The Yield Curve
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Heading towards gradual interest rate hikes in the United States

HIGHLIGHTS

- U.S. economic statistics have become far more encouraging in recent weeks. Housing and employment data are still good, as automobile and retail sales rallied in May.
- The Federal Reserve should start raising key interest rates in September 2015. After that, the pace of rate hikes will probably be slow and irregular. The top of the federal fund target range should stand at 0.75% by the end of the year, and at 1.50% by the end of 2016.
- The prospect of monetary tightening in the United States in the near term raises some concerns for bond investors. However, in our opinion, the risk of a significant upwards movement in long-term bond yields is fairly low.
- In Canada, the first half of 2015 has been even more challenging than previously thought. We are now predicting that the Bank of Canada will leave its key interest rates unchanged until December 2016. It could even cause another surprise by lowering its key interest rates at its July meeting.

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Editorial

At the beginning of May, we noted that the second quarter would be key for the North American bond market. A rebound in the U.S. economy would confirm that the difficulties of the beginning of the year were merely a temporary rough patch, opening the door to a hike in key interest rates. Conversely, additional disappointing data would indicate more serious problems in the United States that could drive bond yields to new lows.

The data that were released in May were such that no clear conclusion could be drawn regarding the health of the U.S. economy. The housing market data were encouraging, but household consumption was still very disappointing, and the industrial sector was still being held in check by the turmoil besetting the oil industry. The second estimate of national accounts, released at the end of May, reported an annualized pullback of 0.7% by the U.S. economy in the first quarter, another sign of a gloomy state of affairs.

Fortunately, the economic statistics have become far more encouraging in recent weeks. The creation of 280,000 jobs in May, combined with a slight acceleration in wages, confirmed that the U.S. job market was still strong. The real estate data are still good, and automobile and retail sales rallied in May. This could indicate that households are finally beginning to spend the money that has been left in their pockets since gasoline prices fell. Although problems persist in some regions and some sectors, the U.S. economy should grow by at least 3% from the second quarter onwards.

THE FEDERAL RESERVE KEEPING THE DOOR OPEN FOR SEPTEMBER

The press release issued by the Federal Reserve (Fed) on June 17 indicates that it too is feeling reassured by the latest U.S. statistics. Among other things, it points to the upturn in job creation and signs of improvement in the housing sector. In these conditions, 15 of the 17 Fed officials predict

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Note to readers: The letters **k**, **M** and **B** are used in texts and tables to refer to thousands, millions and billions respectively.

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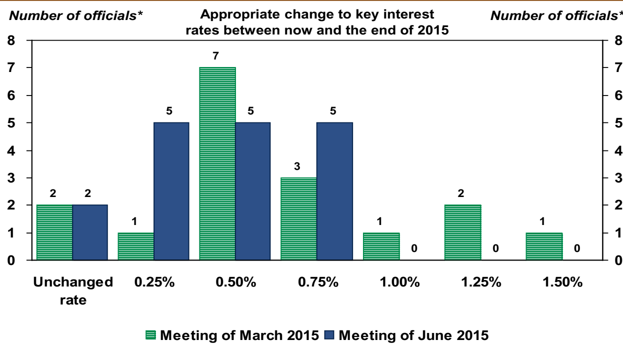
that it will be appropriate to raise key interest rates before the end of 2015. The officials are now evenly split between those calling for one, for two or for three hikes, whereas back in March, the vast majority were saying that two or more hikes would be necessary (graph 1). This uncertainty regarding the number of hikes that would be appropriate is normal, given that the Fed is insisting that its decisions will depend on the statistics released in the months to come.

Graph 1 – Most Federal Reserve officials predict key interest rates will rise between 0.25% and 0.75% by the end of 2015



* The total number of officials at the Federal Reserve who provided forecasts is 17.
Sources: Federal Reserve and Desjardins, Economic Studies

If the U.S. economy posts good results this summer, as we think it will, the trend in inflationary pressures could determine exactly when the Fed will begin its monetary tightening. After dropping significantly, U.S. all-items inflation returned to zero in May, and signs are that it will climb back up sharply towards the end of the year, once the effects of the gasoline price slump dissipate. But the weakness of the core personal consumption expenditures deflator is of greater concern to the Fed officials; they will want to see that statistic head up again before they start raising interest rates. Some signs of acceleration in wages suggest, however, that concerns about lasting limp inflation may wane within the next few months.

All things considered, we still predict that the Fed will begin its monetary tightening next September. But as Janet Yellen has pointed out many times, we should not expect the key interest rates to be raised steadily after that; rather, it will happen very gradually. After a second hike of 0.25% in October, we predict that the Fed will take a break lasting several months, after which it will raise key interest rates by just 0.75% per year in 2016 and 2017. This approach should help contain the upwards pressure on the U.S. dollar.

LONG-TERM YIELDS SHOULD MAINLY CONSOLIDATE THEIR UPWARDS MOVEMENT OF RECENT MONTHS

The prospect of monetary tightening in the United States in the near term raises some concerns for bond investors. However, in our opinion, the risk of a significant upwards movement in long-term bond yields is fairly low, for several reasons. First, these yields have already risen significantly in recent months; for example, the U.S. 10-year yield has climbed from around 1.65% at the end of January to over 2.40% recently. Second, the monetary tightening in the United States will be very gradual, and very few interest rate hikes are expected in the other advanced economies. Therefore, U.S. bonds will remain very attractive to investors, which should keep increases in yield in check. Third, the markets increasingly seem to be prepared for a gradual raising of U.S. key interest rates. Finally, the risk of a real surge in inflation that would light a fire under bond yields appears low, and will diminish further once the Fed begins its monetary tightening. Therefore, even though the U.S. 10-year bond yield could temporarily verge on 2.75% or even 3.00% in the months ahead, our target for the end of 2015 is just 2.50%.

THE SITUATION IN CANADA REMAINS MORE WORRISOME

While the data out of the United States have been more encouraging recently, that is not the case in Canada. The first half of 2015 has been even more challenging than previously thought, and this will hold the economy back from its full potential for longer. We are now predicting that the Bank of Canada will leave its key interest rates unchanged until December 2016. It could even cause another surprise by lowering its key interest rates at its July meeting.

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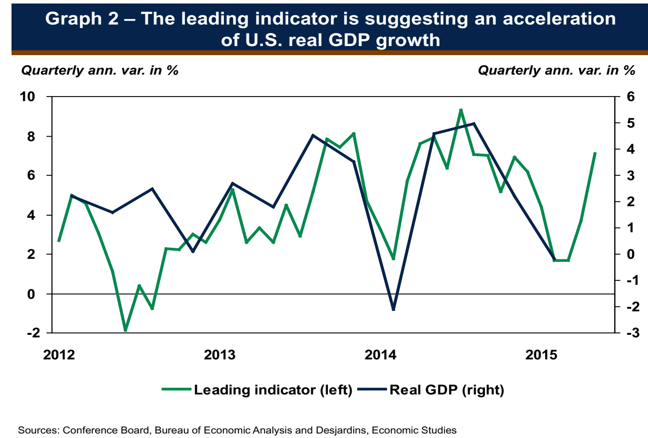
FEDERAL RESERVE

Interest rate hikes in the offing

- After the concern that was generated by the limpness of the U.S. economy at the beginning of the year, Federal Reserve (Fed) officials found, at the monetary policy committee's June 16-17 meeting, that things were improving. It is true that many economic indicators picked up during the spring. After the 0.2% contraction in first-quarter real GDP, based on the third estimate of national accounts (revised from -0.7%), we can now look forward to accelerating growth in the second quarter. This is also shown by the Conference Board's leading indicator (graph 2). Sources of growth should include foreign trade, residential investment and consumption.
- The scope of the rebound is as yet uncertain, however. Confidence is still weaker than at the very beginning of the year, and the negative effects of reduced investment in the oil sector and the strength of the U.S. dollar should continue to weigh the economy down. For these reasons, Janet Yellen indicated at a press conference that the Fed would wait for more decisive evidence that growth will be sustained before moving ahead with key interest rate hikes. In more concrete terms, these fond hopes on the Fed's part would take the form of healthy real GDP growth in the second quarter, strong growth in many indicators over the summer and a sustained pace of hiring. Only in the presence of all these conditions would the Fed consider raising its rates, which probably rules out such a possibility at the meeting scheduled for the end of July. The Fed will also have to be convinced that inflation will eventually head up. Right now, the signs are mixed. Core inflation as calculated by the personal consumption expenditures deflator (excluding food and energy) is still particularly soft (graph 3).
- Even if key interest rates do begin rising in September, that movement will no doubt be very gradual. The Fed wants to avoid the possibility of expectations of a fast reversal in monetary policy suddenly affecting the bond and mortgage markets. In fact, Janet Yellen has reiterated that key interest rates will have to remain below their long-term normal levels for some time to come. We should not expect systematic rate hikes like those that occurred during the previous monetary tightening cycle, between 2004 and 2006 (graph 4).

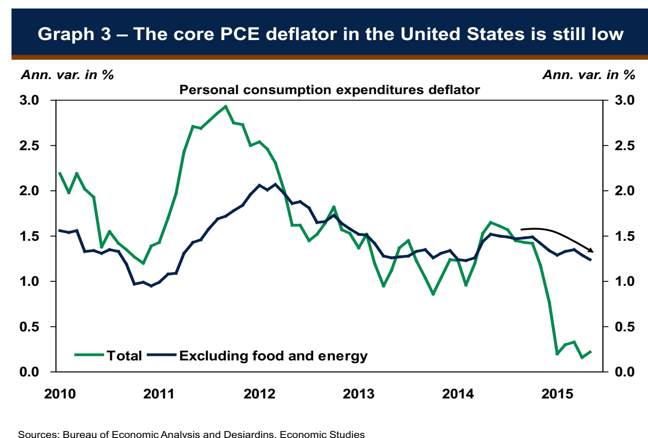
Forecasts: The Fed should start raising key interest rates in September 2015. After that, the pace of rate hikes will probably be slow and irregular. The top of the federal fund target range should stand at 0.75% by the end of the year, and at 1.50% by the end of 2016.

Graph 2 – The leading indicator is suggesting an acceleration of U.S. real GDP growth



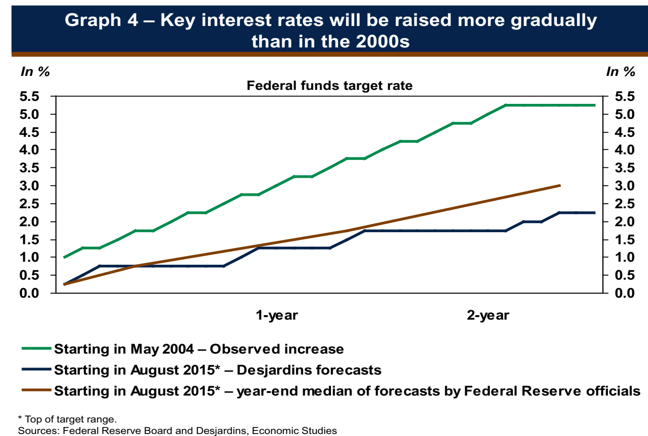
Sources: Conference Board, Bureau of Economic Analysis and Desjardins, Economic Studies

Graph 3 – The core PCE deflator in the United States is still low



Sources: Bureau of Economic Analysis and Desjardins, Economic Studies

Graph 4 – Key interest rates will be raised more gradually than in the 2000s



* Top of target range.
Sources: Federal Reserve Board and Desjardins, Economic Studies

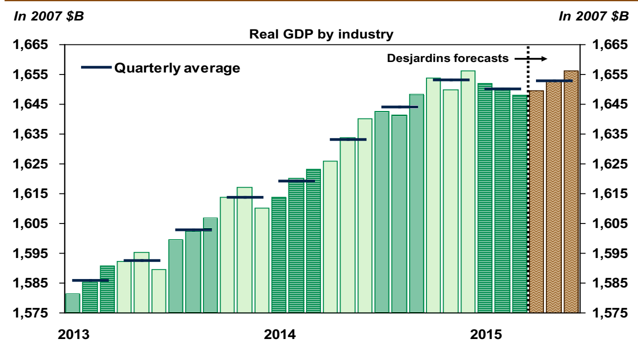
BANK OF CANADA

Interest rate hikes on the back burner for a bit

- The latest economic numbers from Canada are fairly disappointing. Real GDP contracted at an annualized quarterly rate of 0.6% in the first quarter of 2015, and the real GDP growth expected in the second quarter will probably be quite limited. Not only is the carryover low due to the decline in real GDP by industry in the early months of 2015 (graph 5), but many indicators struggled in April, including manufacturing and retail sales. Therefore, it will be difficult to achieve economic growth any greater than 1% in the second quarter.
- This prognosis is much bleaker than the Bank of Canada's (BoC) latest projections, which called for zero change in real GDP in the first quarter and a gain of 1.8% in the second quarter. We should therefore expect the monetary authorities to revise their forecasts downwards in the next *Monetary Policy Report* on July 15.
- The disappointing economic results of the first half of 2015 will have repercussions on the excess production capacity of the Canadian economy as a whole. With a production potential for 2015 evaluated by the BoC at 1.8%, the gap between actual production and its full potential will widen. According to our estimates, it will take around two years to win back the ground that was lost in the first half of 2015 and reach a level similar to that which was recorded at the end of 2014 (graph 6).
- As far as inflation is concerned, the recent trend in the Consumer Price Index has been pretty much in line with expectations. At 0.9%, the annual total inflation rate for May was below the low end of the BoC's target (1%) for the second month in a row. This reflects past slumps in gasoline prices, and it is just a matter of time before total inflation moves back within the BoC's target range (graph 7).
- Price movements are thus unlikely to pose any great concern for the monetary authorities in the months to come. Instead, the BoC will likely focus its attention on the vitality of the economic recovery in North America that is expected to start in the spring.

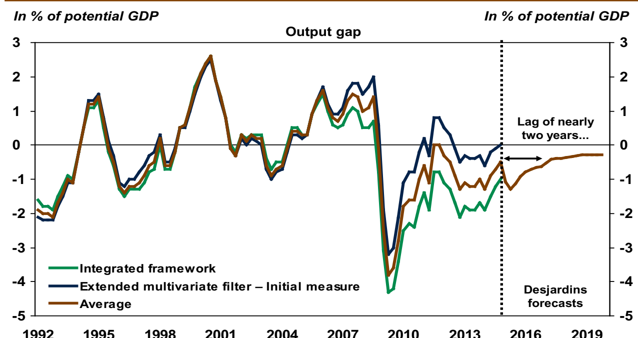
Forecasts: The frailty of the Canadian economy in the first half of 2015 and the persistence of numerous uncertainties will push the BoC to put off raising key interest rates until the fourth quarter of 2016. In the meantime, while the continuation of the status quo is the most probable scenario, we cannot entirely rule out the possibility of the monetary authorities ordering new interest rate cuts, should the expected recovery of the Canadian economy fail to materialize.

Graph 5 – A very small carryover for the second quarter in Canada



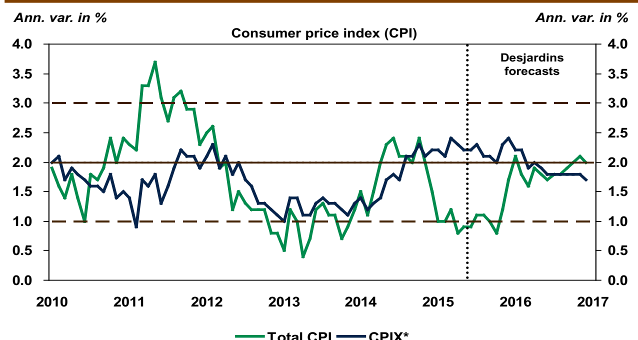
Sources: Statistics Canada and Desjardins, Economic Studies

Graph 6 – The return to full potential in Canada is delayed



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

Graph 7 – Total inflation in Canada should eventually climb back towards the median target



* Bank of Canada core index.
Sources: Statistics Canada and Desjardins, Economic Studies

OVERSEAS CENTRAL BANK

The economic data are improving

EUROPEAN CENTRAL BANK (ECB)

- Economic growth in the euro zone accelerated once again in the first quarter of 2015 (graph 8). The monetary easing measures adopted by the ECB in the past year appear to be producing positive effects as planned. The turnaround observed in the credit market is particularly encouraging. Several sources of uncertainty remain in the euro zone, however. Inflation is low, the unemployment rate is very high, and we are still waiting for significant reforms to support sustainable economic growth. Public finances are another important persistent issue, and a long-term solution must be found for Greece. In these conditions, the ECB will not be able to reduce its interventions for several more quarters.

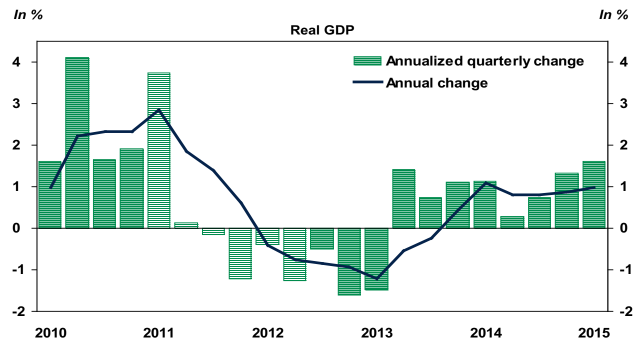
BANK OF ENGLAND (BoE)

- Economic activity slowed down a bit in the United Kingdom in the first quarter, but the latest data suggest that this was just a temporary phenomenon. Standing at close to 0%, inflation is still well below target, however. The BoE believes that temporary factors are responsible for this low inflation, but that some part of it may in fact stem from excess production capacity. Nevertheless, upwards movement in wages, which has intensified lately (graph 9), casts doubt upon that argument and brings back to centre stage the possibility that the BoE may soon begin tightening its monetary policy. That said, the appreciation of the pound sterling and the need to be assured of the sustainability of the economic recovery in Europe should encourage the BoE to bide its time for a few more quarters. An initial interest rate hike is expected in the first half of 2016.

BANK OF JAPAN (BoJ)

- The Japanese economy did well in the first quarter with annualized real GDP growth of 3.9%. A prominent feature of this performance was acceleration in investment, which bodes well for future quarters. Businesses that have seen increased profits thanks to the depreciation of the yen may finally be starting a new cycle of investment. Despite the improvement in economic data, it is too early to contemplate any disengagement on the part of the BoJ. The current monetary policy is still amply justified, especially since the inflation rate fell to nearly 0.6% in April, now that the artificial boost in prices due to last year's sales tax hike has come to an end (graph 10). The BoJ is nevertheless confident that it will reach its target of 2% in 2016 with the measures currently in place. It is interesting to note that Japanese inflation is still higher than those of the euro zone and of the United Kingdom.

Graph 8 – Euro zone economic growth is continuing to improve

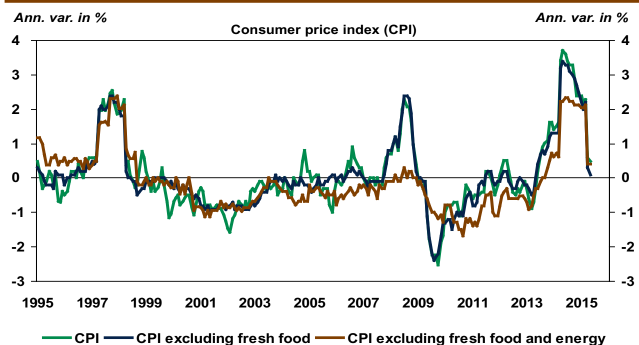


Sources: Eurostat and Desjardins, Economic Studies

Graph 9 – Wages are rising faster in the United Kingdom

Sources: Datastream and Desjardins, Economic Studies

Graph 10 – Japan's inflation rate has plunged due to the end of the sales tax hike effect



Sources: Datastream and Desjardins, Economic Studies

BOND MARKET

Europe sets the course

U.S. FEDERAL BONDS

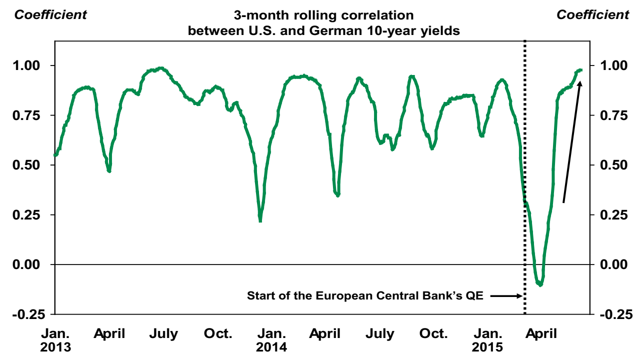
- Volatility was the order of the day for most of the second quarter. The ascent in bond yields in the United States was reminiscent of that which occurred in 2013, after Ben Bernanke suggested that monthly bond purchases might be reduced. But these comparisons were not sustained for long. Starting in the second month of the ascent, it became clear that this movement would not be as sweeping as the “taper tantrum” of two years ago (graph 11). After verging on 2.50% at the beginning of June, the 10-year yield settled down to hover within the 2.30% and 2.40% range. In contrast, the yield had reached 3.00% at this point of the ascent in 2013.
- While the markets are mindful of the fact that rate hikes are looming in the United States, mainly developments in Europe have influenced bond yield trends. The correlation between the German and U.S. 10-year yields solidified in the spring (graph 12), after suffering some distortions relating to the European Central Bank’s quantitative easing policy. The upturn in European bond yields was justified by the rebound in inflation and by several encouraging signs of growth.
- Still, we note that the link between the fundamental variables and bond yield trends is still broken. Intraday yield movements in global fixed income markets have widened, bringing to mind the gradual deterioration in liquidity that currently exists in financial markets. For example, even in the U.S. Treasury market, transaction volumes have been declining over the years (graph 13). The leaner inventories held by large brokerage firms (a consequence of more restrictive regulatory requirements) are partly to blame. Moreover, the unconventional and aggressive policies that have been adopted by many central banks are helping to create fertile ground for volatility. It would not be surprising if the markets were to remain erratic in the months to come.

Forecasts: We still believe that the Federal Reserve will start raising key interest rates in September, which should mainly be reflected in higher 2-year and 5-year yields in the second half of the year. Now that inflation expectations are at more usual levels, it will be more difficult for that factor to have any significant influence on yields. We expect the 10-year yield to wind up the year at 2.50%, i.e. a few points above its current level. However, given the degree of volatility, which is likely to remain high, we must allow for relatively wide risk brackets around our baseline scenario.

Graph 11 – Despite initial concerns, the ascent in U.S. bond yields was less brutal than in 2013

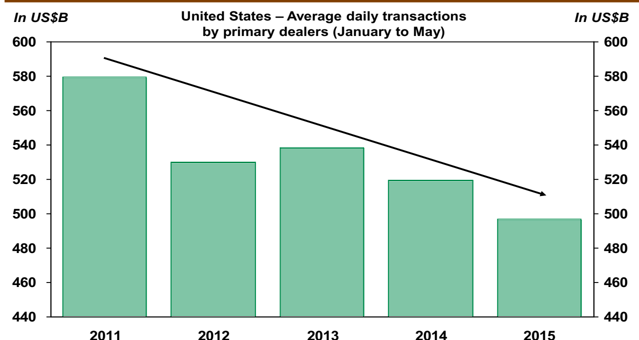
* Bottom of May 5, 2013; ** Bottom of January 30, 2015.
Sources: Bloomberg and Desjardins, Economic Studies

Graph 12 – The synchronicity between German and U.S. yields was quickly re-established



Sources: Bloomberg and Desjardins, Economic Studies

Graph 13 – Brokers’ Treasuries transaction volumes have been declining in recent years



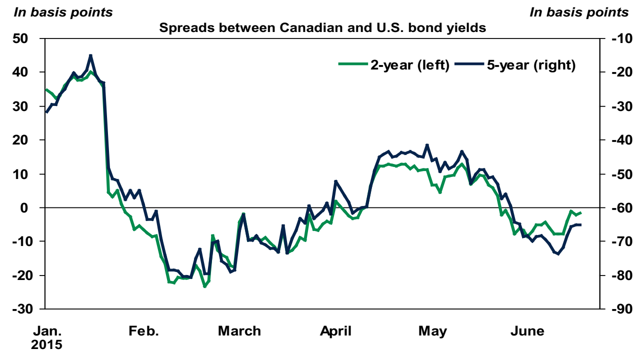
Sources: Federal Reserve of New York and Desjardins, Economic Studies

CANADIAN FEDERAL BONDS

- The Bank of Canada (BoC) put an end to the debate at the end of the winter. In its view, not only did the economy have all the monetary stimulation it needed to cope with the impact of falling oil prices, but U.S. growth and the weakened loonie were on track to exercise considerable influence over exports. But this scenario had yet to be confirmed, and the disappointing GDP data in the first quarter and the meagre carryover for the second quarter revived doubts. BoC Governor, Stephen Poloz, struck a somewhat less sanguine tone in June and admitted that the latest statistics have disappointed. He also was also less insistent on the idea that the economy had sufficient monetary support.
- As a result, spreads between Canadian and U.S. yields have narrowed again in recent weeks (graph 14). The markets are still hesitant to bet on a key interest rate cut on July 15, but another rate cut in 2015 is expected with a probability of around 31% (graph 15). In our opinion, however, a rate cut in July would be likely if signs of weakness in the economy were to accumulate between now and then. Because of the federal election in October, the BoC will probably be less inclined to take action at its September meeting, as the election campaign gets under way. Waiting until the October meeting could be ill advised if convincing signs fail to materialize in the coming weeks, especially since we know that the economy contracted in the first quarter and that it takes a long time for monetary policy effects to seep through the economy.
- That said, it is not yet time to give up on the original scenario. In the past few weeks, the U.S. economic data have been improving (graph 16), particularly those pertaining to consumption and automobile production. This could help the cause of Canadian exporters. In addition, after four straight monthly contractions, April's GDP seems to be heading towards positive growth. Finally, even though oil prices could soften somewhat in the months ahead, they will remain stable enough to avoid amplifying investment cutbacks in the oil industry.

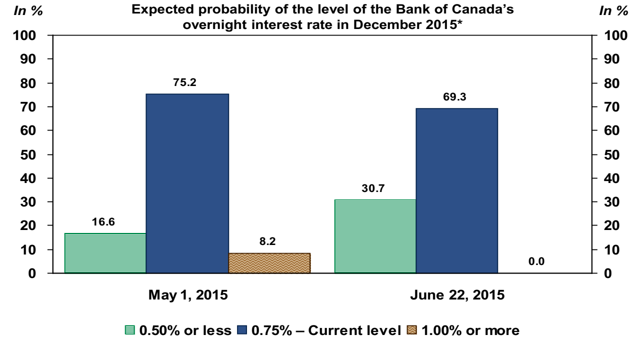
Forecasts: We are maintaining our core assumption of status quo for the BoC's overnight rate in 2015, while noting that the probability of an alternative scenario that would see the Bank call in another cut is still significant at this point. We are nonetheless adjusting our baseline scenario by postponing the normalization of interest rates to the very end of 2016. Canadian bonds are thus likely to outperform U.S. bonds, especially in the short end of the curve.

Graph 14 – Several bad news in Canada have helped narrow the spreads



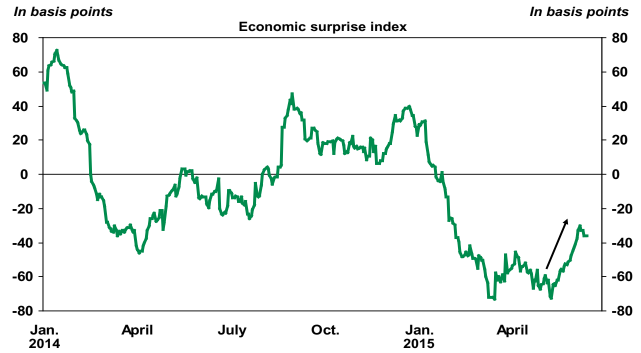
Sources: Bloomberg and Desjardins, Economic Studies

Graph 15 – The implicit probability of rate cuts has increased slightly since the beginning of May



* Based on overnight index swap rates.
Sources: Bloomberg and Desjardins, Economic Studies

Graph 16 – After months in the doldrums, U.S. economic indicators are picking up

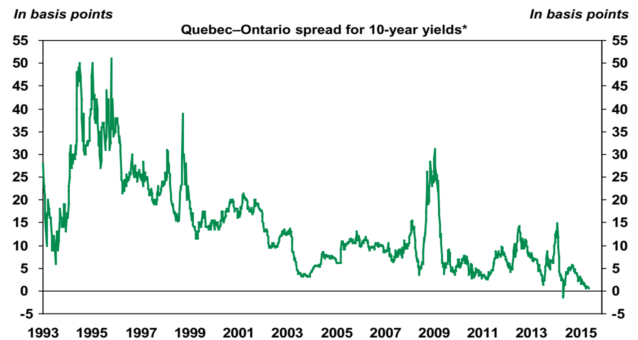


Sources: Bloomberg and Desjardins, Economic Studies

PROVINCIAL AND CORPORATE BONDS

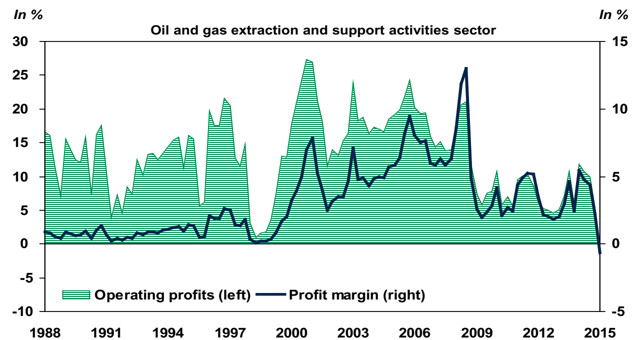
- Quebec bonds continued their solid performance in the spring, to the point where the spread of 10-year constant-maturity yields is very close to being eliminated. Apart from certain brief episodes, long-term Quebec yields have rarely fallen below those of Ontario (graph 17). The budget performances of the respective provincial governments obviously play an important role. Quebec has announced that it will achieve a balanced budget during the current fiscal year, whereas Ontario will take another two years to do so. Despite the fact that the growth outlook is more constructive in Ontario than in Quebec, it seems that the Quebec government's slogan of strict budgetary discipline sits well in financial markets. The province is taking advantage of this opportunity to issue its debt at a faster-than-average pace. As of June 16, it had already met 23% of its financing needs for the 2015–2016 fiscal year, compared with a Canada-wide average of 18%.
- Meanwhile, times are tough for Alberta, which has watched bond yield spreads widen as a result of the oil price slump. Some degree of stabilization was observed in the spring, but we note that long-term yields are still in excess of those of British Columbia, a rather rare phenomenon in the past few years. We have revised our growth forecasts for Alberta downwards, and are now expecting real GDP to contract by 0.3% in 2015. The official data on profitability have shown the first instance of negative operating profit margins in the Canadian oil sector since these data started to be compiled, in 1981 (graph 18). The impact on investment could take some time to dissipate completely. Additionally, the political climate will be less hospitable for the oil sector. The new NDP government has shown that it is determined to reform the royalty regime and to increase tax rates for corporations, besides toughening environmental standards. In short, Alberta's spreads will struggle to narrow, especially since budget uncertainty will remain significant, at least until the NDP government tables its budget, which is not planned until the fall.
- After vast quantities of issuances in the first quarter, buyers' appetite for corporate bonds started to wane at the beginning of the second quarter. The increase in sovereign yields risked constituting another impediment for this asset class. However, while it is true that spreads have widened slightly, the scope has been relatively modest. This also holds true for high-yield bonds, whose total return index is showing just a slight pullback (graph 19), in contrast with the slump of a year ago, which was triggered by the oil price collapse. Right now, everything appears to be under control, but we should not minimize the risk of violent swings. Despite the large quantity of corporate debt issued, the liquidity of these markets has shrunk considerably, since regulatory requirements have led the large brokerage institutions to reduce their footprint in the market making of riskier assets.

Graph 17 – The spread between Quebec and Ontario bond yields has rarely been so narrow



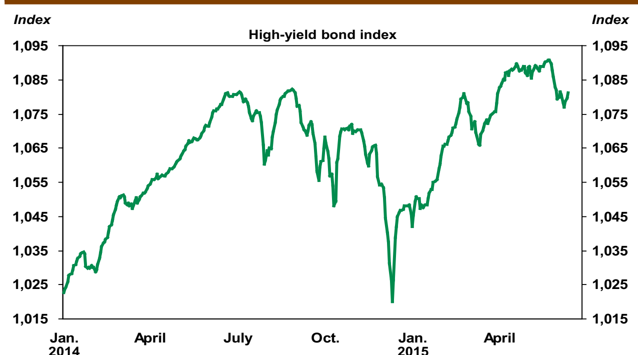
* Constant-maturity yields.
Sources: Desjardins, Capital Markets and Desjardins, Economic Studies

Graph 18 – The troubles of the energy sector are confirmed by official profitability data



Sources: Statistics Canada and Desjardins, Economic Studies

Graph 19 – Far from a disaster in the high-yield space



Sources: Bank of America Merrill Lynch and Desjardins, Economic Studies

Table 1
Key interest rates

End of period in %	2014 Q1	Q2	Q3	Q4	2015 Q1	Q2f	Q3f	Q4f	2016 Q1f	Q2f	Q3f	Q4f
United States												
Federal funds	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	0.75	1.00	1.25	1.50
Canada												
Overnight funds	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00
Euro zone												
Refinancing rate	0.25	0.15	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
United Kingdom												
Base rate	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.25
Japan												
Overnight funds	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 2015			
9	Bank of Korea	s.q.	1.75
15	European Central Bank	s.q.	0.05
15	Bank of Canada	s.q.	0.75
29	Reserve Bank of New Zealand	s.q.	3.50
29	Bank of Sweden	s.q.	-0.25
29	Bank of Brazil	+50 b.p.	13.25
29	Federal Reserve	s.q.	0.00 / 0.25
30	Bank of Japan	---	---
30	Bank of Mexico	s.q.	3.00
May 2015			
5	Reserve Bank of Australia	-25 b.p.	2.00
7	Bank of Norway	s.q.	1.25
11	Bank of England	s.q.	0.50
15	Bank of Korea	s.q.	1.75
21-22	Bank of Japan	---	---
27	Bank of Canada	s.q.	0.75
June 2015			
2	Reserve Bank of Australia	s.q.	2.00
3	European Central Bank	s.q.	0.05
3	Bank of Brazil	+50 b.p.	13.75
4	Bank of England	s.q.	0.50
4	Bank of Mexico	s.q.	3.00
10	Bank of Korea	-25 b.p.	1.50
10	Reserve Bank of New Zealand	-25 b.p.	3.25
17	Federal Reserve	s.q.	0.00 / 0.25
18	Bank of Norway	-25 b.p.	1.00
18	Swiss National Bank	s.q.	-0.75
18-19	Bank of Japan	---	---

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

Table 3
Coming soon

Date	*Central Bank*
July 2015	
2	Bank of Sweden
7	Reserve Bank of Australia
8	Bank of Korea
9	Bank of England
14-15	Bank of Japan
15	Bank of Canada
16	European Central Bank
22	Reserve Bank of New Zealand
23	Bank of Mexico
29	Bank of Brazil
29	Federal Reserve
August 2015	
4	Reserve Bank of Australia
6	Bank of England
6-7	Bank of Japan
13	Bank of Korea
September 2015	
1	Reserve Bank of Australia
2	Bank of Brazil
3	European Central Bank
3	Bank of Sweden
3	Bank of Mexico
9	Reserve Bank of New Zealand
9	Bank of Canada
10	Bank of England
10	Bank of Korea
14-15	Bank of Japan
17	Swiss National Bank
17	Federal Reserve

Source: Desjardins, Economic Studies

Table 4
United States: fixed income market

End of period in %	2014				2015				2016			
	Q1	Q2	Q3	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Key rate												
Federal funds	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	0.75	1.00	1.25	1.50
Treasury bills												
3-month	0.05	0.04	0.02	0.04	0.03	0.00	0.45	0.60	0.65	1.00	1.10	1.50
Federal bonds												
2-year	0.39	0.42	0.56	0.63	0.54	0.70	1.00	1.20	1.30	1.50	1.65	1.80
5-year	1.71	1.60	1.77	1.64	1.37	1.70	1.90	2.00	2.05	2.20	2.30	2.45
10-year	2.73	2.52	2.51	2.17	1.93	2.40	2.45	2.50	2.55	2.65	2.75	2.90
30-year	3.56	3.34	3.21	2.75	2.54	3.20	3.20	3.20	3.20	3.25	3.30	3.35
Yield curve												
5-year - 3-month	1.66	1.56	1.75	1.60	1.34	1.70	1.45	1.40	1.40	1.20	1.20	0.95
10-year - 2-year	2.34	2.09	1.95	1.54	1.39	1.70	1.45	1.30	1.25	1.15	1.10	1.10
30-year - 3-month	3.51	3.30	3.19	2.71	2.51	3.20	2.75	2.60	2.55	2.25	2.20	1.85

f: forecasts
Sources: Datastream and Desjardins, Economic Studies

Table 5
Canada: fixed income market

End of period in %	2014				2015				2016			
	Q1	Q2	Q3	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Key rate												
Federal funds	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00
Treasury bills												
3-month	0.89	0.94	0.92	0.92	0.56	0.60	0.65	0.65	0.70	0.75	0.80	1.15
Federal bonds												
2-year	1.07	1.10	1.12	1.01	0.50	0.60	0.75	0.90	1.00	1.10	1.25	1.45
5-year	1.71	1.53	1.63	1.34	0.76	1.00	1.25	1.45	1.55	1.65	1.80	2.00
10-year	2.46	2.24	2.15	1.79	1.36	1.85	1.90	1.90	1.95	2.05	2.20	2.40
30-year	2.96	2.78	2.67	2.34	1.98	2.45	2.50	2.55	2.60	2.65	2.70	2.75
Yield curve												
5-year - 3-month	0.82	0.59	0.71	0.42	0.20	0.40	0.60	0.80	0.85	0.90	1.00	0.85
10-year - 2-year	1.39	1.14	1.03	0.78	0.86	1.25	1.15	1.00	0.95	0.95	0.95	0.95
30-year - 3-month	2.07	1.84	1.75	1.42	1.42	1.85	1.85	1.90	1.90	1.90	1.90	1.60
Spreads (Canada - U.S.)												
3-month	0.84	0.90	0.90	0.88	0.53	0.60	0.20	0.05	0.05	-0.25	-0.30	-0.35
2-year	0.68	0.68	0.56	0.38	-0.04	-0.10	-0.25	-0.30	-0.30	-0.40	-0.40	-0.35
5-year	-0.00	-0.07	-0.14	-0.30	-0.61	-0.70	-0.65	-0.55	-0.50	-0.55	-0.50	-0.45
10-year	-0.27	-0.28	-0.36	-0.38	-0.57	-0.55	-0.55	-0.60	-0.60	-0.60	-0.55	-0.50
30-year	-0.60	-0.56	-0.54	-0.41	-0.56	-0.75	-0.70	-0.65	-0.60	-0.60	-0.60	-0.60

f: forecasts
Sources: Datastream and Desjardins, Economic Studies