarily take North American bond yields

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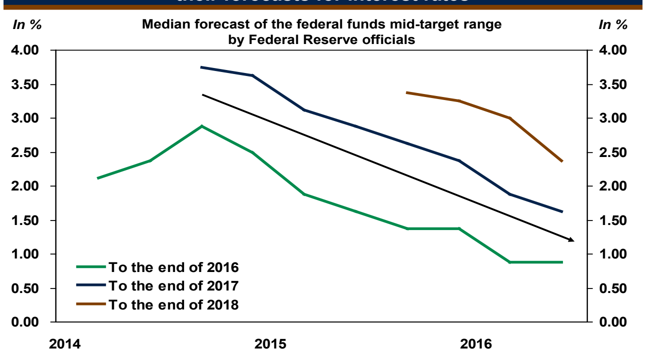
even lower than our core scenario calls for. The medium- and long-term impact on North America's markets would however probably be limited.

THE FEDERAL RESERVE SEEMS PARALYZED

Not that long ago, we were calling for a rate increase at the June 15 Federal Reserve (Fed) meeting. However, May's steep dip of U.S. job creation and the surge in Brexit voter intentions shut the door on this option in early June. The question now is whether the Fed will start to firm up its monetary policy again in July, September, December, or only next year. Action at the November meeting is almost out of the question due to the U.S. election.

The statement that accompanied the decision to keep key rates unchanged on June 15 was relatively optimistic. Another drop by the notorious "dots", which represent the level at which Fed officials expect key rates to be appropriate in the future, gave however the impression that a rate increase was not imminent. While the median forecast still signals two 0.25% rate increases by the end of 2016, the number of officials who predict just one rate increase this year has gone from one official in March to six in June, out of seventeen officials. Another decline of the rates forecasted for later years and over the long term intensified the feeling that the "dots" were still overestimating the actual rate increases (graph 1).

Graph 1 – Federal Reserve officials continue to revise down their forecasts for interest rates



Sources: Bloomberg, Federal Reserve and Desjardins, Economic Studies

Chair Janet Yellen's remark that she wanted to make sure that the U.S. economy was not losing momentum before raising key rates also leans toward fairly late firming. It won't be easy to dispel this doubt, as U.S. data have been especially volatile in recent quarters. The recent U.S. figures on consumption are very encouraging, but job creation now seems to be weakening. The Fed was looking at the opposite situation at the start of the year, and, at the time, it also responded by pushing back its rate hikes. In this context, a July rate increase seems very unlikely. If the Brexit option is rejected, U.S. data is very good, and the financial markets perform well, the Fed would probably be ready to raise its rates in September. However, we think it is more likely that an obstacle will arise that will convince it to wait until December to take action.

THE BANK OF CANADA WILL ALSO BE VERY PATIENT

We thus now expect U.S. key rates to come up even more gradually, with just one 0.25% increase this year and two next year. The Fed's slower pace will curb upside pressure on the U.S. dollar and encourage other central banks to maintain highly accommodative monetary policies. In this context, the Bank of Canada will probably wait until the spring of 2018 before in turn kicking off monetary firming. We have substantially downgraded our forecasts for bond yields to reflect the new key rate scenarios.

Everything thus seems to be going well for the bond market, as the risk of overly aggressive U.S. monetary policy firming now seems negligible. However, our core scenario assumes that inflation will stay well under control despite central banks' reticence to raise rates. This is not guaranteed, as the outlooks seem favourable to an increase in oil prices and we are starting to see signs of accelerating wage pressures in the United States. The onset of real inflationary pressure would put the central banks and bond markets in a tough spot.

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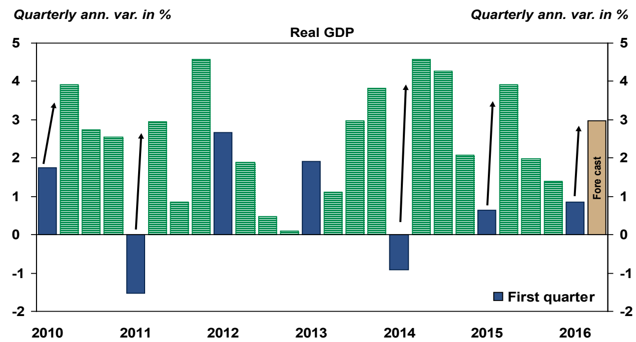
FEDERAL RESERVE

The Federal Reserve will be patient for even longer

- The Federal Reserve (Fed) once again opted for the status quo at its June 15 meeting. Economic conditions were not convincing enough to persuade them to firm up monetary policy again after December 2015's initial rate hike. Note that the economy posted disappointing growth in the first quarter of 2016, with annualized real GDP growth of just 0.8% according to the preliminary estimate of the national accounts. This poor performance is reminiscent of the sluggish first quarters seen in 2014 and 2015. Thankfully, as in those two years, we can expect economic growth to pick up in the second quarter (graph 2).
- Given that growth seems to be picking up, why did Janet Yellen and her colleagues decide not to raise key rates in June? At the press conference, the Fed Chair clearly indicated that the uncertainty surrounding the British referendum on the United Kingdom's membership in the European Union was one factor that had influenced the decision. The deciding factor, however, which had substantially altered the markets' expectations for this meeting, was the release of May's employment results, which showed just 38,000 hires. Although this is just one figure, employment growth has been trending down since February. The Labor Market Conditions Index, an indicator published by the Fed to provide a broader picture of the market, has also been declining since the year began (graph 3). While, as we do, the Fed expects hiring to recover quickly, Fed leaders will no doubt want to make sure that the job market's overall picture is showing convincing improvement before it raises key rates, which could mean they will wait until the fall.
- On the other hand, wage growth is accelerating, according to the Atlanta Fed's Wage Growth Tracker. However, the fears of widespread acceleration by inflation remain subdued and some surveys, such as the University of Michigan consumer confidence survey, are even showing a decline by household inflation expectations (graph 4).

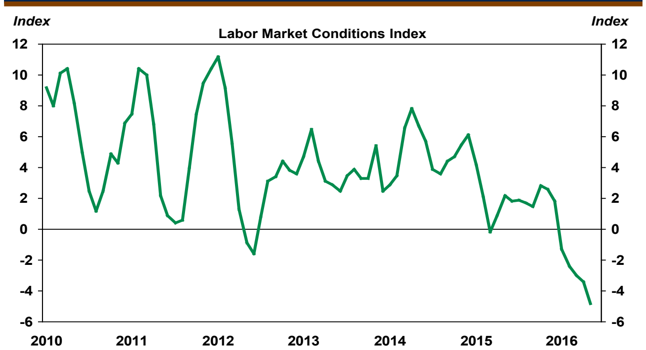
Forecasts: Uncertainty in the United Kingdom, U.S. presidential election, drop in market and consumer inflation expectations and the concerns over the strength of the job market are all arguments that will urge the Fed to be patient. Despite the signs of a rebound by real GDP and expectations of faster employment growth, we are now projecting just one key rate increase this year, which will probably come at the December meeting. Only two rate increases are expected in 2017.

Graph 2 – As in the last few years, U.S. growth is expected to rebound as of the spring



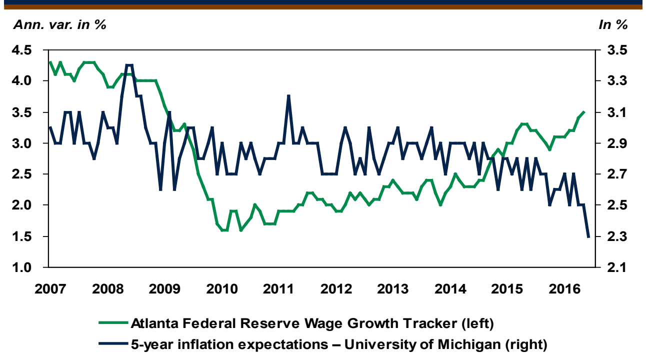
Sources: Bureau of Economic Analysis and Desjardins, Economic Studies

Graph 3 – Worrisome picture of the job market



Sources: Federal Reserve Board and Desjardins, Economic Studies

Graph 4 – Diverging signals from U.S. inflation



Sources: Atlanta Federal Reserve, University of Michigan and Desjardins, Economic Studies

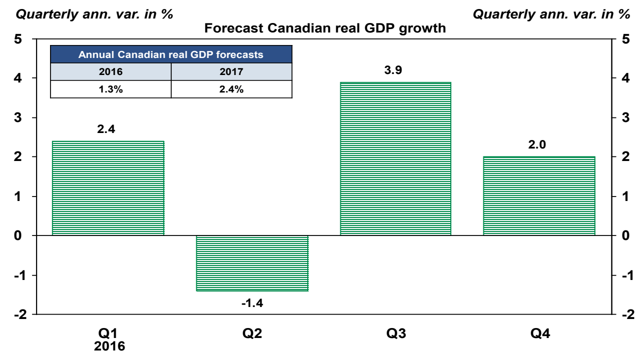
BANK OF CANADA

Looming problems should not disturb monetary authorities

- Major fluctuations will affect Canada's economy in the quarters to come (graph 5). Although they remain on an uptrend, exports have run into some temporary difficulties recently, which could put the brakes on real GDP growth in the second quarter. In addition, there are the negative effects of the forest fires around Fort McMurray. Among other things, Alberta's oil output fell substantially in May. Under these conditions, real GDP could slide into negative territory in Q2, with a pullback of about 1.5% expected.
- Oil sector operations will gradually get back to normal which, with the ongoing uptrend in non-energy exports (graph 6), should generate a major rebound by economic growth in the third quarter; it should go to around 4%.
- In April, the Bank of Canada (BoC) lowered its forecast range for growth by the country's potential output, primarily due to the drop in business investment. Under these circumstances, the Canadian economy's excess production capacity could close by the end of 2017. In the meantime, upside pressure on inflation will remain subdued. The core annual inflation rate is very stable; it has been holding between 1.9% and 2.4% for nearly two years.
- Strong housing market growth in some parts of the country and high household debt levels are an ongoing major concern. Although the debt service ratio (i.e. payments of interest and principal in relation to disposable income) edged down in the first quarter (graph 7), going from 14.05% to 14.04%, some households are vulnerable to an eventual interest rate increase. According to our estimates, given the current debt level, the average interest rate on household debt would only have to go up 60 basis points to put the debt service ratio above its historical peak.

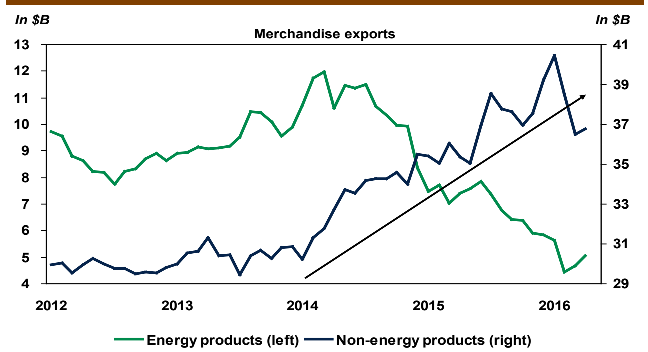
Forecasts: Given the high household debt loads, another key interest rate cut is to be avoided, even if further economic disappointments were to materialize in the next few months. On the other hand, the BoC will want to wait for the global and national economic situation to improve substantially before it starts to take the target for the overnight rate back up. In our opinion, the conditions will only be sufficiently in place to justify a first Canadian key rate increase in the spring of 2018.

Graph 5 – Canada's economy will see some major blips in the coming quarters



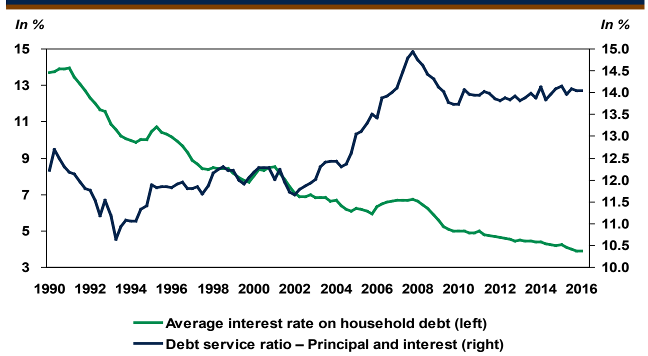
Sources: Statistics Canada and Desjardins, Economic Studies

Graph 6 – Non-energy exports continue to trend up



Sources: Statistics Canada and Desjardins, Economic Studies

Graph 7 – Low interest rates will curb growth by debt service



Sources: Statistics Canada and Desjardins, Economic Studies

OVERSEAS CENTRAL BANK

Will rates in the euro zone and Japan come down further?

EUROPEAN CENTRAL BANK (ECB)

- The ECB has not announced anything new since the string of measures ordered in March. That being said, in a context marked by numerous uncertainties, in which economic growth is struggling to accelerate and inflation is still well below the target, the door is open to further action. The Federal Reserve's slowness in firming up its monetary policy is also putting pressure on the ECB through a stronger euro.
- The measures already announced must be assessed thoroughly, however. Through March 2017, the ECB's balance sheet will expand sharply due to the €80B in monthly asset purchases, as well as the potentially big contribution from the TLTRO II, the latest support program for financial institutions. Assuming that the asset purchases are extended beyond March 2017, with the pace gradually declining, the ECB's balance sheet could exceed €5,000B, or about 50% of the euro zone's GDP (graph 8), a level much higher than seen in the United States. Given these figures, it seems unlikely that the ECB with expand its action substantially, unless another major shock materializes, or the TLTRO II program is not very popular.

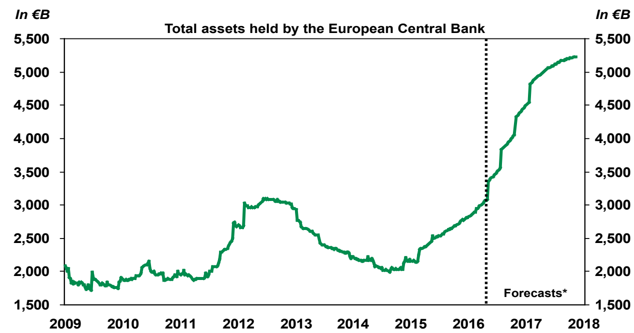
BANK OF ENGLAND (BoE)

- Not long ago, interest rate increases were anticipated in the United Kingdom, but the uncertainty introduced by the referendum on whether the country should leave the European Union changed the situation. The latest surveys suggest a close result (graph 9), but undecided voters could, in the end, shift the balance toward the status quo. This is our preferred scenario, but it still would not let the BoE initiate firming before the second quarter of next year. Patience is justified by weaker economic growth and inflation pressures. In the event of a Brexit, monetary firming would be postponed even further.

BANK OF JAPAN (BoJ)

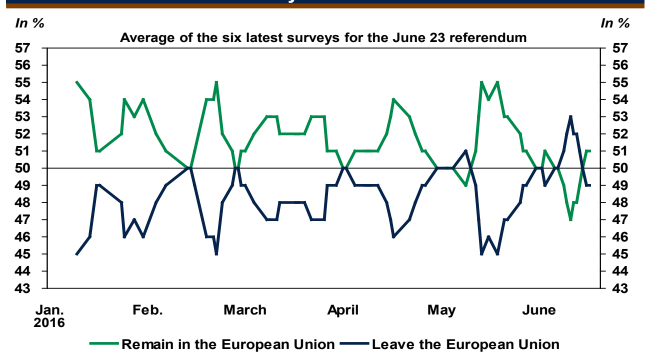
- The BoJ is keeping all of its options open for accelerating economic growth and getting inflation up to its target, 2%. Here, the latest numbers on price growth are still not starting to trend up (graph 10), increasing the likelihood that an announcement will come shortly. The yen has been appreciating in recent months, which also argues for action from the monetary authorities. Still, as the interest rate cut ordered in January, which took it into negative territory, had no impact on the currency, foreign exchange intervention could be the choice this time.

Graph 8 – The European Central Bank's balance sheet will expand sharply in the next few quarters



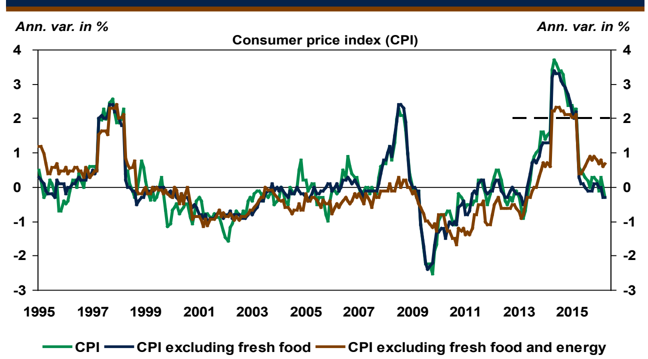
* Purchases of €80B/month until March 2017. Purchases will then be reduced until the end of 2017. The four refinancing operations planned from June 2016 to March 2017 (TLTRO II) could add €1,000B.
Sources: European Central Bank and Desjardins, Economic Studies

Graph 9 – The outcome of the U.K. referendum is still very uncertain



Sources: NatCen Social Research and Desjardins, Economic Studies

Graph 10 – Inflation is still struggling to pick up speed in Japan



Sources: Datastream and Desjardins, Economic Studies

BOND MARKET

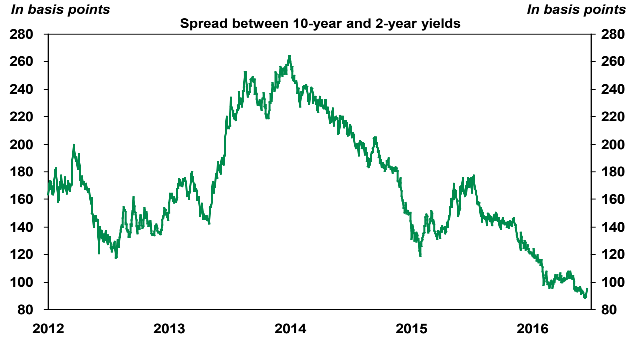
Expecting low yields, with or without Brexit

U.S. FEDERAL BONDS

- U.S. bond yields at all maturities were broadly directionless right until last month. From February to May, the 10-year yield hovered around 1.81% on average, while the 2-year yield oscillated around 0.79%. The latest payroll employment estimates, which were rather disconcerting, acted as a defining catalyst. Yields plunged after the data was released, and the trend held through the most part of June, as fears that the United Kingdom might leave the European Union (EU) intensified. On June 17, the 10-year yield was down 23 basis points from where it was on May 31. It had even dropped below 1.52% at some point, its lowest level in nearly four years. The slope of the bond curve, already quite flat, flattened further (graph 11)
- The evolution of U.S. bond yields occurs in a context of heightened political uncertainty, especially in the United Kingdom, due to Brexit. Yields in the United Kingdom set new records, reflecting nervous investors in the face of the eventuality where the vote favours leaving the EU. Testing the markets' nerve, several recent surveys have given the "leave" side a lead recently (graph 12). Risk aversion triggered a flight to German bonds, taking the 10-year yield briefly into negative territory (graph 13).
- Our core scenario calls for an ongoing status quo in the United Kingdom. From this perspective, much of June's decline in yields should reverse. The alternative outcome would imply further sustained near-term demand for U.S. bonds due to their safe haven status. Even without an exit by the United Kingdom, yields will end the year lower than previously forecast. Our reading of the latest Federal Reserve (Fed) announcement tells us that policy rates will be lifted more slowly in the United States; we now expect a rate increase decision to be made only in December.

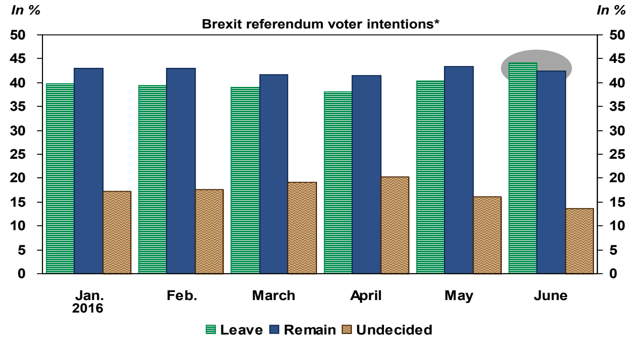
Forecasts: Our year-end target is now 2.00% for the 10-year yield. The 2-year yield will likely end the year just above 1.00%. We expect the Fed to order no more than five rate increases between now and the end of 2018. The global context, which will likely remain just as uncertain over this horizon, and very aggressive monetary policy elsewhere, are factors that argue for normalizing U.S. monetary policy at a snail's pace.

Graph 11 – The slope of the yield curve is extremely flat in the United States



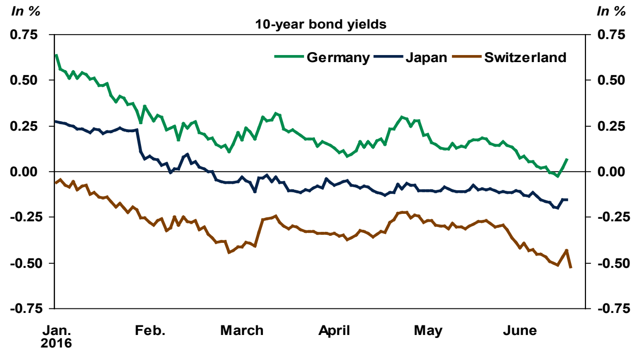
Sources: Bloomberg and Desjardins, Economic Studies

Graph 12 – Polls conducted in June have tended to favour the Leave option



* Average of surveys done during the month.
Sources: Bloomberg and Desjardins, Economic Studies

Graph 13 – The German 10-year yield made a brief incursion in negative territory



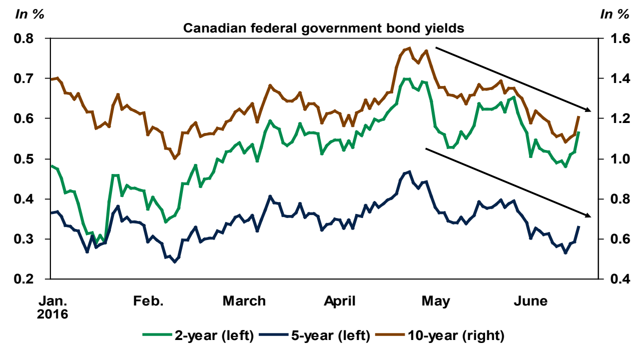
Sources: Bloomberg and Desjardins, Economic Studies

CANADIAN FEDERAL BONDS

- It has been a rollercoaster spring for Canadian bond yields (graph 14). The Bank of Canada's (BoC) decision to opt for patience in January was followed by a substantial improvement in Canada's economic statistics, so much so that, at the end of April, instead of expecting rate cuts, the derivatives' markets were positioned for a slight chance that the BoC would tighten its monetary policy at the end of the year. Having hit a low of 0.25% on January 20, the 2-year yield climbed to as much as 0.71% on May 2. The 5-year yield followed the same trend, hitting 0.95% just a few months after brushing 0.39%. Yields then started on a downward path again as of early May.
- The resurgence in risk aversion around the world helped Canadian bonds. Although Canadian yields are low, they remain higher than in several developed nations (graph 15). Canada's economy has also started to struggle again. The first quarter, which had been promising, ended with a smaller than anticipated increase in GDP. The Alberta wildfires added another factor of uncertainty with respect to growth for subsequent quarters. We expect GDP to contract 1.4% in the second quarter, then rebound 3.9% in the third quarter.
- Aside from the risks surrounding Brexit, we now expect bond yields to end the year lower than previously anticipated. As the Federal Reserve (Fed) should stay on the sidelines for another six months, and given the importance of a weak currency to keep supporting Canada's trade sector (graph 16), the BoC will not be in any rush to raise rates. We now think the BoC will wait until the second quarter of 2018 before kicking off monetary normalization. Movements in Canadian yields should be essentially similar to that of U.S. yields in the second half of 2016. As such, we expect spreads between Canadian and U.S. yields to stay close to current levels until December, then start to fall again as the Fed orders its next rate increase.

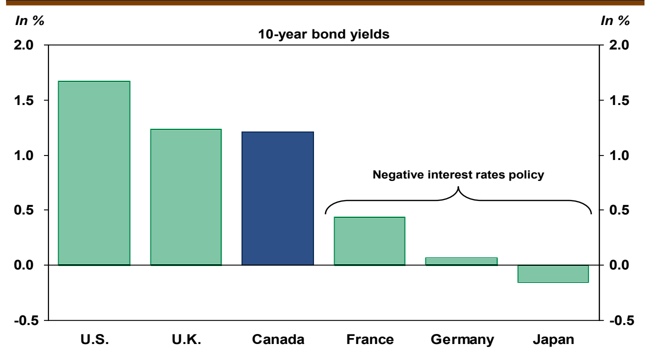
Forecasts: Our revisions take the target for the Canadian 10-year yield to 1.35% at the end of 2016. We expect it to end 2017 at just 1.60%, a smaller increase than in the United States as, unlike the Fed, the BoC will not yet have ordered any rate increases by then. Canadian bonds should therefore outperform U.S. bonds in 2017, particularly in the short maturities, which are the most sensitive to monetary policy directions.

Graph 14 – Canadian yields reverted to a downward trajectory in early May



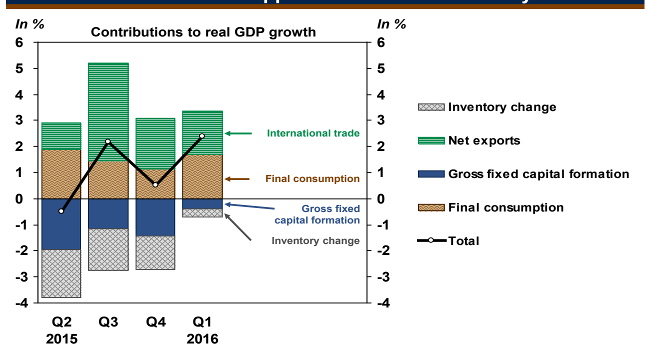
Sources: Bloomberg and Desjardins, Economic Studies

Graph 15 – Canada is part of the countries for which bond yields remain relatively elevated



* As of June 20, 2016.
Sources: Bloomberg and Desjardins, Economic Studies

Graph 16 – The Bank of Canada will seek to ensure that trade continues to support the Canadian economy

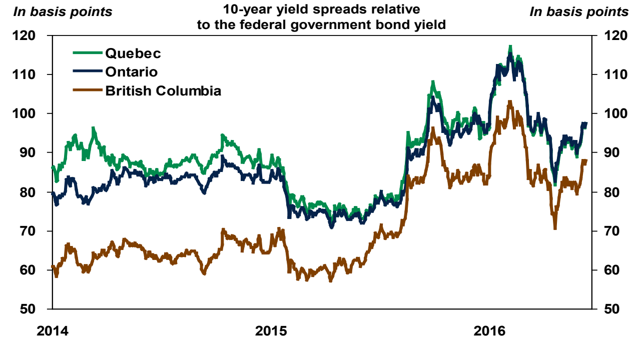


Sources: Statistics Canada and Desjardins, Economic Studies

PROVINCIAL AND CORPORATE BONDS

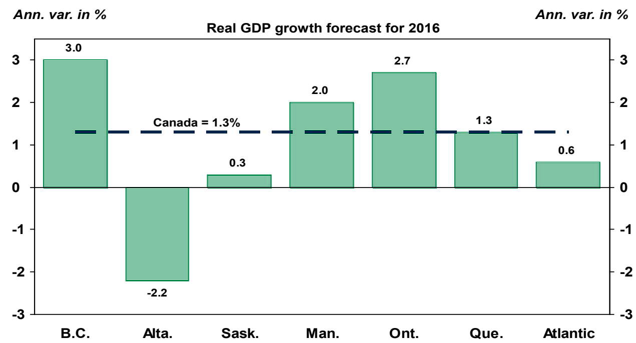
- After the intense volatility that characterized the start of 2016, calm returned to the provincial bond market. Spreads dropped fairly sharply from mid-February to the end of April. They have since come up, without revisiting the peaks set at the start of the year (graph 17). The main factor in the recent spread widening was the drop in federal bond yields, rather than a fundamentally negative investor view of the asset class.
- The budget season unfolded with no major surprises from the major issuers. Quebec is now posting interesting surpluses (before the payments to the Generations Fund). Ontario will likely balance its budget next year, as anticipated. In fact, the only two provinces expected to be in deficit next year are Alberta and Newfoundland and Labrador. These two economies are still grappling with a recession this year, as a result of the collapse in oil prices. We still expect them to start come out of recession next year, which should help alleviate the pressure on their public finances.
- Spreads on borrowing costs for a province like Alberta are unlikely to compress quickly, however. In 2015, GDP contracted almost three times as much as the Alberta government estimated, illustrating the high degree of uncertainty. The year 2016 will be just as uncertain, as the impact of the wildfires will combine with a situation that is already difficult for the oil sector. On the other hand, the bonds of a province such as Manitoba, which should post above-average growth this year (graph 18) and balance its budget next year, are an interesting option. This will primarily be true for investors with fairly long investment horizons, as the issue is not very liquid.
- As for corporate bonds, the environment can be described as calm, relatively speaking, since May. The spread of BBB-rated bonds relative to federal bonds has compressed considerably after the early-year turmoil, and is even below the levels of the fourth quarter of 2015. This ties into the equity market revival observed until early June. In a context where the annual variation of S&P 500 earnings has been negative for the past six quarters, one would expect some weakness in corporate bonds. It illustrates the degree to which the extremely low rate environment in the sovereign space, resulting from ultra-loose monetary policy, overrides the fundamentals. The current situation is also favorable to Canadian corporate bonds. In particular, the rise in oil prices is an element that favours lower borrowing costs in the energy sector (graph 19).

Graph 17 – Provincial spreads remain close to their recent average



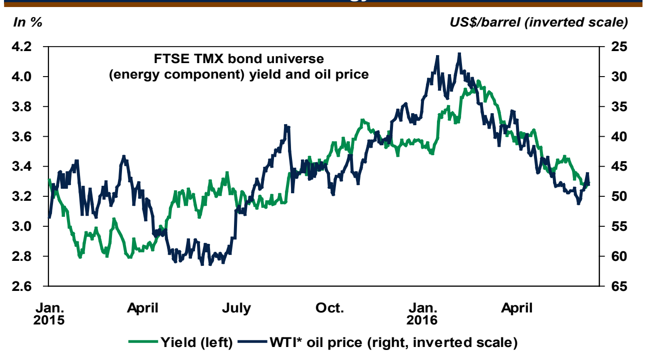
Sources: Bloomberg and Desjardins, Economic Studies

Graph 18 – Manitoba is part of the provinces that should experience above-average growth



Sources: Statistics Canada and Desjardins, Economic Studies

Graph 19 – Rising oil prices alleviate pressures on borrowing costs within the energy sector



* West Texas Intermediate.
Sources: Datastream and Desjardins, Economic Studies

Table 1
Key interest rates

End of period in %	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2f	2016 Q3f	2016 Q4f	2017 Q1f	2017 Q2f	2017 Q3f	2017 Q4f
United States												
Federal funds	0,25	0,25	0,25	0,50	0,50	0,50	0,50	0,75	0,75	1,00	1,00	1,25
Canada												
Overnight funds	0,75	0,75	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50
Euro zone												
Refinancing rate	0,05	0,05	0,05	0,05	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
United Kingdom												
Base rate	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,75	1,00
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 Bank	Decision	Rate
April 2016			
5	Reserve Bank of Australia	s.q.	2,00
13	Bank of Canada	s.q.	0,50
14	Bank of England	s.q.	0,50
18	Bank of Korea	s.q.	1,50
21	European Central Bank	s.q.	0,00
21	Bank of Sweden	s.q.	-0,50
27	Reserve Bank of New Zealand	s.q.	2,25
27	Bank of Brazil	s.q.	14,25
27	Bank of Japan	s.q.	-0,10
27	Federal Reserve	s.q.	0,25 / 0,50
May 2016			
3	Reserve Bank of Australia	-25 b.p.	1,75
5	Bank of Mexico	s.q.	3,75
12	Bank of England	s.q.	0,50
12	Bank of Korea	s.q.	1,50
12	Bank of Norway	s.q.	0,50
25	Bank of Canada	s.q.	0,50
June 2016			
2	European Central Bank	s.q.	0,00
7	Reserve Bank of Australia	s.q.	1,75
8	Bank of Korea	-25 b.p.	1,25
8	Reserve Bank of New Zealand	s.q.	2,25
8	Bank of Brazil	s.q.	14,25
15	Bank of Japan	s.q.	0,10
15	Federal Reserve	s.q.	0,25 / 0,50
16	Bank of England	s.q.	0,50
16	Swiss National Bank	s.q.	-0,75

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

Table 3
Coming soon

Date	Central Bank
June 2016	
23	Bank of Norway
30	Bank of Mexico
July 2016	
5	Reserve Bank of Australia
6	Bank of Sweden
13	Bank of Korea
13	Bank of Canada
14	Bank of England
20	Bank of Brazil
21	European Central Bank
27	Federal Reserve
28	Bank of Japan
August 2016	
2	Reserve Bank of Australia
4	Bank of England
10	Bank of Korea
10	Reserve Bank of New Zealand
11	Bank of Mexico
31	Bank of Brazil
September 2016	
6	Reserve Bank of Australia
7	Bank of Sweden
7	Bank of Canada
8	European Central Bank
8	Bank of Korea
15	Bank of England
15	Swiss National Bank
20	Bank of Japan
21	Reserve Bank of New Zealand

Source: Desjardins, Economic Studies

Table 4
United States: fixed income market

End of period in %	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2f	2016 Q3f	2016 Q4f	2017 Q1f	2017 Q2f	2017 Q3f	2017 Q4f
Key rate												
Federal funds	0,25	0,25	0,25	0,50	0,50	0,50	0,50	0,75	0,75	1,00	1,00	1,25
Treasury bills												
3-month	0,03	0,01	0,00	0,16	0,21	0,25	0,30	0,50	0,55	0,75	0,80	1,00
Federal bonds												
2-year	0,54	0,60	0,60	1,04	0,75	0,75	0,85	1,10	1,15	1,30	1,35	1,50
5-year	1,37	1,63	1,33	1,65	1,21	1,15	1,30	1,60	1,65	1,80	1,85	1,95
10-year	1,93	2,35	2,03	2,27	1,78	1,65	1,75	2,00	2,05	2,20	2,25	2,35
30-year	2,54	3,12	2,85	3,02	2,62	2,45	2,55	2,75	2,80	2,90	2,95	3,00
Yield curve												
5-year - 3-month	1,34	1,62	1,33	1,49	1,00	0,90	1,00	1,10	1,10	1,05	1,05	0,95
10-year - 2-year	1,39	1,75	1,44	1,23	1,03	0,90	0,90	0,90	0,90	0,90	0,90	0,85
30-year - 3-month	2,51	3,11	2,85	2,86	2,41	2,20	2,25	2,25	2,25	2,15	2,15	2,00

f: forecasts
Sources: Datastream and Desjardins, Economic Studies

Table 5
Canada: fixed income market

End of period in %	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2f	2016 Q3f	2016 Q4f	2017 Q1f	2017 Q2f	2017 Q3f	2017 Q4f
Key rate												
Federal funds	0,75	0,75	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50
Treasury bills												
3-month	0,56	0,58	0,44	0,50	0,44	0,50	0,50	0,50	0,50	0,55	0,55	0,60
Federal bonds												
2-year	0,50	0,48	0,52	0,48	0,54	0,55	0,60	0,70	0,75	0,80	0,85	0,95
5-year	0,76	0,82	0,80	0,73	0,67	0,65	0,75	0,90	0,95	1,10	1,15	1,25
10-year	1,36	1,69	1,43	1,40	1,23	1,20	1,25	1,35	1,40	1,50	1,55	1,65
30-year	1,98	2,31	2,20	2,15	2,00	1,80	1,85	2,00	2,10	2,20	2,30	2,40
Yield curve												
5-year - 3-month	0,20	0,24	0,36	0,23	0,23	0,15	0,25	0,40	0,45	0,55	0,60	0,65
10-year - 2-year	0,86	1,21	0,91	0,92	0,69	0,65	0,65	0,65	0,65	0,70	0,70	0,70
30-year - 3-month	1,42	1,73	1,76	1,65	1,56	1,30	1,35	1,50	1,60	1,65	1,75	1,80
Spreads (Canada - U.S.)												
3-month	0,53	0,57	0,44	0,34	0,23	0,25	0,20	0,00	-0,05	-0,20	-0,25	-0,40
2-year	-0,04	-0,12	-0,08	-0,56	-0,21	-0,20	-0,25	-0,40	-0,40	-0,50	-0,50	-0,55
5-year	-0,61	-0,81	-0,53	-0,92	-0,54	-0,50	-0,55	-0,70	-0,70	-0,70	-0,70	-0,70
10-year	-0,57	-0,66	-0,60	-0,87	-0,55	-0,45	-0,50	-0,65	-0,65	-0,70	-0,70	-0,70
30-year	-0,56	-0,81	-0,65	-0,87	-0,62	-0,65	-0,70	-0,75	-0,70	-0,70	-0,65	-0,60

f: forecasts
Sources: Datastream and Desjardins, Economic Studies