Monthly Fixed Income Monitor

Economics and Strategy

NATIONAL BANK OF CANADA FINANCIAL MARKETS

March 2024

Forecast Summary

By Taylor Schleich & Warren Lovely

- Closer but not yet close enough (for rate cuts). That's seemingly the unofficial message delivered by both Jay Powell at the FOMC and Christine Lagarde at the ECB in recent days/weeks. While conceding that it's premature to be pivoting to less restrictive policy rates in the here and now, messaging from both Powell and Lagarde implies cutting conditions should gradually falling into place. This reinforces the notion that policy rates have peaked, the precise timing of a pivot and the eventual policy rate path to be walked the focus of our monthly interest rate recalibration.
- In/around mid-year still strikes us as a likely timeframe for the Fed to initiate a series of cuts. To us, it may be more appropriate to dub the looming adjustment as 'policy rate normalization' more than a legit 'easing cycle', since the prospective move lower in fed funds will be designed to lessen restrictiveness rather than to genuinely stimulate fresh economic activity. On the 'other' normalization, that of the Fed's balance sheet, we'll learn in the coming days, with drainage of excess liquidity expected to make a case for a QT taper sometime this fall.
- Like the Fed, our policy rate forecast is data dependent. Sifting through recent data, July still looks like a viable meeting for the first cut. While that timing is technically unchanged versus our prior assessment, we've come to reconsider the likely pace of easing. Deliberate may be the watchword, with more than a few FOMC members seeming to favour a slower adjustment process so that the durability, breadth and overall legitimacy of inflation relief can be thoroughly assessed. Indeed, on consumer price inflation, the past two reports have been less-than-encouraging, core services inflation remaining a noted problem spot. Clearly, this stickiness (if sustained) would gum up the process of interest rate relief, lest the Fed's credibility/resolve be drawn into question.
- To us, it suggests 75 bps of FOMC easing in calendar 2024, an initial move in July to be followed by a pause to reinforce the point that policymakers are in no rush. Fed funds upper would end the year at 4.75% and approach our nominal terminal rate (which we still believe to be a snick above 3%) at a slower clip. Overall, the revised path jibes with our amended U.S. growth forecast, which acknowledges some lingering inflation hot spots and generally embeds a much less forceful slowdown than we had previously outlined.
- For its part, the Bank of Canada is not yet willing to entertain talk of cuts. This despite a growing output gap and evidence of more contained inflation (beyond a still-problematic shelter component). The BoC's relatively guarded posture may reflect a desire to avoid a repeat of last year's reacceleration in interest-sensitive demand/housing, that ultimately forced the Bank into back-to-back hikes to start the summer.
- While our base case forecast makes a case for getting on with it (rate cuts that is), we must acknowledge that Macklem et al are seeing a different economic scenario play out. Call it a point of departure (us vs. them) on growth and inflation, our more noted slump in activity securing sustained inflation relief and making a case for meaningful policy rate relief. With our March issue, we are nonetheless pushing back the first BoC cut to July, a Fed-matching 75 bps of relief now expected before the year is out. There's no shortage of conjecture regarding Canada's r-star and the BoC will use the occasion of the April MPR to update its own thinking. Rather than 2.5%, a neutral nominal setting may be 25-50 bps higher, that level likely to be attained by latter stages of 2025, based on our current forecast/thinking.

United States						
Quarter	**Fed funds**	**3-month**	**2-year**	**5-year**	**10-year**	**30-year**
15-Mar-24	**5.50**	**5.42**	**4.69**	**4.28**	**4.27**	**4.40**
Q1:2024	5.50	5.40	4.70	4.30	4.30	4.45
Q2:2024	5.50	5.20	4.60	4.25	4.25	4.35
Q3:2024	5.25	4.90	4.30	4.05	4.15	4.25
Q4:2024	4.75	4.40	3.95	3.85	3.95	4.15
Q1:2025	4.25	4.00	3.60	3.60	3.80	4.05
Q2:2025	4.00	3.75	3.40	3.50	3.65	3.95
Q3:2025	3.75	3.55	3.30	3.45	3.70	3.95
Q4:2025	3.50	3.30	3.25	3.45	3.75	4.00
Q1:2026	3.25	3.10	3.25	3.50	3.80	4.05

Canada						
Quarter	**Overnight**	**3-month**	**2-year**	**5-year**	**10-year**	**30-year**
15-Mar-24	**5.00**	**4.95**	**4.21**	**3.58**	**3.51**	**3.39**
Q1:2024	5.00	5.00	4.20	3.60	3.50	3.40
Q2:2024	5.00	4.80	4.10	3.50	3.45	3.35
Q3:2024	4.75	4.45	3.75	3.30	3.35	3.25
Q4:2024	4.25	3.95	3.35	3.05	3.15	3.15
Q1:2025	3.75	3.45	2.95	2.80	2.95	3.05
Q2:2025	3.25	3.05	2.75	2.70	2.85	3.00
Q3:2025	3.00	2.80	2.70	2.70	2.90	3.05
Q4:2025	2.75	2.70	2.75	2.80	3.00	3.10
Q1:2026	2.75	2.70	2.80	2.90	3.05	3.15

FOMC Update: Seeking confidence (but not finding it)

Three months ago, Fed Chair Jerome Powell was asked about the so-called 'last mile' of inflation and if he anticipated that future disinflation would be more difficult to achieve than the progress made so far. He responded:

> *"…to say with certainty that the last mile is going to be different, I'd be reluctant to suggest that we have any certainty around that. We just don't know. I mean, inflation keeps coming down. The labor market keeps getting back into balance. And it's so far, so good—although we kind of assume that it will get harder from here. But so far, it hasn't."*

Okay, so that may not be a full-fledged declaration of inflation victory. He acknowledged that the last bit of relief *may* be more challenging but at the same time sounded optimistic it will continue to be a straightforward and painless process. In any event, it's becoming clear that the last mile *is* proving more difficult.

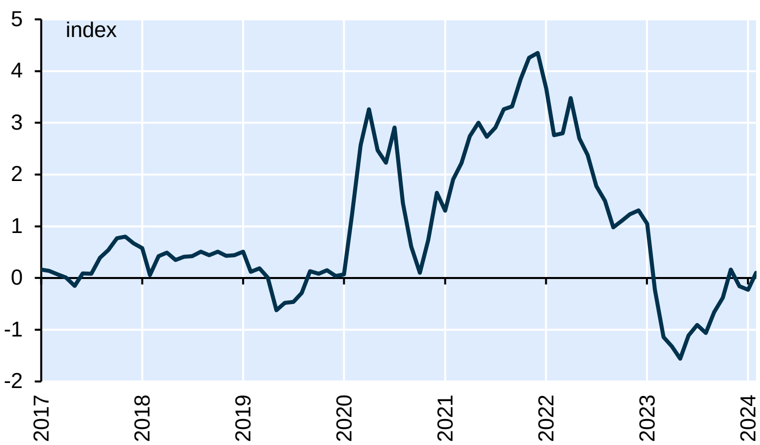
Markets were first put on notice last month when January's CPI report was published. Some dismissed the inflation pop as temporary, driven by 'residual seasonality'. However, that theory took a hit in March when the latest inflation data indicated there are still price pressures lingering. The PPI data that followed offered a similar assessment.

We're not sure this should come as a surprise. We'll reiterate what we argued in last month's monitor: *anyone looking at the economy through the lens of an output gap or Phillips curve should be skeptical that inflation could fall to 2% and stay there sustainably given the above-potential GDP growth and below-NAIRU unemployment*.

Rather than this more recent data being the aberration on a steady disinflation path, it appears that the softness we saw in 2023 is what was abnormal. For this relief, we can largely thank a normalization in supply chain pressures and a rise in labour force participation. However, the disinflationary impacts these items had to offer are probably now behind us. That means more meaningful labour market slack, and economic slack more generally, will be needed to generate further relief.

Supply chains won't offer much further relief for goods prices

NY Fed Supply Chain Pressure Index

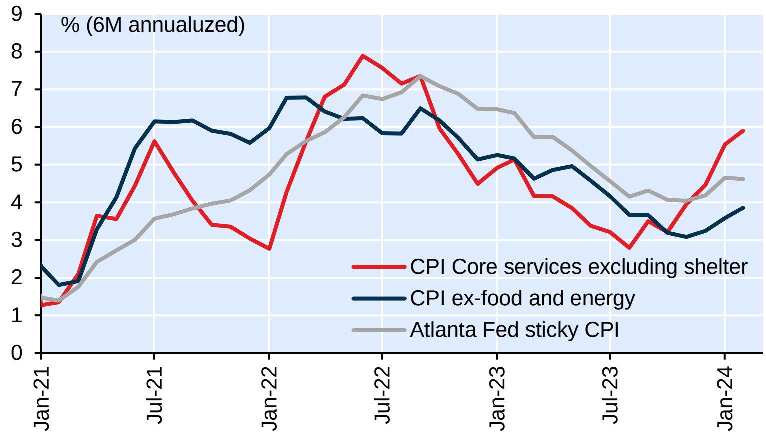


Source: NBF, Bloomberg, NY Fed

Now, one may reasonably point to the measure of inflation the Fed *actually* targets—the PCE deflator—and conclude that the Fed's job is effectively done. At 2.4%, inflation has already fallen to the pace the FOMC expected by year-end. Thinking about policy from a real rate perspective, that has meant monetary policy has grown more restrictive over recent months even as Fed remained sidelined. Shouldn't that alone warrant modest near-term easing? This would be an easier argument to make had inflation not spent the last three years meaningfully above target. Policymakers are—and probably should—be more sensitive to upside inflation risks for 'credibility' reasons alone. But more fundamentally, indicators of underlying pressures suggest further and/or sustained PCE relief may be fleeting. The latest CPI report showed momentum in core services excluding shelter (a gauge historically favored by the Fed) has been picking up. The Atlanta Fed's sticky inflation index is seeing a similar resurgence. Although a large gap has emerged between CPI and PCE (which may persist), equivalent PCE measures are also re-accelerating. That's a trend set to continue.

Underlying inflation is re-accelerating

Measures of underlying U.S. CPI inflation momentum



Source: NBF, Bloomberg, BLS, Atlanta Fed

There's also the issue of financial conditions. Recall, these were emphasized by Chair Powell back in the fall when yields shot higher on Treasury supply developments and risk assets retreated. Policymakers effectively used this tightening to back away from the additional hike they'd previously signalled. Since then, yields are decidedly lower, and equities have enjoyed an awe-inspiring run. These may not get the same airtime they once did but should weigh on the FOMC as they debate when to dial back restrictiveness.

Financial conditions loosening in a big way

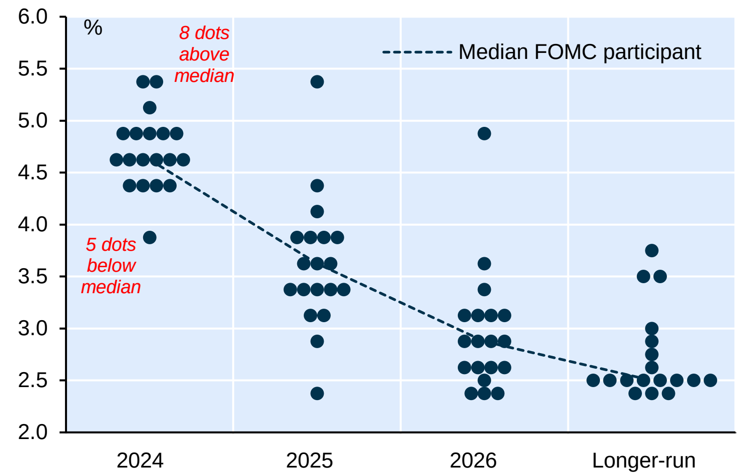
Key financial market variables: Last Fed hike, decision after yield peak, latest.

	July hike to November hold			Since November hold		
Measure	26-Jul	31-Oct	Change	31-Oct	15-Mar	Change
2-year	4.85	5.09	+24 bps	5.09	4.59	-50 bps
5-year	4.12	4.85	+74 bps	4.85	4.15	-71 bps
10-year	3.87	4.93	+106 bps	4.93	4.15	-78 bps
30-year	3.93	5.09	+116 bps	5.09	4.31	-78 bps
CDX IG	64	80	+16 bps	80	48	-31 bps
CDX HY	415	517	+102 bps	517	323	-194 bps
S&P 500	4,567	4,194	-8%	4,194	5,175	+23%
NASDAQ	14,127	12,851	-9%	12,851	16,266	+27%
DXY	101	106.7	6%	106.7	103.0	-3%

Source: NBF, Bloomberg | Note: 31-Oct was day before November Fed decision

We therefore would not be surprised to see policymakers, in this month's update to their Summary of Economic Projections, remove one of the three cuts they'd signaled for 2024 back in December. This is *not* guaranteed, but the existing skew of the dots means a shift to *fewer* cuts is more likely than a shift to *more* cuts.

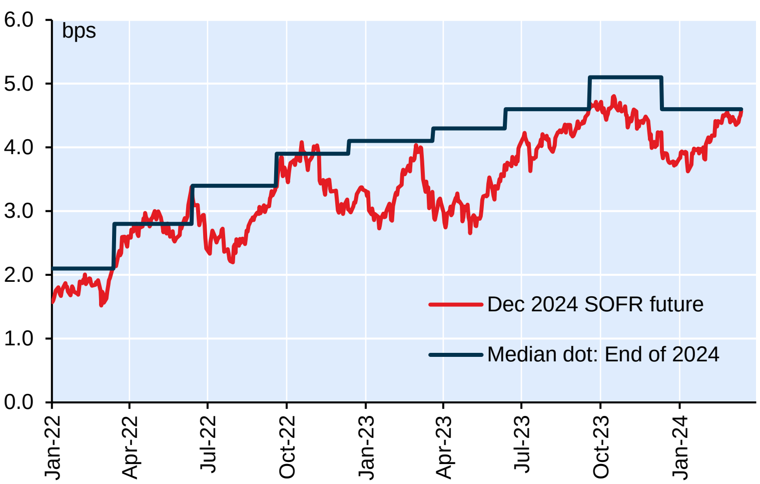
Existing 'dot skew' underscores risk of higher rate projections
FOMC December 2023 dot plot



Source: NBF, FRB | Note: 2023 dots excluded

This cycle, markets haven't always agreed with the rate implied by the Fed's dot plot, but they have tended to converge over time. And converge they have since January. The removal of a 2024 cut means short-term rates could come under further pressure in the near-term.

Market has converged to 2024 FOMC median projection
2024 year-end rate implied by Dec24 SOFR future vs. 2024 median 'dot'



Source: NBF, Bloomberg, FRB

Note that our own updated forecast *does* see the Fed easing three times this year (starting in July) but that is contingent on a material slowdown in coming quarters which will drive marginal inflation relief. That type of slowdown policymakers will not be signaling in their own growth forecast, and as such may judge fewer cuts *and* a slower pace of cuts is more appropriate.

What are we seeing that suggests a more material slowdown awaits the U.S. economy? Concerns in no small part stem from the labour market. While admittedly still in reasonably healthy shape, a number of tried and tested indicators of job market strength have been deteriorating. To name a few:

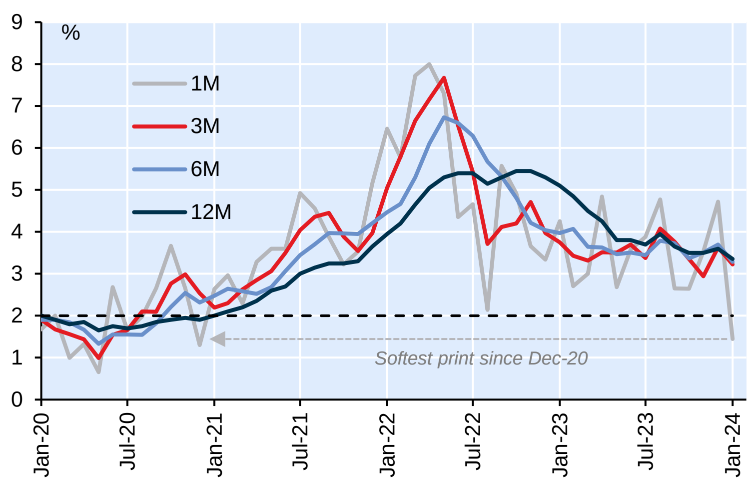
- the number of temporary roles have fallen for 23 straight months;
- the breadth of job growth (by industry) has significantly narrowed;
- full-time jobs, per the household survey, is down year-on-year;
- the quits rate has steadily fallen, now below pre-COVID levels.

These suggest the labour market isn't as strong as non-farm payroll growth might imply. Given that U.S. consumption growth is being aided by dissaving (which itself is being propelled by consumer confidence), further labour market softening could lead to weaker sentiment, triggering a reversal in spending/saving patterns. That in turn would lead to a slowdown sharper than many forecasters expect. Indeed, despite an upward adjustment to our growth forecast, we remain skeptical of the 'no landing' forecast increasingly adopted by the consensus. More material economic weakness may not be a development in the immediate term (i.e., the next couple months) but we could see a shift in the second half of the year. As such, we're bracing for yields to remain broadly steady, if not back up further until mid-year.

BoC Update: Weak… just not weak enough

The Bank of Canada's March decision was about as predictable as they come. As expected, the BoC left rates unchanged, making no mention of easier policy on the horizon. Moreover, Macklem explicitly stated in the press conference "it's still too early to consider lowering the policy interest rate". Not surprisingly, they remain concerned about upside inflation risks, despite what was a very encouraging January CPI report. Reading between the lines, Governing Council is telling us "one month a trend does not make". Consistent with that, the statement reaffirmed earlier projections of inflation hovering around 3% for the first half of 2023.

This was good news… but one month doesn't make a trend
Core inflation momentum over various time horizons

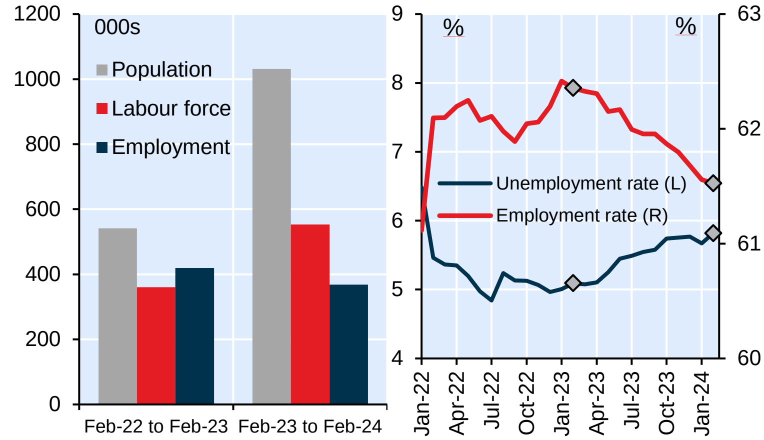


Source: NBF, StatCan | Note: Data reflects average of CPI-Trim & CPI-Median

While the BoC remains cautious on the inflation outlook, they'll readily admit the rest of the economy is slowing. They again acknowledged that the economy is in "modest excess supply". The fourth quarter GDP report was consistent with that assessment as a surge in exports masked what was another sluggish quarter for domestic demand, particularly in the private sector. The labour market, meanwhile, continues to rebalance. Indeed, after a brief improvement in the unemployment rate (due to a drop in participation), this key labour market gauge resumed its ascent in February as population and labour force growth continued to outpace job gains.

Labour demand is cooling while labour supply grows

Labour market growth (left) and measures of labour market slack (right)



Source: NBF, StatCan

We'd stress that this view of the economy is nothing new from the BoC. It's entirely consistent with January's MPR. But if there was one aspect of March's communications that could have surprised us, it was their marginally dovish assessment of wage pressures:

> *"Employment continues to grow more slowly than the population, and there are now some signs that wage pressures may be easing."*

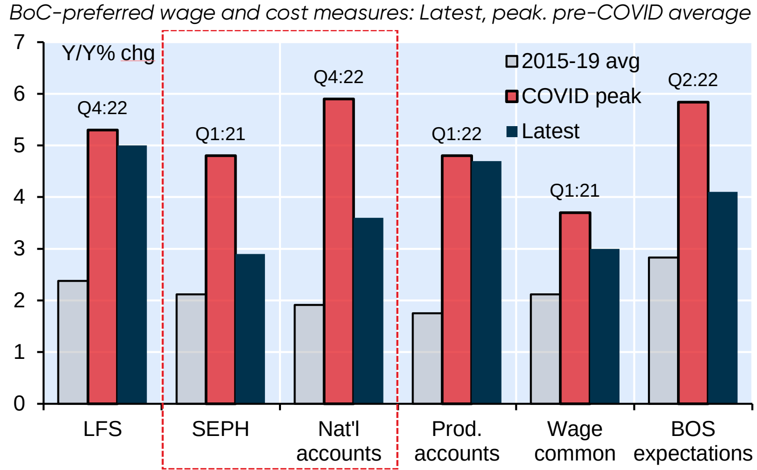
Compare that to the central bank's January characterization:

> *"Labour market conditions have eased, with job vacancies returning to near pre-pandemic levels and new jobs being created at a slower rate than population growth. However, wages are still rising around 4% to 5%"*

What is the BoC seeing here? On the surface, the latest read on wages from the well-publicized February Labour Force Survey—at 4.9%—certainly isn't consistent with this change. Well, as per the BoC's wage dashboard, there are no less than 5 different measures they use to assess wage inflation (in addition to wage plans/expectations from the BOS) and here you'll find some indicators *have* cooled.

Some measures of wage growth *are* easing

BoC-preferred wage and cost measures: Latest, peak. pre-COVID average



Source: NBF, StatCan, BoC | Note: Label refers to quarter of peak wage pressure

It should be noted that progress may be slightly overestimated as some of these measures were negatively impacted in Q4 by Quebec's public sector strikes (there is a downward bias on wages given that these striking workers had above-average incomes). While there is a risk that some of this 'progress' could stall or reverse in Q1, it remains that the LFS is probably overestimating current wage pressures. As our *Monthly Economic Monitor* outlines, private sector wage growth has moderated materially. That's in contrast with the U.S. labour market where wage pressures are still running hot.

To be sure, the BoC is not declaring victory here, just as they aren't on inflation. They'll need to see more evidence of sustained easing before gaining confidence that wage pressures are contained. Moreover, there are other 'focus items' that will need to moderate further. Inflation expectations and corporate pricing behaviour have both long been cited as variables that will guide the rate outlook and both have yet to fully normalize. An important update will be on offer here in April's Business Outlook Survey. We'd note that April will also bring a revised neutral rate estimate (in the MPR). Communications over the past year indicate their estimate will almost surely be revised higher. Expect the projected nominal neutral range to move up to 2.25%-3.25% (from 2%-3%).

Overall, there are clearly signs of moderating conditions across many Canadian macro indicators. Despite this, readers may notice we've delayed the timing of the BoC's initial rate cut to July and pared the total easing we expect in 2024. There are a number of reasons for this.

First, it's consistent with the Fed who we expect will be in no rush to begin cutting. Second, July is a more natural time to make a major policy shift as it comes with an updated Monetary Policy Report and provides policymakers with more latitude to discuss changes. Third, Canadian growth data, while below potential, is not weak enough to be the 'smoking gun' the BoC might need to pivot sooner. An improved (albeit still-soft) growth outlook may limit the pace of easing too. Fourth, the labour market rebalancing has also been a bit slower than expected. Fifth, financial conditions have loosened materially, which may be limiting some of the pain from elevated interest rates. And sixth, the additional month allows the Bank more time to fully assess the spring housing season. Recall, last spring's surge in housing activity and prices contributed to the Bank resuming its tightening cycle in June. We don't expect a repeat of last year, but we suspect the BoC will want to wait just to be sure.

There's one other major issue the Bank is undoubtedly watching carefully: fiscal policy. The BoC had already noted the government sector was growing at an above-potential pace and that isn't likely to change. Indeed, governments across the country are hearing their constituents bemoan cost of living pressures which doesn't incentivize budgetary constraint. That's been clear in recent weeks as budget balance estimates have deteriorated for most provinces. Federally, there are pressures too as the Parliamentary Budget Officer recently indicated the feds are on track to overshoot their earlier deficit estimate. If fiscal anchors from the fall update are to be respected, this will have to be resolved, either through spending cuts or tax increases. That may not be net stimulative relative to earlier guidance, but it could still have consequences for Canada's outlook.

To summarize: The BoC isn't likely to rush in the current environment. Later this year, we still see the economy slowing further. Moreover, the jobless rate rising above NAIRU will mean the 2% inflation that should take hold this year will be sustainable. This will (finally) allow for the long-awaited easing. We've thus maintained an aggressive path of cuts around the end of 2024/into 2025. Also, intact is our call that the BoC will be able to cut faster and reach neutral sooner than the Fed.

Interest Rates, spreads & foreign exchange: Current levels vs. those prevailing 3, 6, 9 and 12 months ago

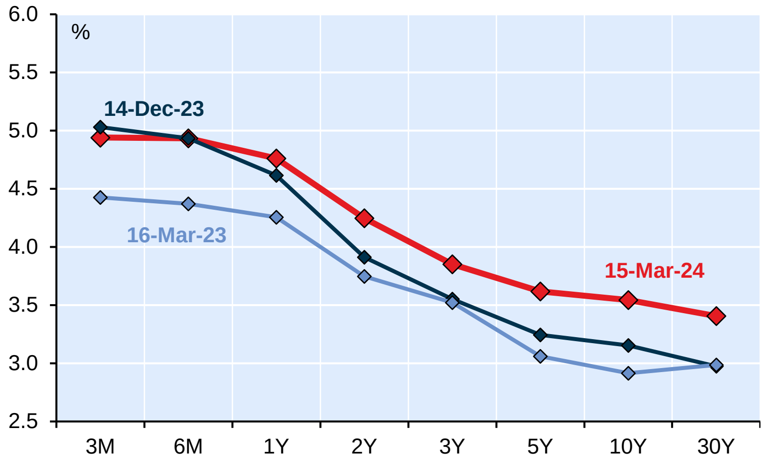
Canada						
Closing:	**Current**	**3M**	**6M**	**9M**	**12M**	**5Y avg**
Interest Rates (%)						
3M	**4.94**	5.02	5.10	4.85	4.41	1.99
1Y	**4.76**	4.60	5.20	5.09	4.24	2.19
2Y	**4.25**	3.91	4.69	4.49	3.75	2.05
3Y	**3.85**	3.55	4.29	4.08	3.52	2.00
5Y	**3.62**	3.24	3.97	3.64	3.06	1.96
10Y	**3.54**	3.15	3.69	3.33	2.91	2.03
30Y	**3.41**	2.97	3.53	3.21	2.98	2.24
Spreads (bps)						
3M-10Y	**-140**	-186	-141	-152	-149	4
2Y-10Y	**-70**	-76	-100	-116	-83	-1
5Y-10Y	**-7**	-9	-28	-31	-15	8
10Y-30Y	**-14**	-18	-16	-12	7	21
Currencies						
USD/CAD	**1.35**	1.34	1.35	1.32	1.37	1.32
EUR/CAD	**1.47**	1.47	1.44	1.45	1.46	1.46

United States						
Closing:	**Current**	**3M**	**6M**	**9M**	**12M**	**5Y avg**
Interest Rates (%)						
3M	**5.40**	5.38	5.47	5.22	4.67	2.08
1Y	**5.07**	4.91	5.43	5.19	4.47	2.18
2Y	**4.73**	4.39	5.01	4.65	4.16	2.13
3Y	**4.51**	4.09	4.69	4.24	4.01	2.11
5Y	**4.33**	3.91	4.42	3.91	3.74	2.15
10Y	**4.31**	3.92	4.29	3.72	3.58	2.34
30Y	**4.44**	4.04	4.38	3.84	3.70	2.73
Spreads (bps)						
3M-10Y	**-109**	-146	-118	-150	-108	26
2Y-10Y	**-42**	-47	-73	-93	-58	21
5Y-10Y	**-2**	2	-13	-19	-16	19
10Y-30Y	**13**	12	9	12	12	40
Currencies						
CAD/USD	**0.74**	0.75	0.74	0.76	0.73	0.76
EUR/USD	**1.09**	1.10	1.06	1.09	1.06	1.11

Source: NBF, Bloomberg | Note: values quoted in 3-month intervals from present day to the nearest trading date 3M, 6M, 9M, and 12M prior

Evolution of the Canadian yield curve

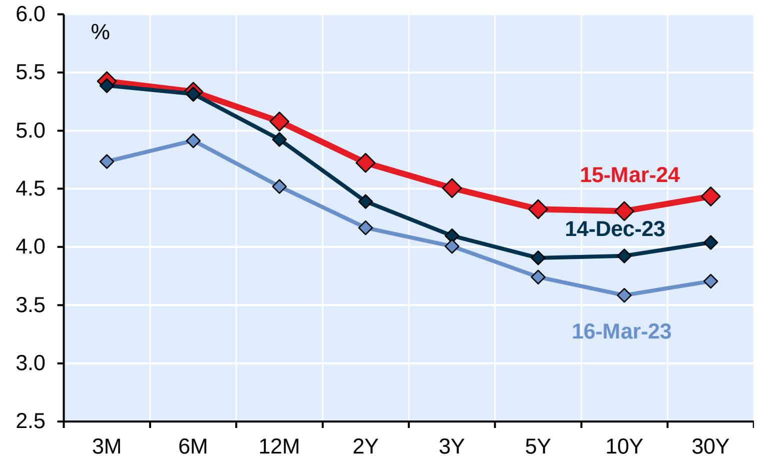
GoC yield curve: Current, 3 & 12 months ago



Source: NBF, Bloomberg

Evolution of the U.S. yield curve

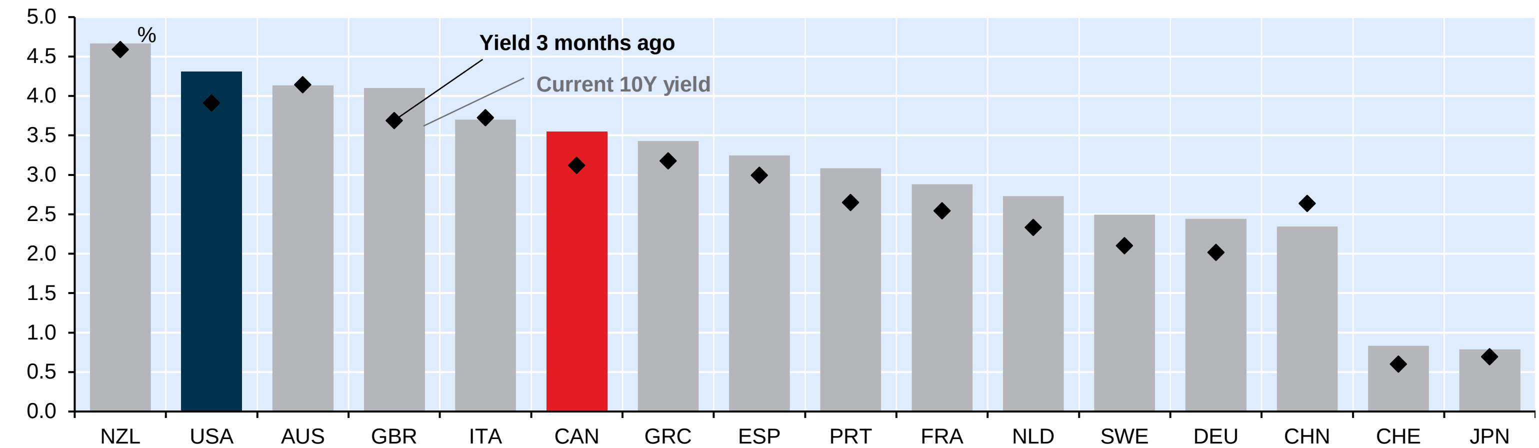
U.S. yield curve: Current, 3 & 12 months ago



Source: NBF, Bloomberg

World bond market snapshot

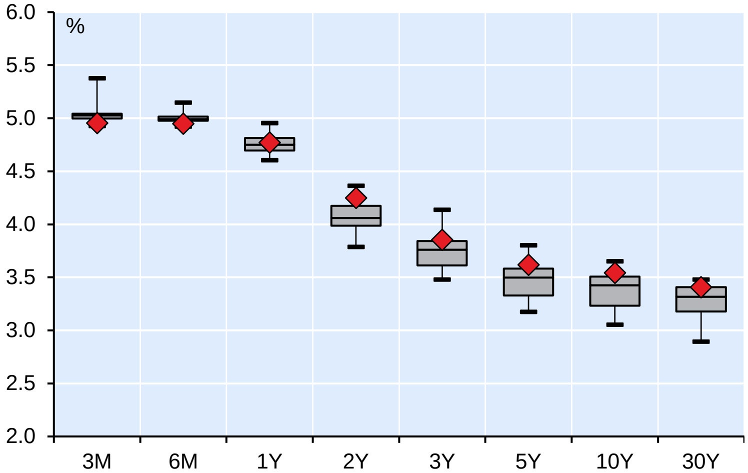
10Y bond yield by country: Current vs. 3 months ago



Source: NBF, Bloomberg

Canadian benchmark interest rates

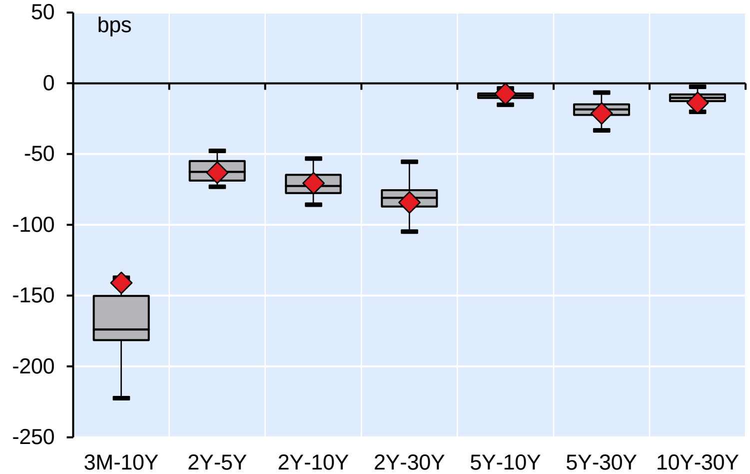
GoC benchmark bond yields: Current & 3-month trading range



Source: NBF, Bloomberg | Note: Grey box denotes 25th to 75th percentile trading range

Canadian interest rate curves

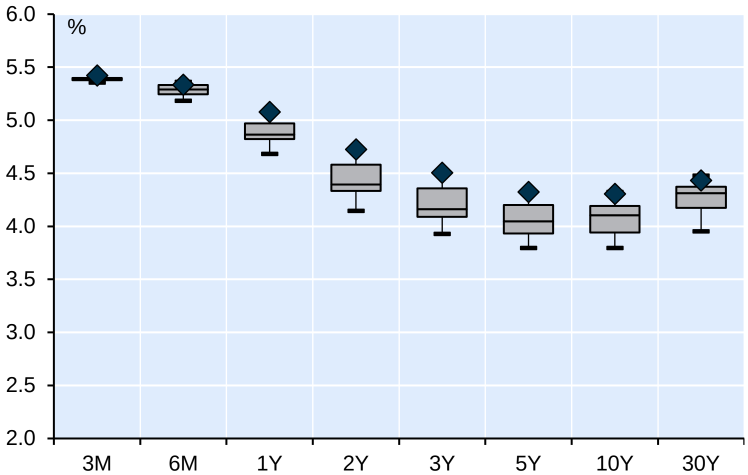
GoC benchmark bond yield curves: Current & 3-month trading range



Source: NBF, Bloomberg | Note: Grey box denotes 25th to 75th percentile trading range

U.S. benchmark interest rates

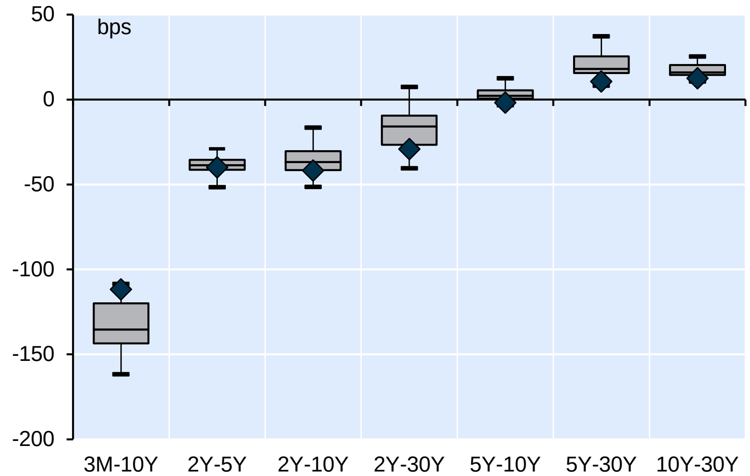
UST benchmark bond yields: Current & 3-month trading range



Source: NBF, Bloomberg | Note: Grey box denotes 25th to 75th percentile trading range

U.S. interest rate curves

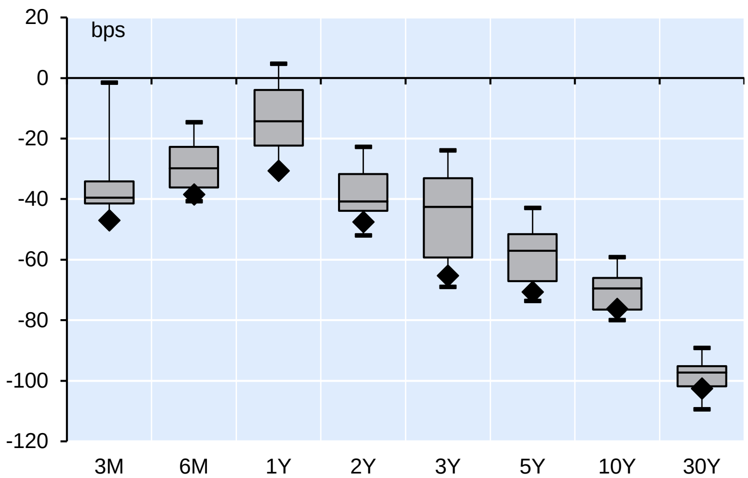
UST benchmark bond yield curves: Current & 3-month trading range



Source: NBF, Bloomberg | Note: Grey box denotes 25th to 75th percentile trading range

Canada-U.S. interest rate differentials

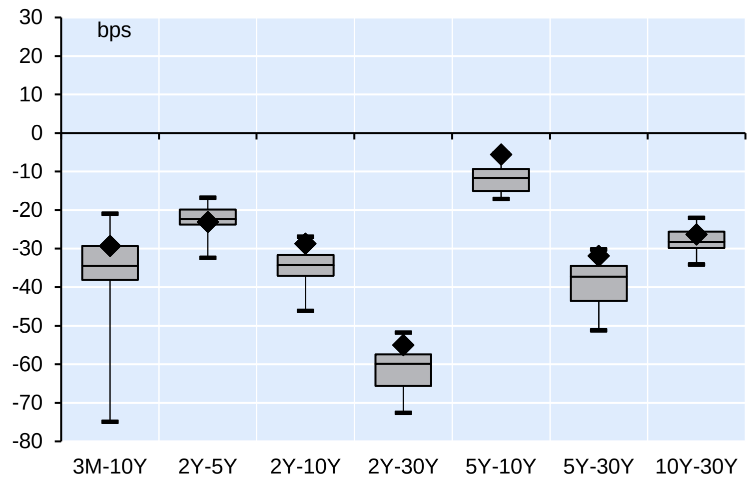
GoC -UST benchmark bond yields: Current & 3-month trading range



Source: NBF, Bloomberg | Note: Grey box denotes 25th to 75th percentile trading range

Canada-U.S. interest rate boxes

GoC-UST yield curves: Current & 3-month trading range



Source: NBF, Bloomberg | Note: Grey box denotes 25th to 75th percentile trading range

Economics and Strategy

Montreal Office
514-879-2529

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

Matthieu Arseneau
Deputy Chief Economist
matthieu.arseneau@nbc.ca

Kyle Dahms
Economist
kyle.dahms@nbc.ca

Daren King, CFA
Economist
daren.king@nbc.ca

Jocelyn Paquet
Economist
jocelyn.paquet@nbc.ca

Alexandra Ducharme
Economist
alexandra.ducharme@nbc.ca

Angelo Katsoras
Geopolitical Analyst
angelo.katsoras@nbc.ca

Toronto Office
416-869-8598

Warren Lovely
Chief Rates and Public Sector Strategist
warren.lovely@nbc.ca

Taylor Schleich
Rates Strategist
taylor.schleich@nbc.ca

UK Residents

This Report is a marketing document. This Report has not been prepared in accordance with EU legal requirements designed to promote the independence of investment research and it is not subject to any prohibition on dealing ahead of the dissemination of investment research. In respect of the distribution of this Report to UK residents, NBF has approved the contents (including, where necessary, for the purposes of Section 21(1) of the Financial Services and Markets Act 2000). This Report is for information purposes only and does not constitute a personal recommendation, or investment, legal or tax advice. NBF and/or its parent and/or any companies within or affiliates of the National Bank of Canada group and/or any of their directors, officers and employees may have or may have had interests or long or short positions in, and may at any time make purchases and/or sales as principal or agent, or may act or may have acted as market maker in the relevant investments or related investments discussed in this Report, or may act or have acted as investment and/or commercial banker with respect hereto. The value of investments, and the income derived from them, can go down as well as up and you may not get back the amount invested. Past performance is not a guide to future performance. If an investment is denominated in a foreign currency, rates of exchange may have an adverse effect on the value of the investment. Investments which are illiquid may be difficult to sell or realise; it may also be difficult to obtain reliable information about their value or the extent of the risks to which they are exposed. Certain transactions, including those involving futures, swaps, and other derivatives, give rise to substantial risk and are not suitable for all investors. The investments contained in this Report are not available to retail customers and this Report is not for distribution to retail clients (within the meaning of the rules of the Financial Conduct Authority). Persons who are retail clients should not act or rely upon the information in this Report. This Report does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for the securities described herein nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

This information is only for distribution to Eligible Counterparties and Professional Clients in the United Kingdom within the meaning of the rules of the Financial Conduct Authority. NBF is authorised and regulated by the Financial Conduct Authority and has its registered office at 70 St. Mary Axe, London, EC3A 8BE.

NBF is not authorised by the Prudential Regulation Authority and the Financial Conduct Authority to accept deposits in the United Kingdom.

U.S. Residents

With respect to the distribution of this report in the United States of America, National Bank of Canada Financial Inc. ("NBCFI") which is regulated by the Financial Industry Regulatory Authority (FINRA) and a member of the Securities Investor Protection Corporation (SIPC), an affiliate of NBF, accepts responsibility for its contents, subject to any terms set out above. To make further inquiry related to this report, or to effect any transaction, United States residents should contact their NBCFI registered representative.

This report is not a research report and is intended for Major U.S. Institutional Investors only.

This report is not subject to U.S. independence and disclosure standards applicable to research reports.

HK Residents

With respect to the distribution of this report in Hong Kong by NBC Financial Markets Asia Limited ("NBCFMA")which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 (dealing in securities) and Type 3 (leveraged foreign exchange trading) regulated activities, the contents of this report are solely for informational purposes. It has not been approved by, reviewed by, verified by or filed with any regulator in Hong Kong. Nothing herein is a recommendation, advice, offer or solicitation to buy or sell a product or service, nor an official confirmation of any transaction. None of the products issuers, NBCFMA or its affiliates or other persons or entities named herein are obliged to notify you of changes to any information and none of the foregoing assume any loss suffered by you in reliance of such information.

The content of this report may contain information about investment products which are not authorized by SFC for offering to the public in Hong Kong and such information will only be available to, those persons who are Professional Investors (as defined in the Securities and Futures Ordinance of Hong Kong ("SFO")). If you are in any doubt as to your status you should consult a financial adviser or contact us. This material is not meant to be marketing materials and is not intended for public distribution. Please note that neither this material nor the product referred to is authorized for sale by SFC. Please refer to product prospectus for full details.

There may be conflicts of interest relating to NBCFMA or its affiliates' businesses. These activities and interests include potential multiple advisory, transactional and financial and other interests in securities and instruments that may be purchased or sold by NBCFMA or its affiliates, or in other investment vehicles which are managed by NBCFMA or its affiliates that may purchase or sell such securities and instruments.

No other entity within the National Bank of Canada group, including National Bank of Canada and National Bank Financial Inc, is licensed or registered with the SFC. Accordingly, such entities and their employees are not permitted and do not intend to: (i) carry on a business in any regulated activity in Hong Kong; (ii) hold themselves out as carrying on a business in any regulated activity in Hong Kong; or (iii) actively market their services to the Hong Kong public.