NATIONAL BANK OF CANADA
FINANCIAL MARKETS

Monthly Fixed Income Monitor

Economics and Strategy

February 2018

Highlights

- Given that our growth and inflation forecasts have not materially changed since last month, we see no reason to revise our monetary policy forecast. We continue to see the FOMC announcing quarter-point hikes in March, September and December. In the longer portion of the yield curve we see 10-year Treasuries trading just under 3.0% in Q4.

- Over the last 13 weeks the Canadian yield curve has shifted quite substantially. But since a few months ago our base case scenario for the BoC in 2018 was more hawkish than that of the consensus, we do not feel the need to revise our projection at this point. We see the overnight at 2% by year end and the 10-year yield trading in a range of 2.70% to 2.85% a year from now.

Paul-André Pinsonnault

Forecast dated January 26, 2018

United States

Quarters	Fed Fund	3 Mth Bill	2YR	5YR	10YR	30YR
01/26/18	1.50	1.42	2.12	2.47	2.66	2.91
Q1/18	1.75	1.58	2.22	2.54	2.73	2.97
Q2	1.75	1.59	2.31	2.60	2.80	3.03
Q3	2.00	1.86	2.37	2.64	2.84	3.04
Q4	2.25	2.08	2.47	2.74	2.95	3.14
Q1/19	2.25	2.11	2.51	2.77	2.99	3.16
Q2	2.50	2.33	2.59	2.81	3.02	3.18
Q3	2.50	2.33	2.69	2.87	3.09	3.24
Q4	2.50	2.38	2.76	2.93	3.17	3.31

Canada

Quarters	Overnight	3 Mth Bill	2YR	5YR	10YR	30YR
01/26/18	1.25	1.20	1.82	2.06	2.26	2.33
Q1/18	1.25	1.30	1.89	2.14	2.31	2.37
Q2	1.50	1.68	1.96	2.18	2.51	2.58
Q3	1.75	1.89	2.13	2.31	2.65	2.72
Q4	2.00	1.96	2.26	2.38	2.70	2.73
Q1/19	2.00	1.96	2.31	2.57	2.86	2.91
Q2	2.00	2.18	2.37	2.62	2.93	2.98
Q3	2.25	2.21	2.48	2.74	3.02	3.06
Q4	2.25	2.21	2.55	2.77	3.05	3.08

More yield-curve flattening in store

At this writing, incoming indicators continue to support our forecast of three FOMC rate hikes in 2018.

Although Q4 U.S. GDP growth of 2.6% annualized was softer than expected, braked by drag from trade and inventories, growth still exceeded potential in the quarter. Consumer spending grew at 3.8% in Q4 compared to 2.2% in the previous quarter. Also accelerating from Q3 were government spending growth and the growth of business investment in equipment and intellectual property. Domestic demand consequently contributed 4.3 percentage points to the Q4 growth rate. Subtracting from growth were net exports (−1.1%) and inventories (−0.7%). December orders for non-defence capital goods excluding aircraft – a proxy for business investment – were up 0.6%. It was the 11th consecutive monthly gain, the longest streak since data collection began in 1992 and a good sign for business investment. The Leading Economic Indicator was up in December for a 19th straight month, rising 0.6% to an all-time high of 107.0. What's more, the diffusion index was 75%, meaning that most of the LEI constituent indicators were contributors to the lift. The main boost was from ISM new orders, which added 0.29 percentage points to the composite index.

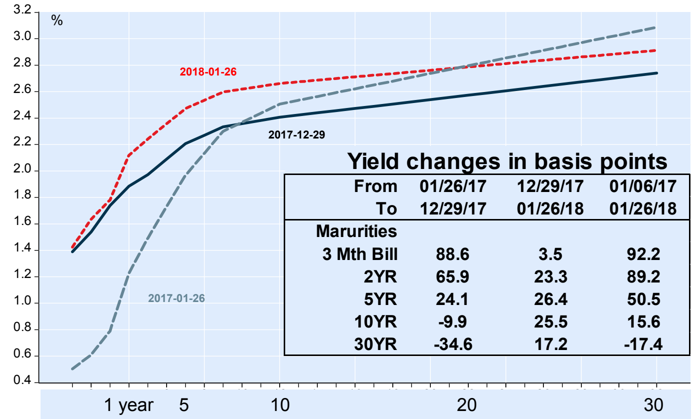
Solid growth momentum coupled with easing of financial conditions – the Chicago Fed NFCI ticked down to −0.94 in the week ended January 19 – supports our forecast of 2.5% expansion in 2018 and our expectation of further gradual monetary policy normalization. Moreover, the weaker USD could add to inflationary pressure in 2018 through higher import prices. This outlook has many analysts revising up their views about the odds of four rate hikes by the FOMC this year. The fed funds futures market currently puts those odds at 17%, up from 9% a month ago.

Not only have domestic indicators been encouraging, but in January the IMF revised its global growth forecast up 0.2 points to 3.9% and the World Bank now expects the global output gap to close this year.

So in the first weeks of 2018, the bond market has faced an acceleration of global economic expansion, rising commodity prices and an upward drift of mid-term inflation expectations. No surprise that the U.S. yield curve has shifted up.

At the close on January 26, Treasuries maturing in 2, 10 and 30 years were yielding 2.12%, 2.66% and 2.91%, up 23, 26 and 17 basis point respectively from the year end. So far in 2018, the Treasury market has delivered a negative total return of −1.17% according to the ICE BofAML Treasury Index.

Treasury yield curve
Yield to maturity



Yield changes in basis points

From	01/26/17	12/29/17	01/06/17
To	12/29/17	01/26/18	01/26/18
Marurities			
3 Mth Bill	88.6	3.5	92.2
2YR	65.9	23.3	89.2
5YR	24.1	26.4	50.5
10YR	-9.9	25.5	15.6
30YR	-34.6	17.2	-17.4

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The shape of the yield curve has changed quite drastically in the last 12 months. With the FOMC gradually normalizing, yields at the front end of the curve have risen as would be expected. It's the flattening of the longer portion of the curve that has surprised many.

From last September 1 to January 26, the yield of 30-year Treasuries rose only 13 bps, to 2.91%, while the 10-year yield rose 49 bps, to 2.66%. The spread between the two maturities shrank from 61 bps in September to 25 bps in late January.

Another way to look at the relationship is in ratio terms. Over the last five years the 30-year yield has averaged 1.36 times the 10-year yield. At this writing the ratio is 1.09.

Normalization of the slope of the yield curve
Median projection of FOMC participants for the long-run neutral rate: 2.8%

NBF Economics and Strategy (data via Bloomberg) 2018-01-25

This is still somewhat higher than in the second half of the 1990s or in late 2005. In 2005, many were debating where, in a range from 3.5% to 4.25%, the FOMC should stop normalizing the fed funds rate. During the period when the rate was in that range, the ratio of the 30-year yield to the 10-year yield averaged 1.06.

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Today, when the FOMC participants' median estimate of the neutral fed funds rate is 2.8% and market participants arguably see a slightly lower endpoint of policy normalization, we see the path of least resistance for the 30-year/10-year ratio to be a gradual drift to 1.04 over the next 18 months.

Bottom line: Given that our growth and inflation forecasts have not materially changed since last month, we see no reason to revise our monetary policy forecast. We continue to see the FOMC announcing quarter-point hikes in March, September and December. In the longer portion of the yield curve we see 10-year Treasuries trading just under 3.0% in Q4.

Looking further ahead, we see the FOMC taking a long pause when the upper bound of the target fed funds range reaches 2.50%, in the second quarter of 2019.

There are obvious risks to this forecast. One important one is the possibility that in the second year of his term President Trump will deliver a substantial spending program to rebuild and improve U.S. infrastructure. Mr. Trump has in the past advocated about US$200 billion in federal infrastructure spending, which could be leveraged up to US$1.5 trillion by involvement of the private sector and other levels of government. In that case the FOMC would have to move more aggressively because inflation would accelerate more than is currently expected.

In the short run, financial markets may find themselves in choppy waters. To avoid another government shutdown the administration must deal with the February 8 expiry of the current continuing resolution. And if nothing is done the Treasury may run out of borrowing authority in early March.

FOMC: More policy normalization in 2018

Balancing of risks to financial stability, the economy and inflation calls for gradual policy normalization

U.S. economic forecast	Q4 2017 forecast	Q1 2018 forecast	Q2 2018 forecast	Q3 2018 forecast	Q4 2018 forecast	2018 forecast
Real GDP growth (q/q % chg. saar)	2.6	1.6	3.2	2.3	2.2	2.5
CPI (y/y % chg.)	2.1	2.0	2.4	2.4	2.0	2.2
CPI ex. food and energy (y/y % chg.)	1.7	1.7	2.1	2.2	2.2	2.0
Unemployment rate (%)	4.1	4.1	4.0	4.0	4.0	4.0
Fed Fund Target Rate		1.75	1.75	2.00	2.25	
10-Year Treasuries		2.73	2.80	2.84	2.95	

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… and in Canada

As expected, the Bank of Canada tightened in January for the third time in less than a year, raising its benchmark rate to 1.25% from 1.00% following a string of positive economic indicators that obliged BoC policymakers to reassess their stance. In its rate-announcement statement the Bank said the economy was now "operating roughly at capacity."

As BoC governor Stephen Poloz reiterated in an interview at the World Economic Forum in Davos, NAFTA uncertainty remains a key Bank concern.

In that interview Mr. Poloz was also asked whether generally speaking, he saw 2018 as the year of the end of easy money in developed economies. He did not. "It's likely that money is going to remain easy for some time yet, because economies are still working their way through a lot of underlying stresses."

In light of such comments, one can wonder whether the 2% overnight rate we see by year end would be too aggressive.

The Bank of course has a bias toward gradualism. It needs to adjust the pace of normalization to the greater sensitivity of the economy to interest rates that results from Canadian household debt. How much greater that sensitivity is remains to be tested. As Mr. Poloz said: "that's one of the things we have to learn by probing, by moving our way along and assessing how things are evolving."

We agree, but our base case scenario is GDP growth of 2.5% in 2018 and trade negotiations remaining on the rails. Further, 12-month CPI-Trim inflation stood at 1.9% in December (up 1 tick from 1.8%), CPI-Median at 1.9% (unchanged) and CPI-Common at 1.6% (up one tick from 1.5%). So the average of these three core inflation measures is now 1.8% annually, the highest in 14 months. In the last six months, according to our in-house replication of CPI-Trim and CPI-Median, the momentum has become even stronger: both measures have been running above the 2% midpoint of the Bank of Canada target range, CPI-Trim at 2.2% annualized and CPI-Median at 2.1%. We believe this new trend will persist, reflecting a strong economy and labour market. So incoming indicators may again force the BoC to deliver more rate hikes than it currently expects.

In recent years, central banks have been arguing that they can rely on macroprudential measures to safeguard financial stability while using the policy rate to achieve their inflation target. Canadian authorities have been leaning very heavily on that script. However, because of feedback loops, keeping the policy rate below inflation for an extended period will require ever-more-intrusive macroprudential measures. Will that be justifiable with inflation close to the Bank's target? After all, central banks cannot count on macroprudential measures alone to contain vulnerabilities to the financial system. Fortunately, as the FOMC gradually normalizes its policy stance the Bank will have more policy room to balance the mix of macroprudential and interest-rate policies without driving the exchange rate out of its comfort zone.

In our view, the Bank will stick with its gradualist approach, with adjustments of the overnight rate nonetheless guided by incoming data. We see the Bank taking some wait-and-see time after the January hike. By the May 30 scheduled rate-announcement date, the Bank will have had 133 days to see how things have been moving. So we think May will be a live meeting for the policy rate.

We see the overnight rate at 2% by year end. With headline inflation slightly above 2% in the second half of the year, that would leave the real policy rate still accommodative. By that metric, money would still be easy.

At the close on January 26, 10-year Canadas were trading at 2.26%, up 21 bps from year end. German 10-year Bunds were yielding 0.63%, up 20 bps. Over the same period the 10-year Treasury yield moved up 25 bps to 2.66%. In other words, the recent upward shift in yields reflects the gain in momentum of the global economy and a shift in market expectations of central-bank policy stances.

After years of serial disappointment and tame inflation, the balance of risk may well have shifted to bond-market surprise at how much the central banks will need to deliver. That said, since a few months ago our base case scenario for the BoC in 2018 was more hawkish than that of the consensus, we do not feel the need to revise our projection at this point.

We see 10-year yields trading in a range of 2.70% to 2.85% 12 months from now.

Canada: More policy normalization in 2018

Balancing of risks to financial stability, economy and inflation calls for gradual policy normalization

Canada economic forecast	Q4 2017 forecast	Q1 2018 forecast	Q2 2018 forecast	Q3 2018 forecast	Q4 2018 forecast	2018 forecast
Real GDP growth (q/q % chg. saar)	2.2	2.3	2.5	2.7	2.1	2.5
CPI (y/y % chg.)	1.8	1.8	2.4	2.6	2.3	2.3
CPI ex. food and energy (y/y % chg.)	1.6	1.4	1.9	2.1	2.2	1.9
Unemployment rate (%)	6.0	5.9	5.9	5.7	5.6	5.8
Boc`s overnight rate		1.25	1.50	1.75	2.00	
10-Year Gov. of Canada		2.31	2.51	2.65	2.70	

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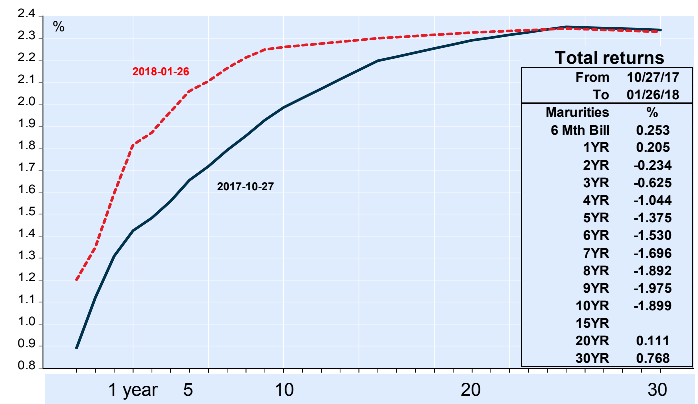
Total return over the last 13 weeks

Over the last 13 weeks the Canadian yield curve has shifted quite substantially. The yield of 2-years has moved up 39 bps, that of 5-years 40 bps, that of 10-years 27 bps and that of 30-years declined less than 1 basis point.

On a total-return basis (chart below), the laggards over that period were the 7- to 10-year maturities. The best performers were the 30-years, which returned a total of 0.77% (assuming a coupon reinvestment rate of 1.12%).

Canada yield curve

Yield to maturity



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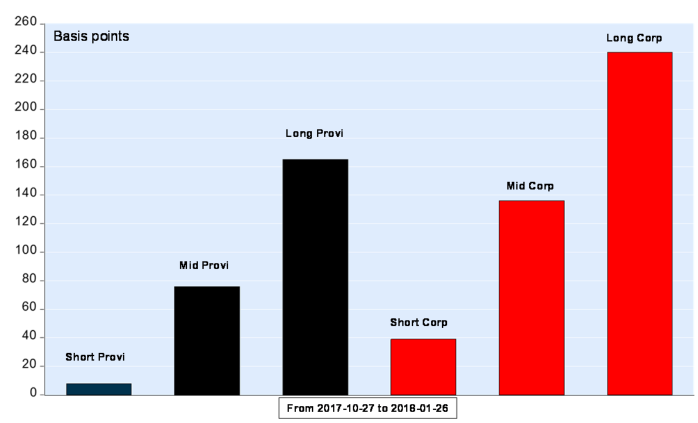
Corporate and provincial spreads to Canadas generally narrowed over the 13 weeks. Short, mid and long spread products significantly outperformed comparable Canadas. For example, corporate maturities of more than 10 years returned 2.46% compared to 0.06% for Canadas. Shorter-term spread products also outdid comparable Canadas, but even their returns were not high enough to offset the upward drift of the yield curve. For example, Canadas maturing in 5 to 10 years returned −1.73%, mid provincials −0.97%.

Canada: Corporate bonds have outperformed over the last 13 weeks

Excess returns of corporate and provincial bonds over comparable Canadas



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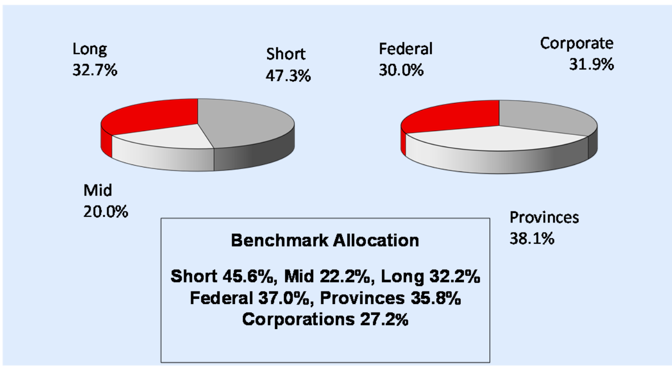
Recommended bond allocation
Recommended duration 7.36 vs the benchmark 7.44
Maintain overweight in provincial and corporate bonds



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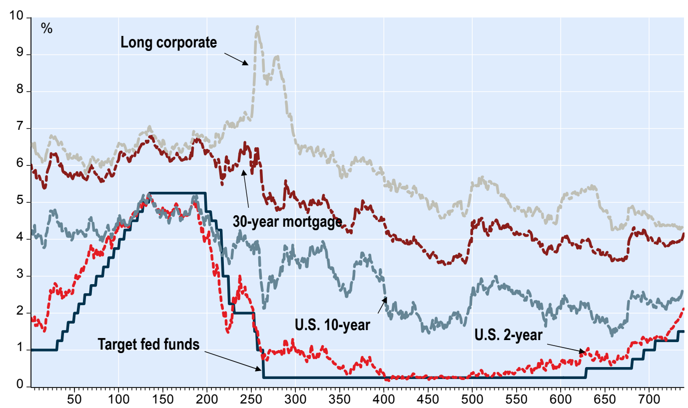
Canadian bond market – total returns

Total Returns	01/26/2018 Since 12/29/2017	Since 10/27/2017	Since 07/28/2017	Since 01/27/2017
Cash	0.07	0.19	0.37	0.58
Canada				
Short	-0.24	-0.53	-0.20	-0.84
Mid	-1.23	-1.54	-0.77	-1.76
Long	-1.17	0.15	2.35	2.96
Universe	-0.62	-0.60	0.17	-0.18
Provincial	-1.03	0.47	2.34	4.09
Municipal	-0.91	0.36	2.22	4.33
Corporate				
AA	-0.18	-0.38	0.31	0.34
A	-0.15	0.63	2.00	4.33
BBB	0.01	0.78	2.10	3.62
Universe	-0.10	0.52	1.76	3.10
Total	-0.62	0.08	1.37	2.23
S&P/TSX	0.33	2.52	8.83	7.24

NBF Economics and Strategy (data via DataStream)

U.S. interest rates
Last observation January 26, 2018



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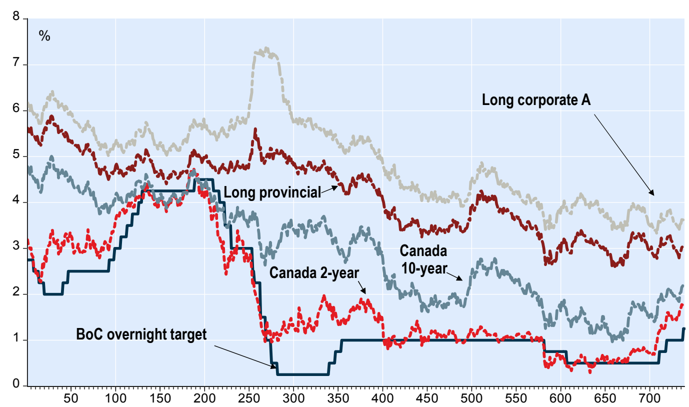
Canadian interest rates
Weekly, last observation January 26, 2018



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Bond Market - Canada

	Close-on 1/26/18	12/29/17	10/27/17	7/28/17	1/27/17
Interest Rates					
90-day (B/A's)	1.673	1.542	1.414	1.280	0.957
2 years	1.818	1.689	1.427	1.325	0.770
5 years	2.062	1.866	1.659	1.640	1.140
10 years	2.262	2.045	1.988	2.028	1.782
30 years	2.330	2.266	2.339	2.451	2.428
Spreads					
90 d - 2 years	14.6	14.7	1.3	4.5	-18.7
2 - 5 years	24.4	17.7	23.2	31.5	37.0
2 - 10 years	44.4	35.6	56.1	70.3	101.2
10 - 30 years	6.8	22.1	35.1	42.3	64.6
Currencies					
CAD / USD	1.2311	1.2573	1.2808	1.2433	1.3152
EUR / CAD	0.6533	0.6625	0.6726	0.6845	0.7107

Source: NBF Economics and Strategy (data via Bloomberg)

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Montreal Office
514-879-2529

Stéfane Marion
Chief Economist and Strategist
stefane.marion@nbc.ca

Marc Pinsonneault
Senior Economist
marc.pinsonneault@nbc.ca

Kyle Dahms
Economist
kyle.dahms@nbc.ca

Paul-André Pinsonnault
Senior Fixed Income Economist
paulandre.pinsonnault@nbc.ca

Matthieu Arseneau
Senior Economist
matthieu.arseneau@nbc.ca

Jocelyn Paquet
Economist
jocelyn.paquet@nbc.ca

Krishen Rangasamy
Senior Economist
krishen.rangasamy@nbc.ca

Angelo Katsoras
Geopolitical Analyst
angelo.katsoras@nbc.ca

Toronto Office
416-869-8598

Warren Lovely
MD, Public Sector Research and Strategy
warren.lovely@nbc.ca

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