The Yield Curve

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The Federal Reserve is likely to repeat the scenario of 2013

HIGHLIGHTS

- The September meeting of the Federal Reserve (Fed) was keenly awaited by investors and analysts. The arguments in favour of the status quo finally won out. The press release clearly stated that it was recent international and financial developments that convinced the Fed to defer monetary firming until later.
- Far from being reassured, investors seemed to interpret the Fed's decision as a vote of non-confidence in the solidity of the U.S. economic recovery.
- We are betting on a hike in U.S. key interest rates in December 2015. It would take much more serious reasons than those given in September to convince the Fed to delay the start of monetary firming to 2016.
- The recovering Canadian economy has reinforced our conviction that the Bank of Canada will leave rates unchanged until 2017.

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The September meeting of the Federal Reserve (Fed) was keenly awaited by investors and analysts. With the disappointments of the beginning of 2015 making way for a strong spring rebound of the U.S. economy and the job market continuing to do well, the Fed had an opportunity to announce its first key interest rate hike since June 2006. But other factors argued for the status quo, in particular a surge of concern about emerging economies and the severe volatility of the financial markets. Some signs of weakness in the U.S. manufacturing sector, and the possibility of another budget impasse, also raised doubts about the advisability of starting monetary firming.

The arguments in favour of the status quo finally won out: 9 of the Fed's 10 voting members chose to keep the target range for federal funds between 0.00% and 0.25%. The press release clearly stated that it was recent international and financial developments that convinced the Fed to defer monetary firming until later. Chair Janet Yellen even said, at the press conference, that the U.S. economic recovery was sufficiently advanced to justify raising interest rates.

THE BEST IS SOMETIME THE ENEMY OF THE GOOD

The Fed seemed to be trying to send out a positive message, even though it kept interest rates unchanged in September. In theory, that should have been favourable to the financial markets, while preparing them for monetary firming in October or December. But the markets' reaction was quite different from what the Fed might have hoped for. Far from being reassured, investors seemed to interpret the Fed's decision as a vote of non-confidence in the solidity of the U.S. economic recovery. As a result, the markets remained extremely volatile after the Fed's announcement of the status quo, and the stock markets lost a good deal of ground (graph 1 on page 2).

The theory that deferring the raising of key interest rates would better prepare the markets for eventual monetary firming also quickly fell flat. Many people perceived the

François Dupuis
Vice-President and Chief Economist

514-281-2336 *or* 1 866 866-7000, ext. 2336
E-mail: desjardins.economics@desjardins.com

Mathieu D'Anjou Senior Economist
Benoit P. Durocher Senior Economist
Francis Généreux Senior Economist
Jimmy Jean Senior Economist
Hendrix Vachon Senior Economist

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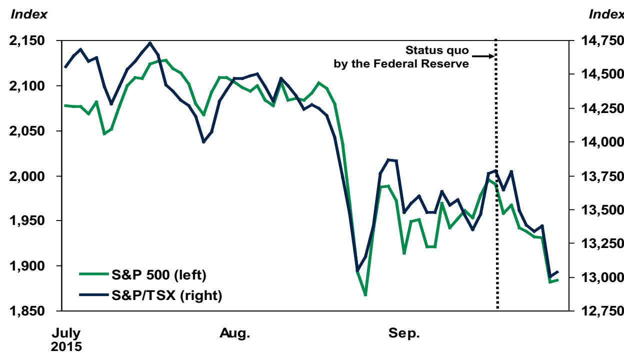
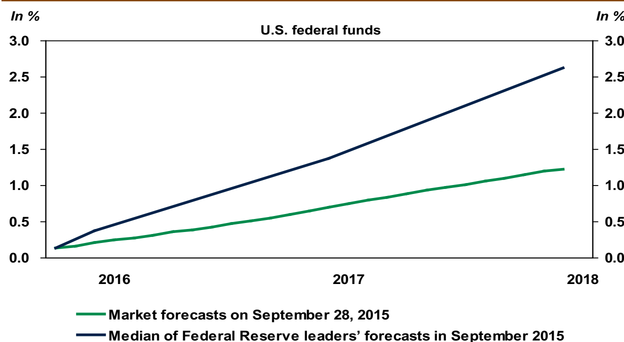
Graph 1 – The Federal Reserve's caution did not benefit the stock markets



Sources: Datastream and Desjardins, Economic Studies

Fed's decision as confirmation that it would always find a reason to keep key interest rates at floor level; so even though 13 of the 17 Fed members are forecasting a key interest rate hike before the end of 2015, the markets quickly positioned themselves for unwavering key interest rates until 2016. The spread between the federal funds rate forecast by the Fed leaders and that predicted by the market is also very wide over the medium term (graph 2).

Graph 2 – The market expects that key interest rates will remain a good deal lower than what the Federal Reserve is indicating



Sources: Bloomberg, Federal Reserve Board and Desjardins, Economic Studies

ACTION IS WORTH A THOUSAND WORDS

Investors can hardly be blamed for being sceptical about key rate forecasts by Fed leaders. Keep in mind that in December 2014, Fed members were predicting a 1.00% increase in the federal funds rate before the end of 2015. The rough patch that the U.S. economy went through at the beginning of the year certainly justified less urgency in raising interest rates, but another delay despite a clear rally in economic activity and a faster-than-expected decline in the unemployment rate warrants scepticism. Moreover, the Fed seems to increasingly be basing its decisions on international factors, including the Greek crisis in June, or problems in China in September.

The difficulty that the Fed is currently having in preparing investors for monetary firming is not surprising. Most experts agree that forward statements about monetary policy are ineffective tools, unless they are firm commitments. The Fed's statements are certainly not firm commitments, as it wants to keep all the leeway possible for reacting to changes in economic conditions. Therefore, one should not attach too much importance to forecasts by Fed leaders. We are therefore also counting on far more gradual monetary firming than what the Fed is signaling.

JUST AS IN 2013, CAUTION IN SEPTEMBER AND ACTION IN DECEMBER

Although we share the market's scepticism to some degree, we are betting on a hike in U.S. key interest rates in December 2015. For some time now, Fed leaders have been telling us that a significant majority of them predict that monetary firming should be started before the end of the year. That message was reinforced by the comments of several leaders after the September meeting, and Chair Janet Yellen made it known, for the first time, that she shared the majority opinion on that point. Furthermore, the Fed leaders' economic growth forecasts are conservative, limiting the risk of disappointment in that regard. It would therefore take much more serious reasons than those given in September to convince the Fed to delay the start of monetary firming to 2016.

The current situation strangely resembles that which surrounded the start of the Fed's tapering of bond purchases in 2013. After preparing the markets for action before the end of 2013, the Fed under Ben Bernanke chose the status quo in September, generating a large amount of scepticism. But even though the markets were not completely prepared, the Fed did start tapering its purchases at its last meeting of the year.

François Dupuis
Vice-President and Chief Economist

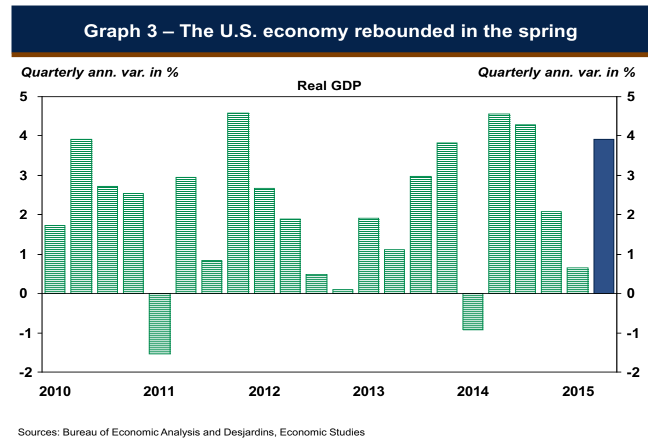
Mathieu D'Anjou, CFA
Senior Economist

FEDERAL RESERVE

Federal Reserve leaders have their fingers on the trigger, but hesitate to fire

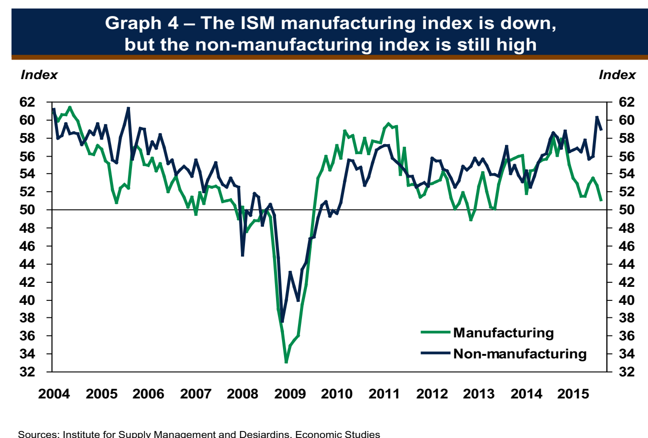
- It seems to have been a difficult decision, but in the end the Federal Reserve (Fed) chose the status quo at its September monetary policy meeting. Apparently, it was mainly overseas developments that made Janet Yellen and the other committee members hesitate. The main change between the press release of September 17 and that of the previous meeting was a sentence emphasizing recent global economic and financial developments that may restrain economic activity. Of course, the weakness of the emerging countries (especially concerns about China) and the slumps in the stock markets and in commodity prices that occurred in August, spring to mind.
- The Fed is showing less concern about the U.S. economy. Its Chair even indicated that the recovery has advanced sufficiently far, and domestic spending appears sufficiently robust, to justify raising interest rates. The sound real GDP advance in the second quarter—a gain of 3.9%—clearly bears this out (graph 3). However, we do note some sources of concern in recent economic developments. The ISM manufacturing index is closing in on the 50 mark, and many regional indexes are pointing towards tougher times for manufacturing in the months ahead. We also note a slackening in the pace of hiring, compared with the very strong numbers seen in 2014. Lastly, some consumer confidence indexes are showing deterioration linked to the problems in the stock market. Despite these more negative factors, we should not worry too much about the health of the U.S. economy. While the ISM manufacturing index is lacklustre, the non-manufacturing index is still very strong (graph 4). As for jobs, we note that the unemployment rate is holding firm to its downward trend. And lower gasoline prices should put households in a better mood.
- As far as inflation is concerned, it is still very weak; but the Fed seems to be less and less worried about it. In a recent speech about inflation trends and monetary policy, Janet Yellen demonstrated that the current low prices were mainly a consequence of soft energy prices and a strong greenback. In the same breath, she showed that the deflationary pressures stemming from the under-utilization of production capacity were abating. Therefore, the Fed is still comfortable with a scenario in which price growth will move back towards the official target of 2% (graph 5).

Forecasts: Even though it says that it is ready to raise interest rates, the Fed is unlikely to start doing so until December 2015. After that, the pace of rate hikes will probably be slow, and sprinkled with pauses. The top of the target range for the federal funds rate should be at 0.50% at the end of the year, and at 1.25% by the end of 2016.



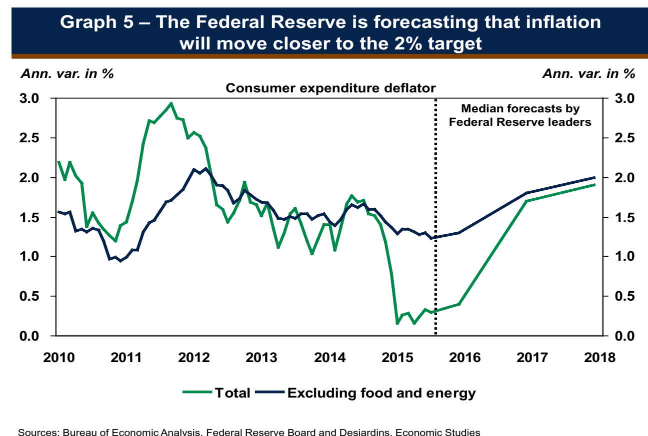
Graph 3 – The U.S. economy rebounded in the spring

Sources: Bureau of Economic Analysis and Desjardins, Economic Studies



Graph 4 – The ISM manufacturing index is down, but the non-manufacturing index is still high

Sources: Institute for Supply Management and Desjardins, Economic Studies



Graph 5 – The Federal Reserve is forecasting that inflation will move closer to the 2% target

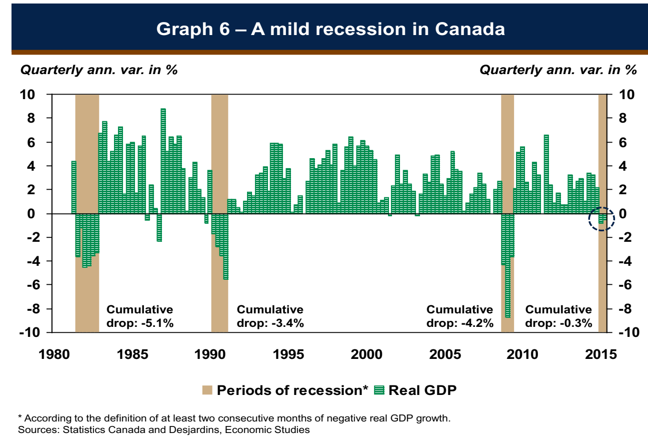
Sources: Bureau of Economic Analysis, Federal Reserve Board and Desjardins, Economic Studies

BANK OF CANADA

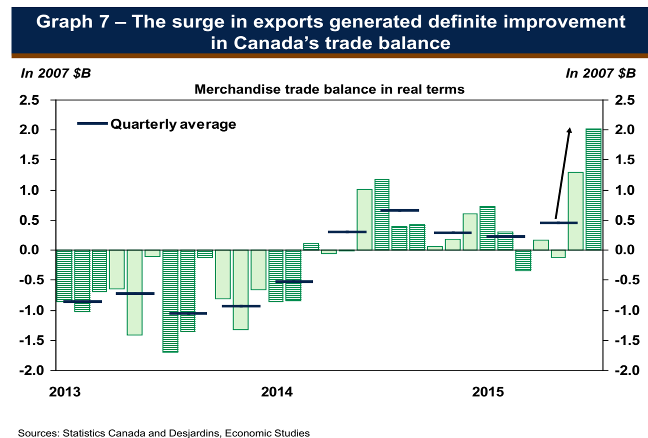
An extended status quo

- Real GDP shrank at an annualized quarterly rate of 0.5% in the second quarter of 2015, after a 0.8% decline in the first quarter. According to the commonly used definition of two consecutive quarters of contraction in real GDP, the Canadian economy was thus in recession in the first half of this year. But this latest downturn differs from other episodes of recession in this country. For one thing, the scope of the contraction in real GDP during the first two quarters of 2015 is much smaller than the pullbacks observed on previous occasions (graph 6). For another, the difficulties of the Canadian economy are not broad-based; they are mainly concentrated in certain fields of activity and in certain regions, i.e. those that are more focused on oil production.
- A return to positive territory is predicted in the third quarter. Merchandise exports rallied in June and July, putting an end to a slump that had lasted several months (graph 7). This gave real GDP by industry a boost of 0.4% in June and 0.3% in July, providing a positive carryover for the third quarter.
- In general, our latest economic forecasts for 2015 are still similar to those prepared by the Bank of Canada (BoC) in the July edition of its *Monetary Policy Report*, i.e. real GDP growth of 1.1% in Canada. However, our projections for 2016 are a little more pessimistic than those of the BoC. Whereas the monetary authorities are anticipating real GDP growth of 2.3% next year, our scenario calls for a gain of just 1.8%.
- As for inflation, recent price trends have been relatively in line with expectations. Standing at 1.3% in July, the total annual inflation rate is still very low, due to successive drops in gasoline prices. The annual change in the core price index (CPIX) is more stable, and is still hovering around the median target (graph 8). Given the excess production capacity that still exists in the Canadian economy, we should expect inflationary pressure to stay very limited, at least until 2017.

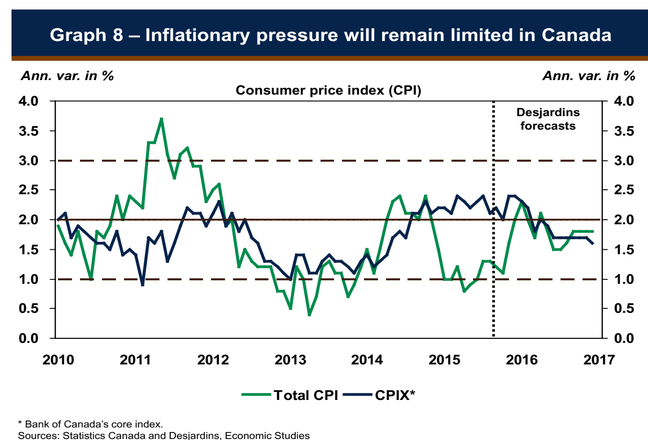
Forecasts: The technical recession in the Canadian economy in the first half of 2015 and the persistence of numerous uncertainties will lead the BoC to bide its time until 2017 before initiating any key interest rate hikes. That said, while the continuation of the status quo is the most likely scenario, we cannot entirely rule out the possibility of the monetary authorities ordering further rate cuts, should the expected recovery of the Canadian economy fail to materialize.



* According to the definition of at least two consecutive months of negative real GDP growth.
Sources: Statistics Canada and Desjardins, Economic Studies



Sources: Statistics Canada and Desjardins, Economic Studies



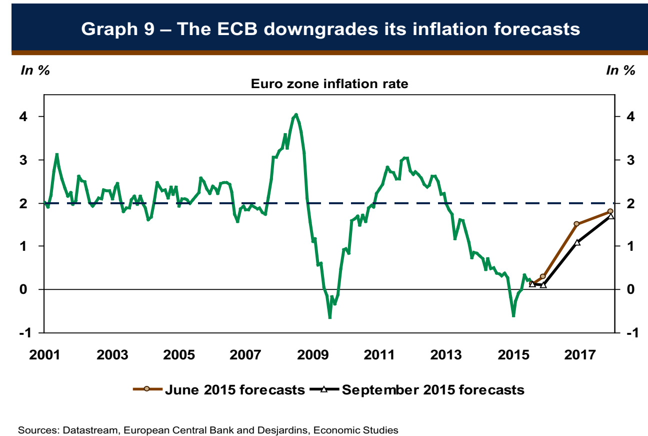
* Bank of Canada's core index.
Sources: Statistics Canada and Desjardins, Economic Studies

OVERSEAS CENTRAL BANK

Will the European Central Bank do more?

EUROPEAN CENTRAL BANK (ECB)

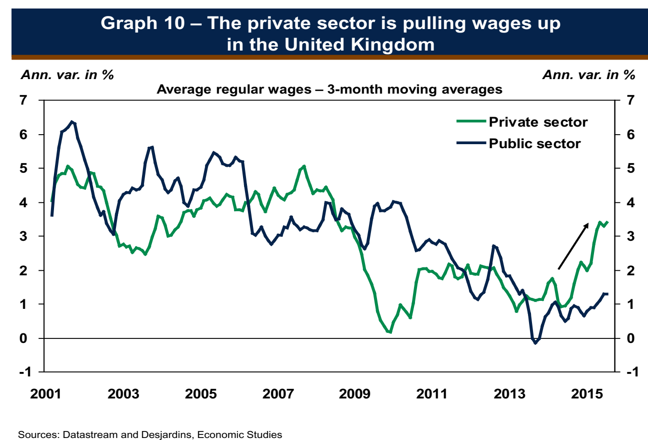
- The latest developments in the emerging countries and the lasting slump in oil prices have led the ECB to downgrade its macroeconomic forecasts. The largest revision is to the inflation forecast for 2016: it is reduced from 1.5% to 1.1%, a level well below the official target (graph 9).
- Yet, the ECB did not announce any new easing measures in September. It feels that it cannot be certain enough of the effects that recent events might have on price trends and on the ability to reach its inflation target over the longer term. It did take a step towards a more forceful intervention, though, by relaxing a technical constraint that prevented it from holding more than 25% of any bond issue. By raising that limit to 33%, the ECB is giving itself more credible leeway to increase its asset purchases, which currently stand at €60B per month. It will be interesting to watch the ECB's readings of the economy in the months ahead. If new events force it to downgrade its inflation forecasts, we could see more intense easing measures.



Graph 9 – The ECB downgrades its inflation forecasts

BANK OF ENGLAND (BoE)

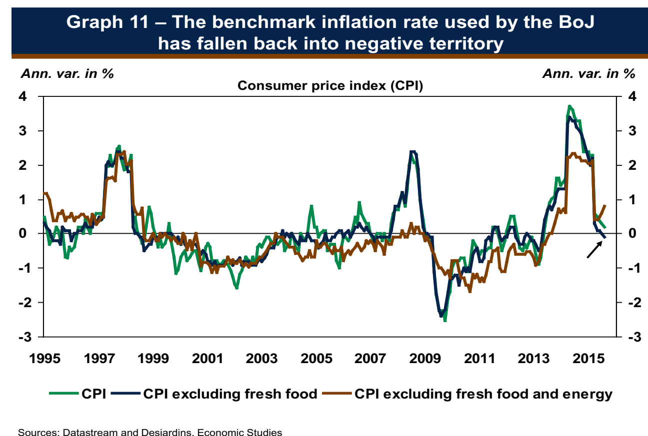
- After the Federal Reserve (Fed), the BoE is probably the central bank that is closest to the point of raising its key interest rates. The British economy is continuing to do well despite a European macroeconomic environment that is still tinged with uncertainty. The labour market appears to be increasingly balanced, and wage growth has accelerated in 2015, especially in the private sector (graph 10). However, it would be very surprising for the BoE to move ahead with monetary firming before its U.S. counterpart, as to do so would risk allowing the British currency to appreciate too much (it is already very strong against the euro). Therefore, the fact that the Fed is drawing out the suspense also argues for a delay in the start of monetary firming in the United Kingdom, probably to around the end of the first quarter of 2016.



Graph 10 – The private sector is pulling wages up in the United Kingdom

BANK OF JAPAN (BoJ)

- Even though one of the BoJ leaders is already voting to reduce the asset purchase program, it is more likely that Japanese monetary policy will hold steady for many more quarters, or even that the degree of easing will increase. The Japanese economy struggled in the spring due to a pullback in consumption. Even though retail sales have now bounced back, industrial production is heading downwards, given that the economic conditions in many parts of the world have become more uncertain. Moreover, inflation has been clearly moving downwards since the spring (graph 11).



Graph 11 – The benchmark inflation rate used by the BoJ has fallen back into negative territory

BOND MARKET

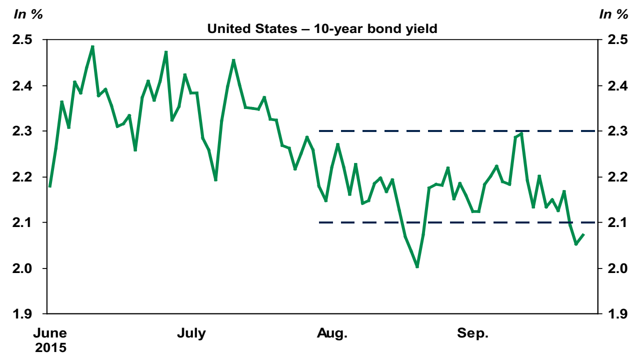
The U.S. yield curve could steepen

U.S. FEDERAL BONDS

- The Federal Reserve's (Fed) decision to hold off a bit on interest rate hikes had a limited impact on bond yields. The 2-year yield did indeed suddenly shoot up to 80 basis points in the sessions just before the September 17 announcement, but the level of around 70 points that was maintained thereafter is comparable to the third-quarter average. As for the 5-year and 10-year terms, the trend over the summer was definitely downwards, against a backdrop of turbulence from China; in recent weeks, it has been slightly more stable. The anxiety concerning the Fed's September announcement did not have much perceptible impact for those terms. The 10-year yield has most of the time been holding at between 2.10% and 2.30% since the beginning of August (graph 12).
- With a front end that is being influenced by imminent interest rate hikes, and a long end that is benefiting from a climate of risk aversion, the U.S. curve is now maintaining a significantly flatter profile than it did at the beginning of the summer. The spread between the 10-year and 2-year yields has returned to around 140 basis points, after being close to 180 points in the middle of July (graph 13). For maturities of five years and longer, the curve has experienced a parallel downward movement over the summer.
- In our opinion, there is a significant risk of the curve steepening further in the months to come. The small degree of compensation for inflation over a long-term horizon has been remarkable this year. Without a doubt, the impact of falling oil prices on current inflation has had the greatest influence on compensation for inflation (graph 14). The inflation risk premium has narrowed considerably, shining a spotlight on a situation of complacency. However, the influence of oil prices and the appreciation of the U.S. dollar are expected to dissipate in the months ahead. This could push the inflation risk premium back to normal levels and long-term yields up further, compared with the short-term yields, which are already quite well positioned for monetary firming.

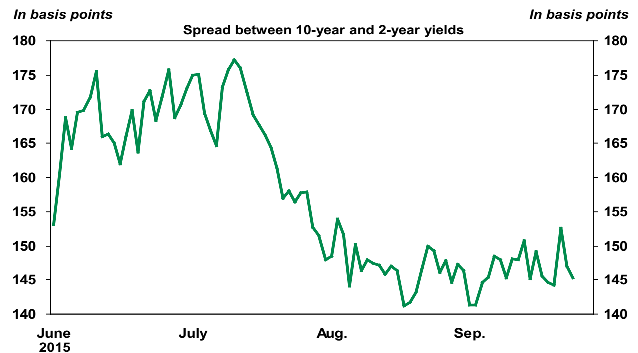
Forecasts: The Fed's decision to hold off on starting to normalize interest rates prompts us to revise our year-end targets downwards slightly. In accordance with the signal sent by Fed officials, we are predicting just one rate hike in 2015, at the December meeting. This should be followed by a second hike in January, and then a pause until the summer of 2016. Even though our revised scenario slightly moderates the upward movement of bond yields, the curve should nonetheless steepen.

Graph 12 – The 10-year yield has fluctuated within a fairly narrow range until very recently



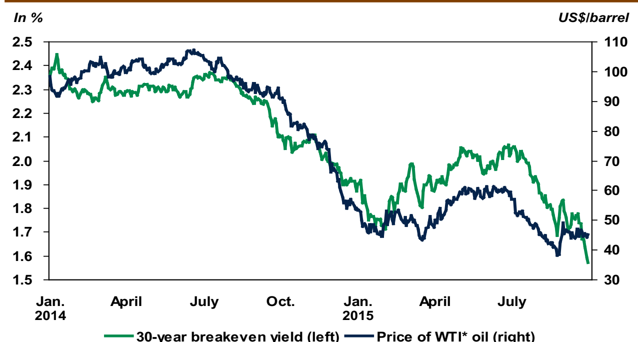
Sources: Bloomberg and Desjardins, Economic Studies

Graph 13 – A part of the U.S. bond yield curve has flattened considerably



Sources: Bloomberg and Desjardins, Economic Studies

Graph 14 – Oil prices have wielded considerable influence over long-term inflation expectations



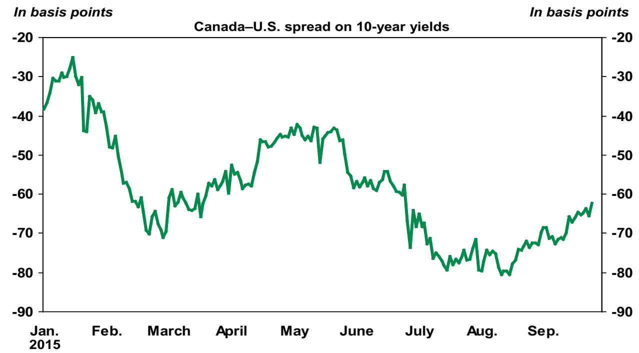
* West Texas Intermediate.
Sources: Bloomberg and Desjardins, Economic Studies

CANADIAN FEDERAL BONDS

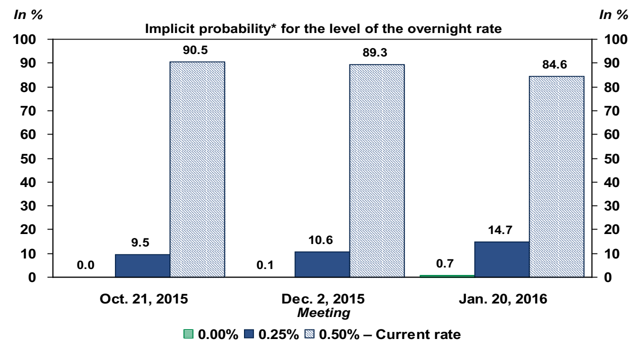
- Bond yields have been picking up in Canada, slowly but surely. They were subject to strong downward pressure during the summer, due to the climate of risk aversion and the Bank of Canada's (BoC) rate cut in July. That easing move was less of a surprise than that of January, but the markets were very slow to anticipate it. Yields on Treasury bills and the 2-year bonds obviously reacted strongly initially, but those yields were already at very low levels. Over time, the 10-year yield recorded an especially steep slide. While it was still close to 1.90% at the beginning of June, it tumbled to 1.26% by the end of August. The result was a sharp compression of the 5/10 spread, along with a new low for the Canada–U.S. yield spread for the 10-year term, i.e. -81 basis points on August 19 (graph 15).
- The gradual return of calmer conditions in the better part of September, and the fact that the BoC showed little interest in taking more action when it met at the beginning of the month, had the effect of disrupting those trends. The Canada–U.S. 10-year spread has widened by around 15 basis points in the past month. The derivatives' markets have now adjusted to factor in a long status quo in Canadian policy rates, ruling out further rate cuts (graph 16). Some stability in oil prices has been observed in recent weeks, while the latest Canadian economic statistics are painting a picture of an economy that is recovering from its setbacks of the first two quarters of the year. The ascent in household debt last spring (graph 17) reminded investors of the financial stability constraints that could encourage the BoC to keep a prudent approach.
- Spreads could nevertheless struggle to widen from current levels. Even though the Federal Reserve adopted a cautious course of action in September, officials are still aiming for an initial interest rate hike before the end of this year. At this point, Canadian bonds will outperform, and the spreads will tend to narrow again. This is especially true as the uncertainties underlying the global economy and the weakness in commodity prices are likely to persuade investors to maintain a slight negative bias in their expectations of the BoC's next action.

Forecasts: The recovering Canadian economy has reinforced our conviction that the BoC will leave rates unchanged for a long stretch (until 2017). The fact that rate hikes in the United States will materialize later than was assumed in our former scenario leads us to make a few downward adjustments to our year-end targets. Thus, the 10-year yield should end the year at 1.55%.

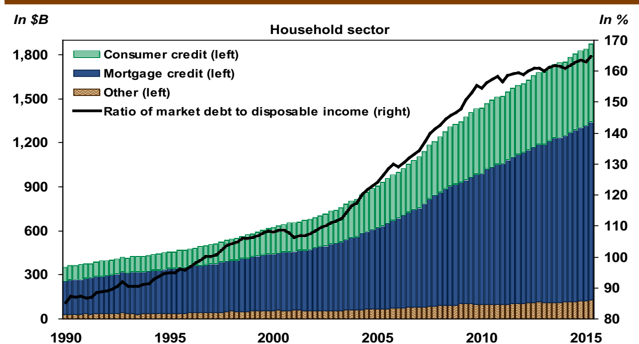
Graph 15 – The 10-year yield spread recovers after bottoming out in August



Graph 16 – The markets are widely anticipating a status quo at future Bank of Canada meetings



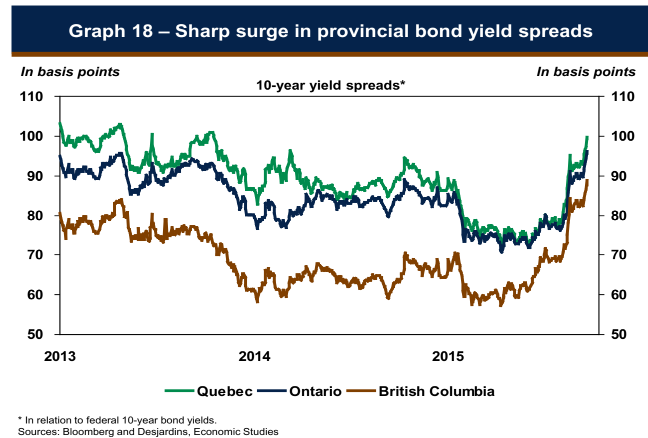
Graph 17 – Canadian household debt keeps rising



PROVINCIAL AND CORPORATE BONDS

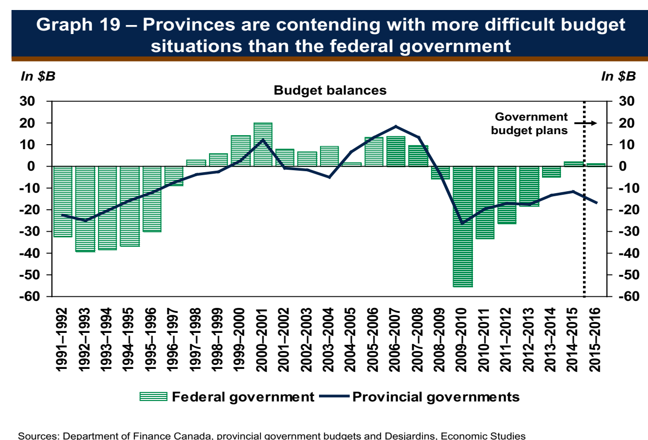
- Provincial spreads are under significant upward pressure (graph 18). The volatile market conditions that prevailed over the summer has put widening pressure on those spreads, although it must be noted that they were abnormally narrow during the spring. Market tensions paired with an underlying environment that was conducive to a widening of spreads, it is clear that, collectively, the provinces' return to balanced budgets will be delayed, unlike the case of the federal government (graph 19).
- Slightly less generous supply during the summer may have limited the damage somewhat. Given volatile environment, provincial issuers were rather reluctant to come to market. At the mid-point of the 2015–2016 fiscal year, some provinces (such as Manitoba, New Brunswick and Ontario) had raised less than half of the financing requirements that had been planned for the year. Nevertheless, the pace of issues picked up in September, contributing to keep spreads wide despite the uptick in federal bond yields.
- For those provinces that are enjoying fundamentally better positions, the spreads might narrow. We note that despite one of the best budget balance sheets, British Columbia bonds are performing worse than those of Ontario. On the other hand, we cannot claim that Quebec bonds are relatively attractive at this point. In July, Finance Minister Leitao announced a revision to the actual deficit for fiscal year 2014–2015 to $1.8B, i.e. $550M less than the amount established when the budget was tabled in the spring. However, the deviation is largely attributable to non-recurring factors. The Minister also acknowledged that Quebec's growth in 2015 will need to be downgraded from the assumption of 2.0% on which the budget forecasts were based. We have lowered our forecast to 1.1%. Therefore, achieving a balanced budget this year is still a matter of uncertainty. We must admit, though, that the Ontario economy has been just as disappointing so far this year, and the province is considerably further away from achieving a balanced budget, versus the Quebec government. Overall, we view these conditions as arguing for relatively stable spreads between Quebec and Ontario in the near term.
- As for corporate bonds, the uptrend in yield spreads is likely to continue (graph 20). This market has faced the same problems that adversely affected provincial bond market this past summer. Issuers encountered hostile environments in Europe, the United States and Canada, and are now redoubling their efforts to conclude deals. For example, September 9 was the fourth busiest day ever recorded in terms of issuances of debt instruments in the United States, with a total of US$26B. The feeling of urgency is amplified by the fact that this is arguably the last opportunity corporations have to raise funds at historically low interest rates.

Graph 18 – Sharp surge in provincial bond yield spreads



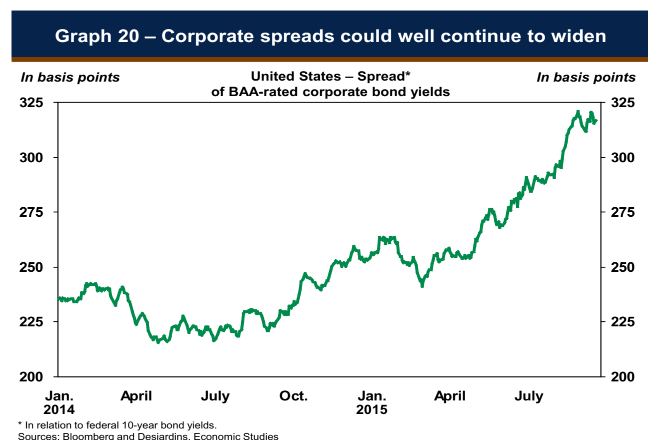
* In relation to federal 10-year bond yields.
Sources: Bloomberg and Desjardins, Economic Studies

Graph 19 – Provinces are contending with more difficult budget situations than the federal government



Sources: Department of Finance Canada, provincial government budgets and Desjardins, Economic Studies

Graph 20 – Corporate spreads could well continue to widen



* In relation to federal 10-year bond yields.
Sources: Bloomberg and Desjardins, Economic Studies

Table 1
Key interest rates

End of period in %	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3f	2015 Q4f	2016 Q1f	2016 Q2f	2016 Q3f	2016 Q4f
United States												
Federal funds	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	0.75	1.00	1.25
Canada												
Overnight funds	1.00	1.00	1.00	1.00	0.75	0.75	0.50	0.50	0.50	0.50	0.50	0.50
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	0.75	1.00	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*
July 2015			
8	Bank of Korea	s.q.	1.50
9	Bank of England	s.q.	0.50
14-15	Bank of Japan	---	---
15	Bank of Canada	-25 b.p.	0.50
16	European Central Bank	s.q.	0.05
22	Reserve Bank of New Zealand	-25 b.p.	3.00
29	Bank of Brazil	+50 b.p.	14.25
29	Federal Reserve	s.q.	0.00 / 0.25
30	Bank of Mexico	s.q.	3.00
August 2015			
4	Reserve Bank of Australia	s.q.	2.00
6	Bank of England	s.q.	0.50
6-7	Bank of Japan	---	---
12	Bank of Korea	s.q.	1.50
September 2015			
1	Reserve Bank of Australia	s.q.	2.00
2	Bank of Brazil	s.q.	14.25
3	European Central Bank	s.q.	0.05
3	Bank of Sweden	s.q.	-0.35
9	Reserve Bank of New Zealand	-25 b.p.	2.75
9	Bank of Canada	s.q.	0.50
10	Bank of England	s.q.	0.50
10	Bank of Korea	s.q.	1.50
14-15	Bank of Japan	---	---
17	Swiss National Bank	s.q.	-0.75
17	Federal Reserve	s.q.	0.00 / 0.25
21	Bank of Mexico	s.q.	3.00
24	Bank of Norway	-25 b.p.	0.75

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

Table 3
Coming soon

Date	*Central Bank*
October 2015	
5	Reserve Bank of Australia
6-7	Bank of Japan
8	Bank of England
14	Bank of Korea
21	Bank of Brazil
21	Bank of Canada
22	European Central Bank
28	Reserve Bank of New Zealand
28	Bank of Sweden
28	Federal Reserve
29	Bank of Mexico
30	Bank of Japan
November 2015	
2	Reserve Bank of Australia
5	Bank of England
5	Bank of Norway
11	Bank of Korea
18-19	Bank of Japan
25	Bank of Brazil
30	Reserve Bank of Australia
December 2015	
2	Bank of Canada
3	European Central Bank
9	Bank of Korea
9	Reserve Bank of New Zealand
10	Bank of England
10	Swiss National Bank
15	Bank of Sweden
16	Federal Reserve

Source: Desjardins, Economic Studies

Table 4
United States: fixed income market

End of period in %	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3f	2015 Q4f	2016 Q1f	2016 Q2f	2016 Q3f	2016 Q4f
Key rate												
Federal funds	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	0.75	1.00	1.25
Treasury bills												
3-month	0.05	0.04	0.02	0.04	0.03	0.01	0.00	0.30	0.55	0.65	0.85	1.10
Federal bonds												
2-year	0.39	0.42	0.56	0.63	0.54	0.58	0.65	0.90	1.10	1.20	1.40	1.55
5-year	1.71	1.60	1.77	1.64	1.37	1.62	1.40	1.70	1.90	2.00	2.15	2.25
10-year	2.73	2.52	2.51	2.17	1.93	2.33	2.10	2.35	2.50	2.55	2.65	2.75
30-year	3.56	3.34	3.21	2.75	2.54	3.10	2.90	3.00	3.10	3.15	3.20	3.30
Yield curve												
5-year - 3-month	1.66	1.56	1.75	1.60	1.34	1.61	1.40	1.40	1.35	1.35	1.30	1.15
10-year - 2-year	2.34	2.09	1.95	1.54	1.39	1.75	1.45	1.45	1.40	1.35	1.25	1.20
30-year - 3-month	3.51	3.30	3.19	2.71	2.51	3.09	2.90	2.70	2.55	2.50	2.35	2.20

f: forecasts
Sources: Datastream and Desjardins, Economic Studies

Table 5
Canada: fixed income market

End of period in %	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3f	2015 Q4f	2016 Q1f	2016 Q2f	2016 Q3f	2016 Q4f
Key rate												
Federal funds	1.00	1.00	1.00	1.00	0.75	0.75	0.50	0.50	0.50	0.50	0.50	0.50
Treasury bills												
3-month	0.89	0.94	0.92	0.92	0.56	0.58	0.45	0.45	0.45	0.45	0.50	0.50
Federal bonds												
2-year	1.07	1.10	1.12	1.01	0.50	0.48	0.50	0.50	0.55	0.60	0.70	0.80
5-year	1.71	1.53	1.63	1.34	0.76	0.82	0.80	0.90	1.00	1.10	1.15	1.35
10-year	2.46	2.24	2.15	1.79	1.36	1.69	1.45	1.55	1.65	1.65	1.75	1.95
30-year	2.96	2.78	2.67	2.34	1.98	2.31	2.20	2.30	2.35	2.40	2.45	2.55
Yield curve												
5-year - 3-month	0.82	0.59	0.71	0.42	0.20	0.24	0.35	0.45	0.55	0.65	0.65	0.85
10-year - 2-year	1.39	1.14	1.03	0.78	0.86	1.21	0.95	1.05	1.10	1.05	1.05	1.15
30-year - 3-month	2.07	1.84	1.75	1.42	1.42	1.73	1.75	1.85	1.90	1.95	1.95	2.05
Spreads (Canada - U.S.)												
3-month	0.84	0.90	0.90	0.88	0.53	0.57	0.45	0.15	-0.10	-0.20	-0.35	-0.60
2-year	0.68	0.68	0.56	0.38	-0.04	-0.10	-0.15	-0.40	-0.55	-0.60	-0.70	-0.75
5-year	-0.00	-0.07	-0.14	-0.30	-0.61	-0.80	-0.60	-0.80	-0.90	-0.90	-1.00	-0.90
10-year	-0.27	-0.28	-0.36	-0.38	-0.57	-0.64	-0.65	-0.80	-0.85	-0.90	-0.90	-0.80
30-year	-0.60	-0.56	-0.54	-0.41	-0.56	-0.79	-0.70	-0.70	-0.75	-0.75	-0.75	-0.75

f: forecasts
Sources: Datastream and Desjardins, Economic Studies