

# The Yield Curve

January 27, 2015

## 2015 is looking to be a tough year for central banks

### HIGHLIGHTS

- The steep downwards trend in bond yields that was observed throughout 2014 has continued in recent weeks, taking some of them to new, historic lows.
- The Swiss National Bank and the Bank of Canada shocked markets by suddenly changing their monetary policy.
- Given that the climate of uncertainty and low energy prices will likely continue for a while longer, Canadian monetary authorities will probably want to cut their key interest rates again by 0.25% at their next meeting on March 4.
- The European Central Bank unveiled a sovereign bond purchase program that satisfied investors' expectations. While not a panacea for the European economy, it will keep the interest rates and the euro at low levels.
- The door is still open to hikes in U.S. key interest rates around the middle of 2015. However, given the international situation and weak wage growth, our new scenario defers the first rate hike to September 2015.

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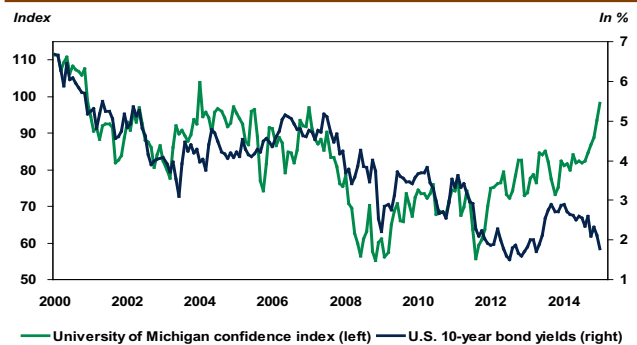
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### Editorial

The steep downwards trend in bond yields that was observed throughout 2014 has continued in recent weeks, taking some of them to new, historic lows. As was the case at the end of 2014, the bond market has reaped benefits from the ongoing correction in oil prices, which has pulled inflation outlooks down considerably and made it almost inevitable that the European Central Bank (ECB) would announce a sovereign bond purchase program.

The drop in yields was also underpinned by a surge of worry; both commentators and investors seemed to be attaching more importance to the negative effects of the collapse in oil prices than to the positive effects. A few disappointing data from the United States, including slowing wage growth and retail sales in December, contributed to this negative sentiment. However, the jump of U.S. consumer confidence to its highest point since 2004 demonstrated that households had a far more positive perception of the current situation (graph 1).

**Graph 1 – Contrary to investors, U.S. households are brimming with confidence**



Sources: Datastream, University of Michigan and Desjardins, Economic Studies

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### **SUDDEN ACTION BY THE SWISS NATIONAL BANK AND THE BANK OF CANADA**

In such circumstances, one might have thought that the financial authorities would attempt to calm the waters. Some officials, especially at the Federal Reserve (Fed), pointed out that plunging oil prices were good news for the U.S. economy, and that a temporary drop in inflation caused by a collapse in energy prices was not a disquieting development that would open the door to real deflation, i.e. a lasting and generalized slump in prices.

But actions speak louder than words, and certain actions have recently sparked worry among investors. The Swiss National Bank (SNB) captured all the attention on January 15 when it suddenly announced it was abandoning its currency floor of 1.20 franc/€. A few days earlier, SNB officials were still maintaining that this floor was its key monetary policy instrument and that they would defend it with the utmost determination. The SNB attempted to justify its reversal of position by saying that the depreciation of the euro against the other currencies had reduced the overvaluation of the franc. In reality, it was the downwards pressure on the euro, that forced the SNB to increase its reserves, that decided it to throw in the towel. The spectacular spike in the franc that ensued is likely to be extremely painful for the Swiss economy, and has destabilized the financial markets. Among other things, it has pushed certain players—who had staked their bets on the SNB's determination—towards bankruptcy. This episode is likely to increase investor scepticism with respect to all central banks, and has already put more pressure on other central banks that peg their currencies, such as that of Denmark.

After the Swiss episode, the question became: which would be the next central bank to give us a surprise? The answer came quickly, when the Bank of Canada (BoC) suddenly cut its key interest rate on January 21, judging that it must respond immediately to the dramatic plunge in oil prices. At its previous meetings, the BoC had emphasized the increased risk caused by the high debt levels of Canadian households. A change of tone appeared to be inevitable, and the BoC could have clearly opened the door to rate cuts at the March meeting if it was concerned. Such sudden action as it took is surprising, however, especially since the BoC's official economic forecasts are still relatively favourable.

### **THE EURO ZONE AND JAPANESE MONETARY POLICIES NEAR THEIR LIMITS**

The ECB adopted a very different tactic, by clearly signalling in recent months what conditions would induce it to further ease its monetary policy. On January 22, following further deterioration of the inflation outlook, it announced

a considerable increase in its financial security purchasing programs (which will now include government bonds). While this program satisfies investors' expectations, it does not constitute a panacea for the European economy, since the level of sovereign bond yields in Europe has not been an obstacle to growth for many quarters now. The main risk facing the ECB is that it will not be able to do much more if economic outlooks continue to disappoint. Thus its position could come to resemble that of the Bank of Japan, which has been extremely aggressive in recent quarters without achieving any lasting effect on the performance of the Japanese economy. Fortunately for both Europe and Japan, chances are that the sharp depreciation of the currency and the cost of energy imports will promote a slight acceleration in economic growth this year.

### **THE FED SHOULD STAY THE COURSE**

Worry may be the order of the day just about everywhere around the world, but the situation in the United States is far more favourable. Under these circumstances, the door is still open to hikes in U.S. key interest rates around the middle of 2015. Given the situation in other parts of the world and in the financial markets, Fed officials could be tempted to keep their key interest rates at floor level throughout 2015, especially since inflation will temporarily be very low. But that strategy would entail a significant risk: it would foster sentiment among many investors that the global economy has entered a long stagnation phase, and that key interest rates will never head up again. Such a perception, which appears already to be partly reflected in the extremely low level of bond yields, would be far more dangerous for medium-term inflation expectations than the current slump in oil prices.

Fed officials appear to be aware of this risk, and we are still counting on monetary tightening to begin this year. However, given the international situation and weak wage growth, our scenario defers the first rate hike to September 2015. This implies that North American bond yields will remain very low for a while longer, but the U.S. 10-year yield could end the year at around 2.50%.

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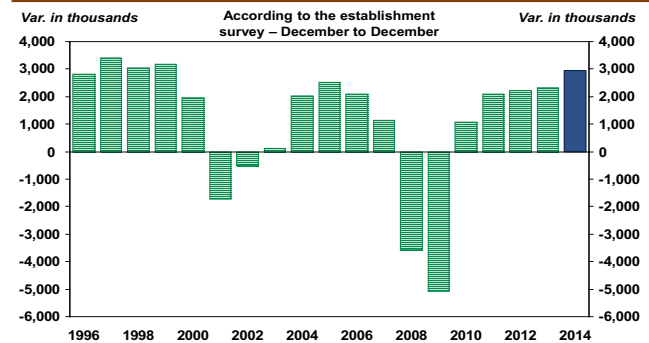
# FEDERAL RESERVE

## The Federal Reserve will remain “patient” for a large part of 2015

- At a time when many central banks appear to be determined to make a splash, the Federal Reserve (Fed) is taking “patience” as its watchword. That is the term it used in December to replace its previous forward-looking statement, which said that it would wait for a considerable period between the end of its bond-buying program and a first key rate hike. The quantitative easing policy drew to a close in the fall, and Janet Yellen and her colleagues needed to adopt a message better suited to the circumstances. Patience will give the Fed some leeway for responding to economic developments. The Fed will be able to take time to carefully assess the trends in economic growth and employment on one hand, and prices on the other hand.
- On the good news front, annualized real GDP growth should approach 3% in the last quarter of 2014, after very strong gains of 4.6% in the spring and 5.0% in the summer. Furthermore, the U.S. economy should get a real boost in 2015 from the lower gasoline prices, and we can already see remarkable improvement in household confidence. In the jobs department, the United States has had its best year since 1999 (graph 2), and 2015 promises to be just as good.
- With respect to inflation, things are a bit more worrisome. It is being severely affected by the lower gasoline prices. The national average price at the pump fell below US\$2 in mid-January. The 12-month growth of the consumer price index was a mere 0.8% in December, and it is likely to become negative in January and stay there until the summer (graph 3). Fortunately, core inflation (which excludes food and energy) should remain more stable, which will comfort the Fed in its “patience”. In fact, the minutes of the December meeting suggested that if core inflation does not budge too much, and the Fed continues to think that the change in prices will get close to the 2% target, a decline in the all-items index would not prevent a future key interest rate hike.
- However, one factor that links the job market and inflation is proving to be particularly disappointing: slow wage growth. In December, the annual change in the average hourly wage fell to its lowest level since November 2012. In the absence of any acceleration in wages during the year, it is hard to imagine that the Fed could start normalizing its key interest rates (graph 4). Under these conditions, we suspect that the Fed’s “patience” will last a little longer than we had predicted in our previous scenarios. And the rate hike, when it comes, will also be more moderate.

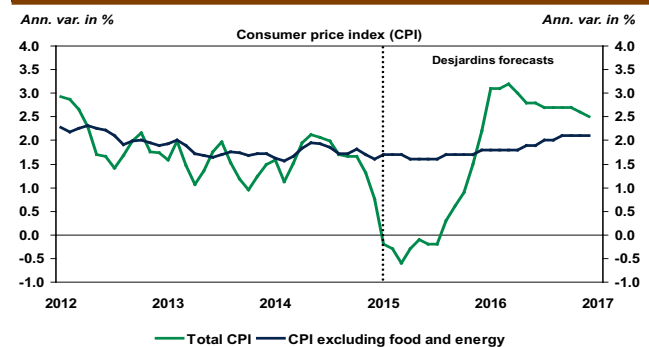
**Forecasts:** The Fed should start raising key interest rates in September 2015. The top of the federal fund target range should stand at 1.00% at the end of the year.

**Graph 2 – 2014 was an excellent year for job growth in the United States**



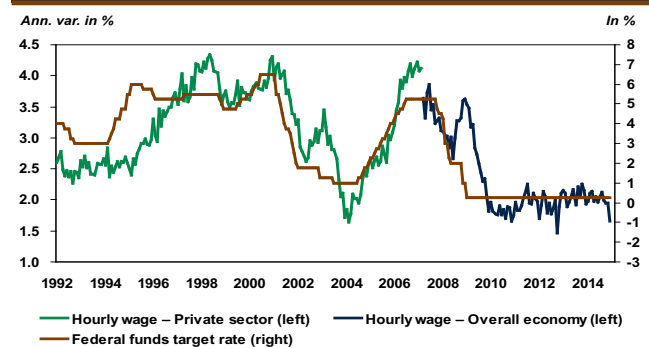
Sources: Bureau of Labor Statistics and Desjardins, Economic Studies

**Graph 3 – Inflation will drop into negative territory for several months in the United States**



Sources: Bureau of Labor Statistics and Desjardins, Economic Studies

**Graph 4 – Without stronger wage growth, the Federal Reserve will be reluctant to start raising key interest rates**



Sources: Federal Reserve Board, Bureau of Labor Statistics and Desjardins, Economic Studies

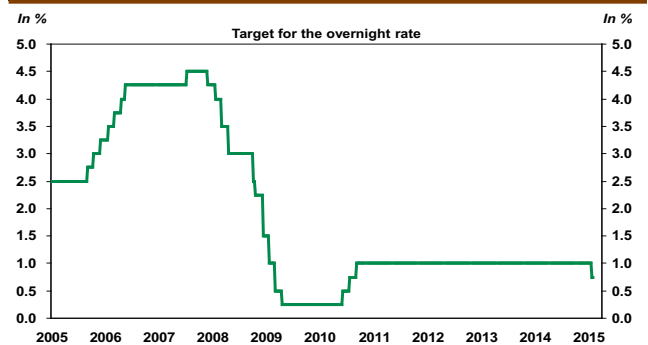
# BANK OF CANADA

## Another interest rate cut is possible

- The Bank of Canada (BoC) gave us quite a surprise on January 21 when it announced a 25 basis point cut in its key interest rates (graph 5). Not only were all the forecasters consulted by the Bloomberg firm expecting another status quo, but the financial markets were not anticipating such a decision either.
- The monetary authorities justified this rate cut by the necessity of stimulating economic growth in the country, in a situation where the plunge in oil prices is casting dark shadows over outlooks for Canadian real GDP.
- There are still many uncertainties to contend with. On one hand, the oil price slump could continue, or even intensify, in the months ahead. On the other hand, the positive effects of lower oil prices, improving U.S. demand and the depreciation of the loonie on consumer spending and non-commodity exports could be weaker than expected. Therefore, the risks for economic growth and inflation appear to be weighted more on the downside.
- Our scenario nevertheless calls for energy prices to stabilize in the short term, and then head up to some degree starting in mid-2015. Accordingly, after disappointing in the first half of the year, Canada's real GDP growth should accelerate in the second half of 2015 (graph 6). That said, our forecast for the year as a whole has recently been revised downwards, to 2.2%. This prediction is similar to that of the BoC, which anticipates 2.1% growth in 2015.
- The BoC estimates that the surplus production capacity stood between 0.25% and 1.25% in the fourth quarter of 2014. A return to full potential is expected towards the end of 2016.
- As expected, a significant drop in gasoline prices and negative seasonal factors triggered a 0.7% decline in the all-items consumer price index in November, for an annual change from 2.0% to 1.5% (graph 7).

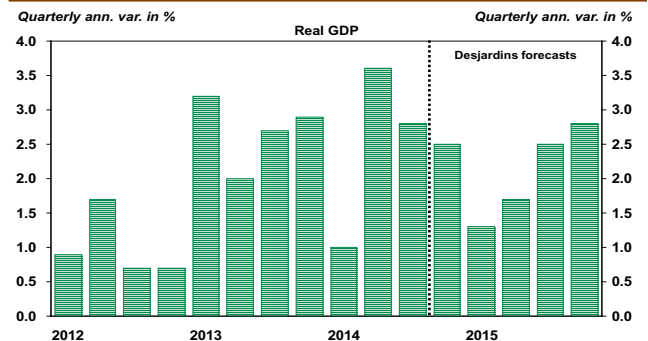
**Forecasts:** Given that the climate of uncertainty and low energy prices will likely continue for a while longer, the monetary authorities will probably want to cut their key interest rates again by 0.25% at their next meeting on March 4. But there is not much room to lower them any further, in particular due to the imbalances in the household sector. Therefore, the monetary authorities will likely return to the status quo starting in April, until at least 2016.

**Graph 5 – First change to key interest rates in more than four years**



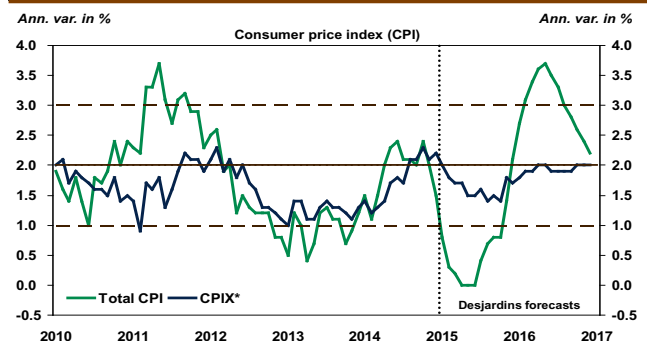
Sources: Bank of Canada and Desjardins, Economic Studies

**Graph 6 – Canada's economic growth will be affected by the slump in oil prices**



Sources: Statistics Canada and Desjardins, Economic Studies

**Graph 7 – The swings in gasoline prices will impact Canada's inflation rate**



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

# OVERSEAS CENTRAL BANK

## The European Central Bank will buy sovereign bonds

### EUROPEAN CENTRAL BANK (ECB)

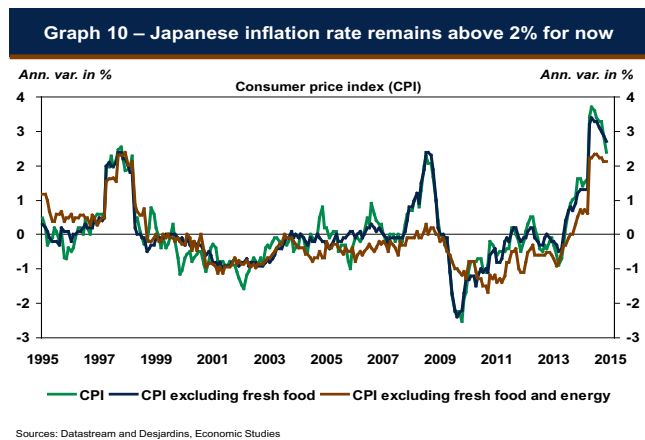
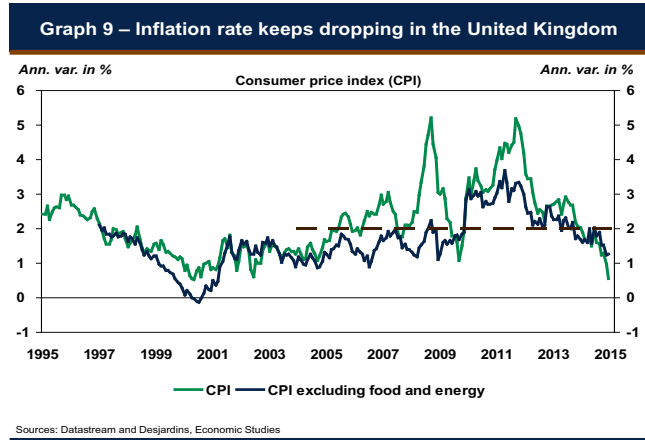
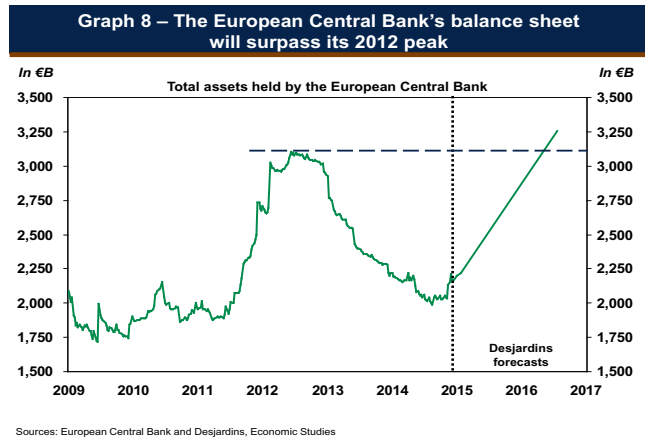
- Sovereign bond purchases were announced at the January 22 monetary policy meeting. This measure will officially get underway in March, and should extend into September 2016 at the rate of €60B per month, which will include purchases of covered bonds, already planned, and agency securities. In all, the security purchases will enable the ECB to expand its balance sheet by about €1,100B, which will bring it slightly above the peak that was reached in 2012 (graph 8). This forecast does not include a likely contribution from the Targeted Longer Term Refinancing Operations (TLTRO), which could become more popular since the financing rate has been revised downwards by the ECB.
- These measures are having a very visible effect on the various market interest rates in Europe and on the euro. But expectations prior to the January decision were very high, and consequently, many financial variables already included the effect of a sovereign bond purchase program before it was officially announced. Nevertheless, this will make it possible to consolidate the recent trends, which is a positive for the future unfolding of events in the euro zone. The ECB will have to adopt a wait-and-see attitude for several months, while it evaluates progress in the economy and in inflation.

### BANK OF ENGLAND (BoE)

- The economic situation is still far better in the United Kingdom than in the euro zone, but this has not prevented expectations of monetary tightening from dwindling. Concerns have been raised in connection with the economic troubles in the euro zone, and the British inflation rate is not escaping the downwards trend observed in many countries (graph 9). Fading expectations of monetary tightening also reflect the more cautious tone adopted by the BoE. The minutes of the January meeting show that the two dissidents who had been voting for interest rate hikes have joined the consensus on the status quo. It now seems more likely that the BoE will wait until the end of 2015 to begin its monetary tightening.

### BANK OF JAPAN (BoJ)

- The BoJ announced other, more marginal measures at its January 21 meeting. It extended lending programs to financial institutions by one year, and raised the maximum amount outstanding of its fund-provisioning as a whole from ¥7,000B to ¥10,000B. Even though the BoJ is a bit more optimistic about Japan's economic growth, it might still have to extend or increase its easing measures between now and the end of the year. The inflation rate, which stands above 2% (graph 10), will probably drop sharply in April when the base effect of the sales tax hike comes to an end.



# BOND MARKET

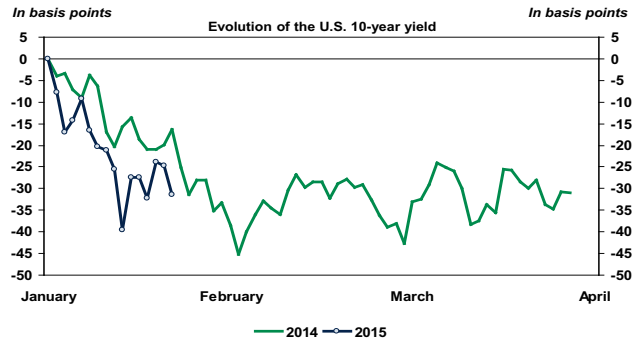
## Bond yields have reached new lows nearly everywhere

### U.S. FEDERAL BONDS

- Continuing their downwards trend of 2014, U.S. bond yields started off the year in sharp decline, in a context of resurging risk aversion. In fact, the pattern of yields resembles the one of this time of the year last year (graph 11). And as in early 2014, real yields have guided the downward trend (graph 12). The momentum of the U.S. economy remains solid, however, and mainly external factors have influenced yields in the United States. We also note that the weakness of yields in North America bears no comparison with the situation in those developed countries where the central banks are expanding their balance sheets. A glance at the bond yields of the G7 countries shows that the 10-year yields in Germany, France and Japan are languishing at less than 0.75% (graph 13). Italy stands apart, due to its less-than-stellar credit rating (BBB- with Standard & Poor's) and its massive debt, but remember that precisely two years ago, its 10-year yield stood above 4.0%.
- We recently adjusted our scenarios to incorporate a much more conservative normalization in long-term yields. For shorter maturities, we could see sharp reversals, however. Federal funds futures contracts are showing that investors are now anticipating just one interest rate hike, towards the end of the year, whereas Federal Reserve (Fed) officials do not seem ready to move away from their message pointing at mid-2015.
- The President of the San Francisco Fed, John Williams, stated in January that he expected that, towards the middle of this year, the Fed would reach the point of discussing interest rate hikes. Comments made by John Williams carry considerable weight, since his opinions often reflect the state of mind of a majority of FOMC members. While we now anticipate that the Fed will start its monetary normalization process in September, we still think that the recent comments by influential officials do not support the scenario on which the markets are counting.

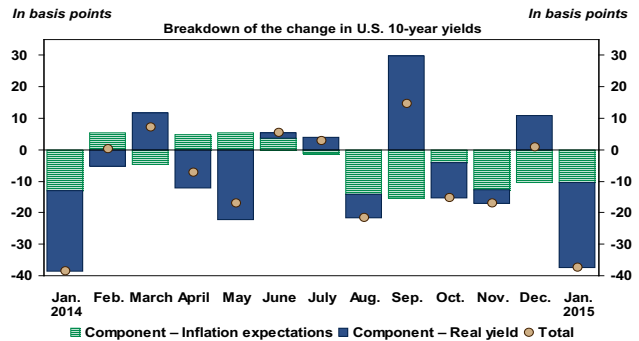
**Forecasts:** We have shifted our target for the first interest rate hike by the Fed by two meetings, to September 2015. Our yield target for year-end stands at 2.50%, a significant revision from the 3.20% that we were predicting in December. Rising yields will probably be influenced by a stabilization of oil prices, followed by modest growth in 2015. This should help inflation expectations firm up significantly.

**Graph 11 – The start of the year bears a strange resemblance to last year for the bond markets**



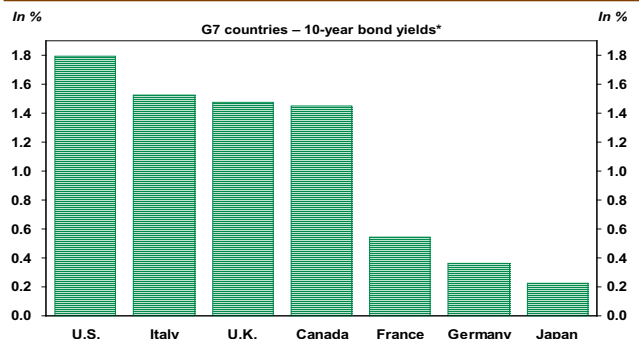
Sources: Bloomberg and Desjardins, Economic Studies

**Graph 12 – Both the real component and implicit expectations of inflation have dropped**



Sources: Bloomberg and Desjardins, Economic Studies

**Graph 13 – Low as they may be, the U.S. yields are still the highest in the G7**



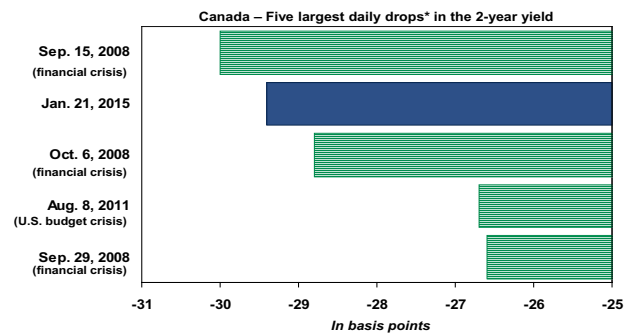
\* As of January 23, 2015.  
Sources: Bloomberg and Desjardins, Economic Studies

**CANADIAN FEDERAL BONDS**

- The surprise cut in the overnight interest rate by the Bank of Canada (BoC) last week was followed by a particularly violent reaction in short-term bond yields, and with good reason. Since 2000, the BoC has rarely taken such action without forewarning. The last instance dates back to October 2008, shortly after the collapse of Lehman Brothers, in a concerted international action. Illustrating the parallel, the drop in the Canadian 2-year yield that occurred on January 21 was in a magnitude reminiscent of that episode (graph 14). The Canadian 2-year yield now stands at just a few basis points above that of its U.S. counterpart.
- Investors who were positioned for a steepening of the curve were dealt a good hand. The 2/10 spread jumped to 96 basis points, its widest point since last November. The 5/10 spread reached its widest point since July (graph 15). It now remains to be seen whether this trend can continue. We think it can. The BoC has never taken such an action without following up on it, and it is very unlikely that the uncertainty surrounding the impact of the oil shock will dissipate entirely before the next monetary policy meeting.
- According to our scenario, the price of WTI (West Texas Intermediate) oil will not reach the US\$60 threshold, on which the BoC's forecast is based, until the summer. This means that the BoC could revise its scenario further downwards. The government budget season (federal and provincial) will be in full swing a few weeks from now, and we cannot rule out the possibility that some finance ministers announce bad news. The BoC has not changed its expectations about the contribution to growth from government spending in January (graph 16), but new, less favourable developments could necessitate an adjustment.

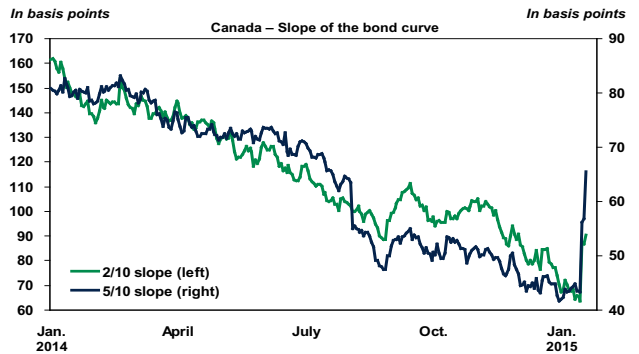
**Forecasts:** The BoC will probably cut interest rates again, and in the short term, investors should continue to favour steepening positions. The yields all along the Canadian curve will stay below U.S. yields. However, a gradual shift higher is predicted, starting in the second quarter. The effects of the weaker currency and the impact of monetary easing should promote renewed growth in the second half of the year, while the negative effects of a decline in investment will begin to fade. Still, the 10-year yield will probably not get back above the 2.0% mark before the second quarter of next year.

**Graph 14 – The reaction of the Canadian 2-year yield was of a magnitude that brings to mind a crisis situation**



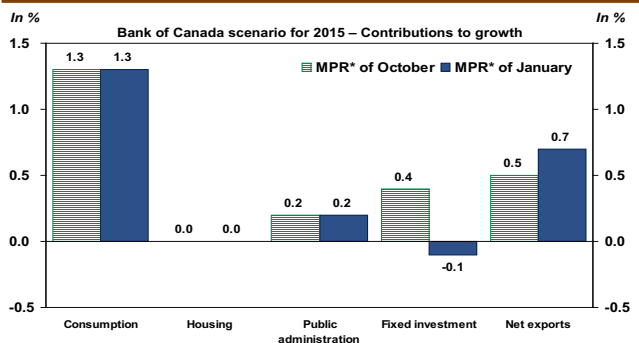
\* Since 2005. Sources: Bloomberg and Desjardins, Economic Studies

**Graph 15 – Sharp steepening of the Canadian curve following the unexpected move by the Bank of Canada**



Sources: Bloomberg and Desjardins, Economic Studies

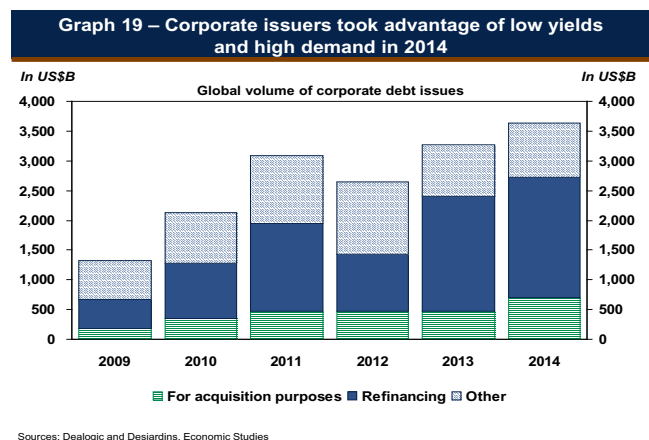
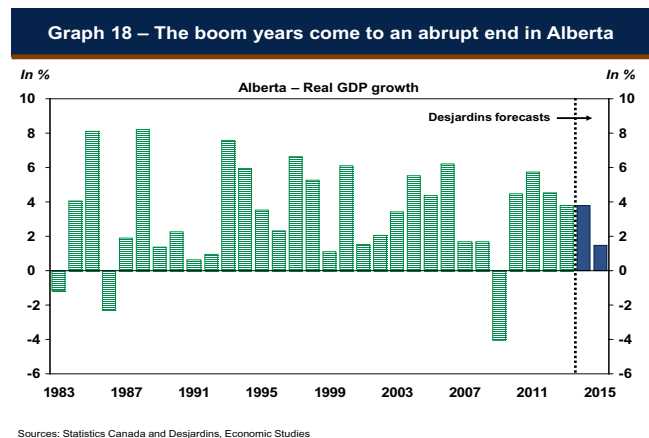
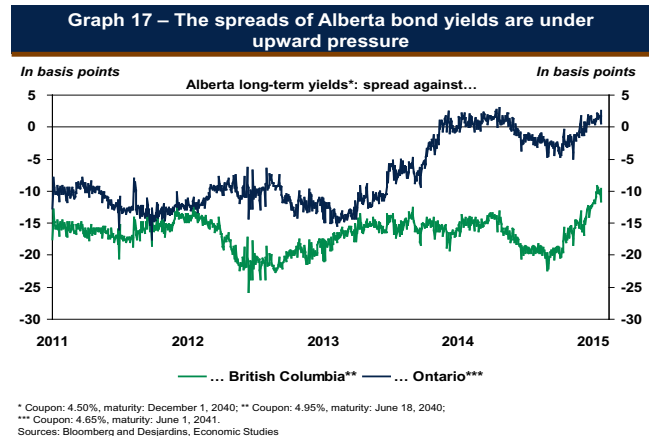
**Graph 16 – The downwards revisions to the Bank of Canada's scenario focused exclusively on investment**



\* Bank of Canada; \*\* Monetary Policy Report. Sources: Bank of Canada and Desjardins, Economic Studies

**PROVINCIAL AND CORPORATE BONDS**

- In the middle of December, it was still early to panic about the outlooks for Alberta, but we must admit that since then, things have taken a quick turn for the worse. The price of a barrel of WTI (West Texas Intermediate) oil, which stood at US\$60 on December 10, has plummeted to hover within a range of US\$40 to US\$50. At the beginning of January, the Premier of Alberta, Jim Prentice, announced that the province was facing a deficit of approximately C\$500M for the current year, a sharp reversal from the C\$933M surplus that was shown in the quarterly budget update, presented just a few weeks earlier. The Premier also indicated that the province could remain in a deficit until 2018. Alberta bonds have taken a hit as a result, and the spreads compared with Ontario and British Columbia have widened considerably (graph 17).
- While we do foresee some stabilization in oil prices, it will not be enough to repair the damage to public finances caused by the recent dizzying plunge. We must keep in mind that royalty revenues account for approximately 21% of the government's income (24% if we exclude federal transfers). On top of the effect of more modest royalties, revenues will be driven down by the economic slowdown. As it stands, we anticipate real GDP growth of only about 1.5% in Alberta in 2015, following 3.8% growth in 2014 (graph 18). Apart from the Great Recession of 2008–2009, this would be the weakest growth for the province since 1999, and risks are skewed to the downside.
- The consolation, if there is one, lies in the fact that Alberta has a good deal of flexibility for its budget. Moreover, its personal and corporate income tax rates are among the lowest in the country, and the province currently has no consumption tax. These are levers that the government could use to try to balance its budget. The contingency fund, which stood at \$4.7B at the end of the last fiscal year, could also help it absorb this new shock. In any event, given the uncertainty, Alberta bonds could have a hard time outperforming peers in the very near term.
- As far as corporate bonds are concerned, while high-yield bonds are still under pressure, investment-grade corporate bonds remain in demand, which issuers are willing to meet. Financing activities broke a record last year (graph 19), and low sovereign bond yields are likely to keep attracting investors. This is equally true of the Canadian market. Issuances have been relatively few in Canada since the beginning of the year, due to the volatile environment. However, issuers can look forward to a warm welcome from investors seeking a good return, especially after the Bank of Canada's interest rate cut.





**Table 1**  
Key interest rates

End of period in %	2014				2015				2016			
	Q1	Q2	Q3	Q4	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>United States</b>												
Federal funds	0.25	0.25	0.25	0.25	0.25	0.25	0.50	1.00	1.00	1.00	1.25	1.75
<b>Canada</b>												
Overnight funds	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.25
<b>Euro zone</b>												
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
<b>United Kingdom</b>												
Base rate	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00	1.00	1.25
<b>Japan</b>												
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
<b>October 2014</b>			
31	Bank of Mexico	s.q.	3.00
<b>Novembre 2014</b>			
3	Reserve Bank of Australia	s.q.	2.50
6	European Central Bank	s.q.	0.05
6	Bank of England	s.q.	0.50
18-19	Bank of Japan	---	---
<b>Décembre 2014</b>			
1	Reserve Bank of Australia	s.q.	2.50
3	Bank of Brazil	+50 b.p.	11.75
3	Bank of Canada	s.q.	1.00
4	European Central Bank	s.q.	0.05
4	Bank of England	s.q.	0.50
5	Bank of Mexico	s.q.	3.00
10	Reserve Bank of New Zealand	s.q.	3.50
11	Bank of Norway	-25 b.p.	1.25
11	Swiss National Bank	s.q.	0.00
16	Bank of Sweden	s.q.	0.00
17	Federal Reserve	s.q.	0,00 / 0,25
18	Swiss National Bank	-25 b.p.	(0.25)
18-19	Bank of Japan	---	---
<b>Janvier 2015</b>			
8	Bank of England	s.q.	0.50
14	Bank of Korea	s.q.	2.00
15	Swiss National Bank	-50 b.p.	(0.75)
20-21	Bank of Japan	---	---
21	Bank of Brazil	+50 b.p.	12.25
21	Bank of Canada	-25 b.p.	0.75
22	European Central Bank	s.q.	0.05

s.q.: status quo; b.p. : basis points  
Source: Desjardins, Economic Studies
**Table 3**  
Coming soon

Date	Central Bank
<b>January 2015</b>	
28	Federal Reserve
29	Reserve Bank of New Zealand
29	Bank of Mexico
<b>Février 2015</b>	
3	Reserve Bank of Australia
5	Bank of England
11	Bank of Sweden
17	Bank of Korea
17-18	Bank of Japan
<b>Mars 2015</b>	
3	Reserve Bank of Australia
4	Bank of Brazil
4	Bank of Canada
5	European Central Bank
5	Bank of England
12	Bank of Korea
12	Reserve Bank of New Zealand
16-17	Bank of Japan
18	Federal Reserve
19	Bank of Norway
19	Swiss National Bank
26	Bank of Mexico
<b>Avril 2015</b>	
7	Reserve Bank of Australia
7-8	Bank of Japan
9	Bank of England
9	Bank of Korea
15	European Central Bank
15	Bank of Canada

Source: Desjardins, Economic Studies

**Table 4**  
**United States: fixed income market**

End of period in %	2014				2015				2016			
	Q1	Q2	Q3	Q4	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>Key rate</b>												
Federal funds	0.25	0.25	0.25	0.25	0.25	0.25	0.50	1.00	1.00	1.00	1.25	1.75
<b>Treasury bills</b>												
3-month	0.05	0.04	0.02	0.04	0.05	0.10	0.55	0.85	0.90	1.00	1.30	1.60
<b>Federal bonds</b>												
2-year	0.39	0.42	0.56	0.63	0.65	0.80	1.10	1.30	1.40	1.55	1.70	1.80
5-year	1.71	1.60	1.77	1.64	1.50	1.65	1.90	2.00	2.05	2.15	2.30	2.40
10-year	2.73	2.52	2.51	2.17	2.00	2.15	2.35	2.50	2.55	2.65	2.80	3.00
30-year	3.56	3.34	3.21	2.75	2.60	2.75	2.90	3.00	3.05	3.10	3.20	3.35
<b>Yield curve</b>												
5-year - 3-month	1.66	1.56	1.75	1.60	1.45	1.55	1.35	1.15	1.15	1.15	1.00	0.80
10-year - 2-year	2.34	2.09	1.95	1.54	1.35	1.35	1.25	1.20	1.15	1.10	1.10	1.20
30-year - 3-month	3.51	3.30	3.19	2.71	2.55	2.65	2.35	2.15	2.15	2.10	1.90	1.75

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	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>Key rate</b>												
Federal funds	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.25
<b>Treasury bills</b>												
3-month	0.89	0.94	0.92	0.92	0.40	0.40	0.40	0.40	0.60	1.00	1.10	1.40
<b>Federal bonds</b>												
2-year	1.07	1.10	1.12	1.01	0.45	0.60	0.70	0.80	0.90	1.25	1.40	1.55
5-year	1.71	1.53	1.63	1.34	0.75	0.95	1.25	1.40	1.55	1.70	1.80	1.90
10-year	2.46	2.24	2.15	1.79	1.30	1.45	1.70	1.90	2.00	2.20	2.30	2.40
30-year	2.96	2.78	2.67	2.34	2.00	2.15	2.30	2.40	2.50	2.60	2.65	2.80
<b>Yield curve</b>												
5-year - 3-month	0.82	0.59	0.71	0.42	0.35	0.55	0.85	1.00	0.95	0.70	0.70	0.50
10-year - 2-year	1.39	1.14	1.03	0.78	0.85	0.85	1.00	1.10	1.10	0.95	0.90	0.85
30-year - 3-month	2.07	1.84	1.75	1.42	1.60	1.75	1.90	2.00	1.90	1.60	1.55	1.40
<b>Spreads (Canada - U.S.)</b>												
3-month	0.84	0.90	0.90	0.88	0.35	0.30	-0.15	-0.45	-0.30	0.00	-0.20	-0.20
2-year	0.68	0.68	0.56	0.38	-0.20	-0.20	-0.40	-0.50	-0.50	-0.30	-0.30	-0.25
5-year	-0.00	-0.07	-0.14	-0.30	-0.75	-0.70	-0.65	-0.60	-0.50	-0.45	-0.50	-0.50
10-year	-0.27	-0.28	-0.36	-0.38	-0.70	-0.70	-0.65	-0.60	-0.55	-0.45	-0.50	-0.60
30-year	-0.60	-0.56	-0.54	-0.41	-0.60	-0.60	-0.60	-0.60	-0.55	-0.50	-0.55	-0.55

f: forecasts

Sources: Datastream and Desjardins, Economic Studies