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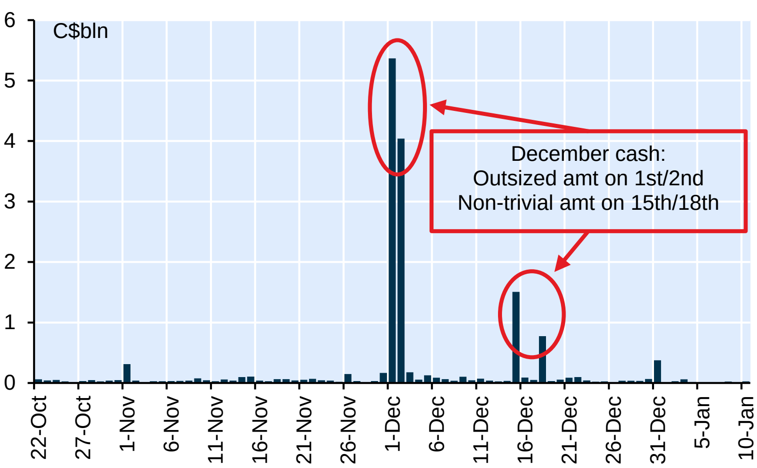
Market View – Canada's December 1st/2nd effect… cash and lots of it!

By Warren Lovely / Taylor Schleich

December 1st is more than a month and a half away (34 trading days to be precise). Too early to start thinking about the likely deployment of all the associated cash, resulting Index extensions, absolute and relative value trades, etc? Hardly. Not when the cash flows are so significant. Moreover, it seems to us that awareness of Canada's December 1st (and December 2nd) cash flow effect intensifies (and moves up) with each passing year. So here a few things to think about ahead of one of the most material sets of cash flows Canada's bond market sees in any given year. As for format of this note, we're attaching some brief text to a series of representative charts. There is a certain amount of nuance, plenty of caveats and any number of additional charts one could include. We'll happily take up the discussion with interested parties.

Chart 1: Prepping for December's outsized cash dump

Projected FTSE Canada Universe cash flows in/around 1-Dec-2020

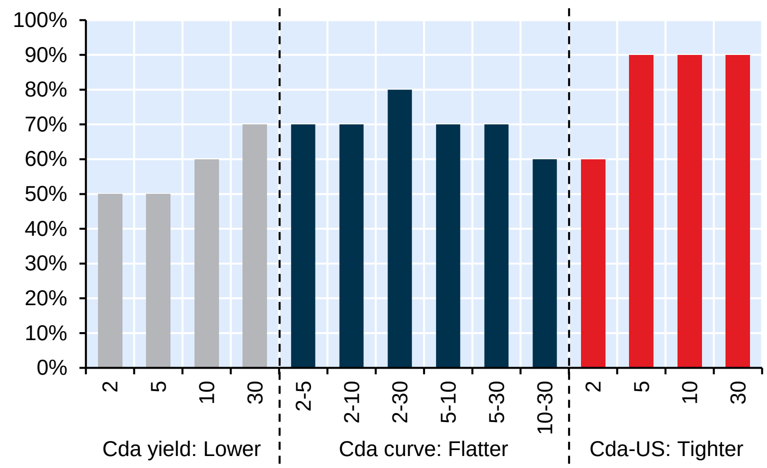


Source: NBF, FTSE Russell | Note: Based on cashflow report from 8-Oct

December 1st/2nd cash flows are a big deal in Canada, being the six-month echo effect of June 1st/2nd. Alongside the deployment of outsized cash, Index-related adjustments typically see average duration extend. This year will be no different. Refer to Index-related comments (and NBF's simulation results) on pages 3-4.

Chart 2: Canada-US most consistently profitable aspect

10Y success rate vs. expected direction in Canadian rates 20D up to 1-Dec

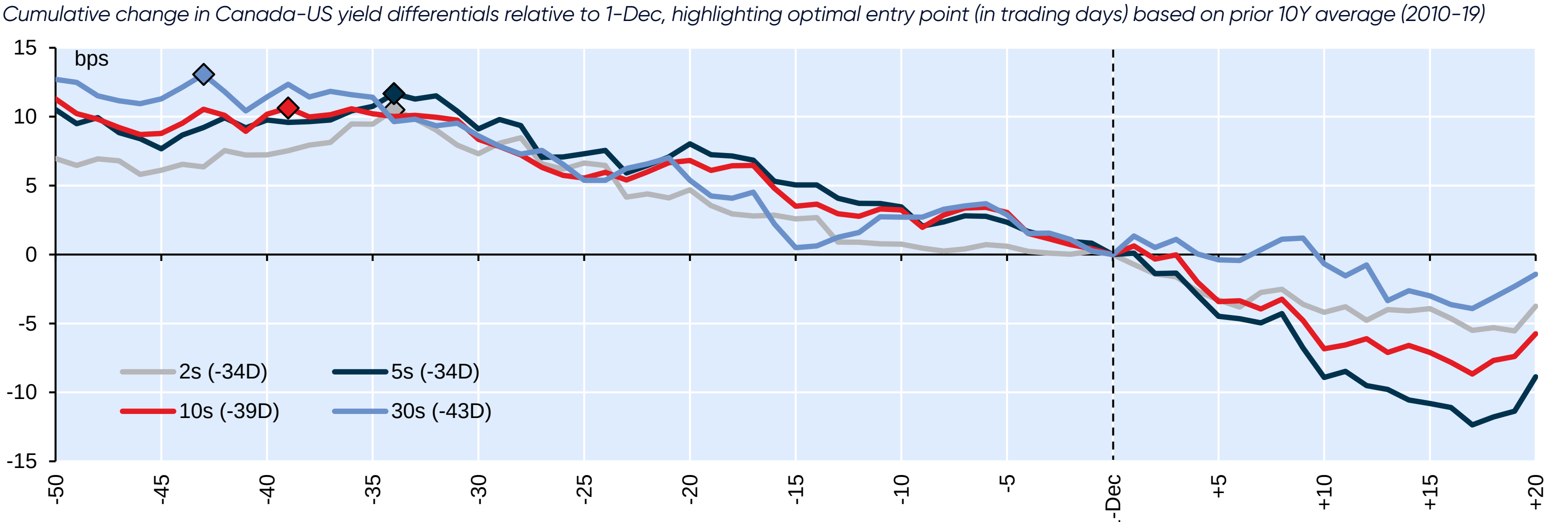


Source: NBF, Bloomberg | Note: Success rates based on 10Y period from 2010-19

December cash flows can and do impact various segments of the market, but focusing on Canadian rates, the tendency is towards lower yields, flatter curves and outperformance vis-à-vis the U.S. It's this latter aspect—Canada-U.S. yield differentials—where the historical performance record (over 10 years) is most compelling.

Chart 3: Optimal entry point for Canada-US? Historically, it's been right about now!

Cumulative change in Canada-US yield differentials relative to 1-Dec, highlighting optimal entry point (in trading days) based on prior 10Y average (2010-19)

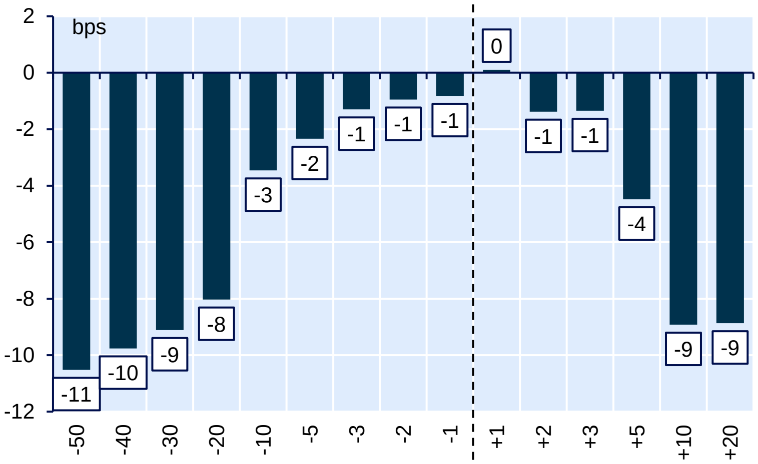


Source: NBF, Bloomberg | Note: Average change in yield differentials relative to 1-Dec (which is set to 0); markers denote optimal entry based on average performance in each tenor; days listed in legend coincide with largest cumulative move

Zeroing in on Canada-U.S. yield differentials, we've tended to observe a non-trivial degree of outperformance of GoC bonds in the lead-up to December 1st. Based solely on the empirical record, the optimal time to get long Canada vs. the U.S. is generally 34-40 days prior to the large cash flows. Note: October 14th is precisely 34 trading days ahead of December 1st, suggesting the ideal entry window may be upon us.

Chart 4: Canada-US tends to perform pre & post 1-Dec

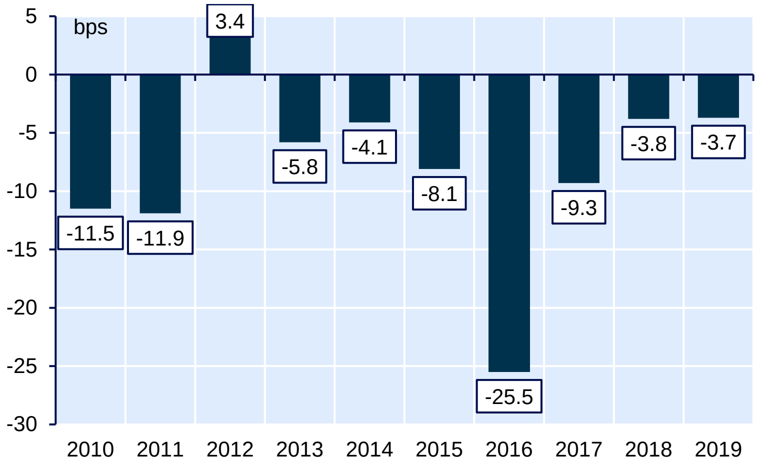
Average change in Canada-US 5s leading up to & following 1-Dec (2010-19)



Source: NBF, Bloomberg | Note: Figures to left of dotted line indicate avg chg up to 1-Dec, while figures to right of dotted line indicate avg chg after 1-Dec

Chart 5: Performance record neither perfect nor uniform

Total change in Canada-US 5s in 20D leading up to 1-Dec



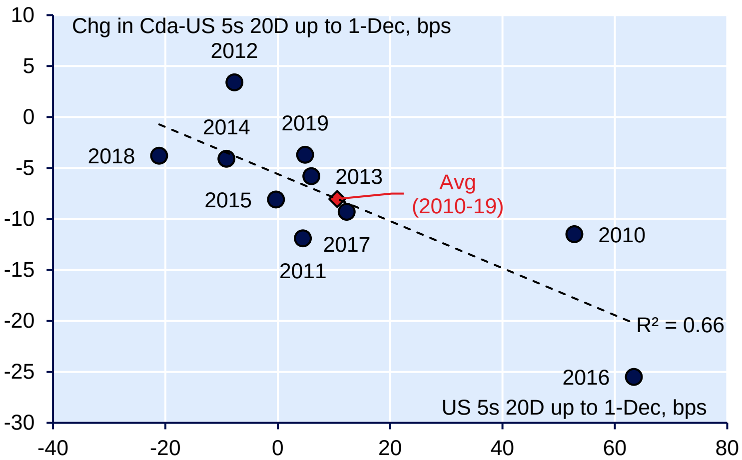
Source: NBF, Bloomberg

The above chart illustrates the average move in Canada-U.S. 5s leading up to and following the key date of December 1st. As highlighted in Chart 3, history suggests it pays to put this trade on early. Waiting too long typically limits gains. Last year, for instance, this trade (Canada-U.S. 5s) would have gone against you if put on less than 15 days prior to December 1st. Meanwhile, it tends to be profitable to maintain a long Canada, short U.S. bias into mid-December (if not year-end). We caution that post-cash flow outperformance is at least party a by-product of the late-year selloff in rates we often observe, with directionality explored in Chart 6.

As you might expect, average moves don't tell the whole story. Again, isolating for the performance of Canada-U.S. 5s, you will see the average 8 bp gain in the 20 trading days leading up to December 1st includes an excessively large move in 2016 (more on this in Chart 7) and also incorporates a single instance (out of 10 years) where being long Canada vs. the U.S. would have hurt you outright (2012). We'd also note that the recorded move in the last two years (2018 and 2019) was smaller-than-average. As noted at left, if you were to produce the above chart based on the 10-day performance going into December 1st, you would find that this trade was a rare loser last year.

Chart 6: Directionality a consideration (more than location)

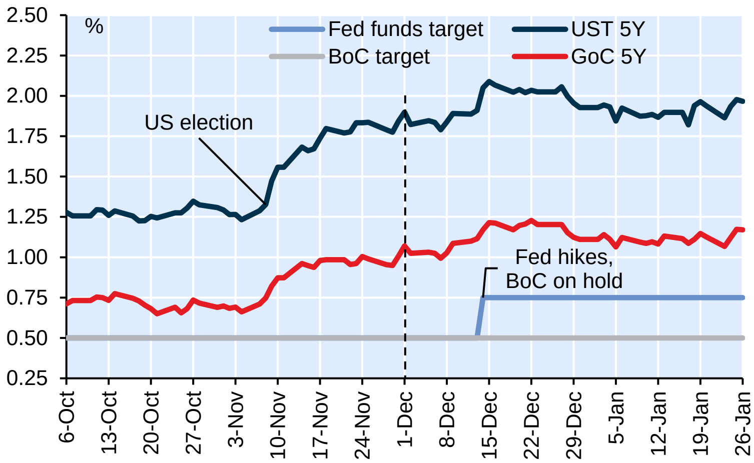
Change in Canada-US 5s (vertical) vs. chg in US yields (horizontal)



Source: NBF, Bloomberg

Chart 7: The 2016 experience, where U.S. vote & Fed factored

Canada & US target policy rates & 5Y yields in/around 1-Dec-2016

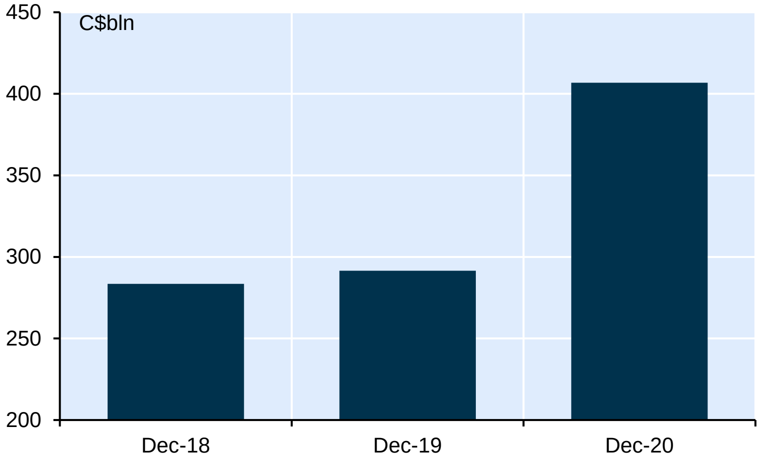


Source: NBF, Bloomberg | Note: Fed funds target relates to upper band

More than location, market directionality tends to influence the long Canada, short U.S. trade we've highlighted here. While the relationship is far from perfect, Canada's relative performance is intuitively correlated with the overall move in underlying U.S. yields leading up to December 1st. The one and only year Canada failed to perform on a relative basis (2012) coincided with a move lower in underlying yields. On the flip side, the significant back-up in U.S. yields recorded in 2016 allowed Canada to register its best-ever performance during our focal time period.

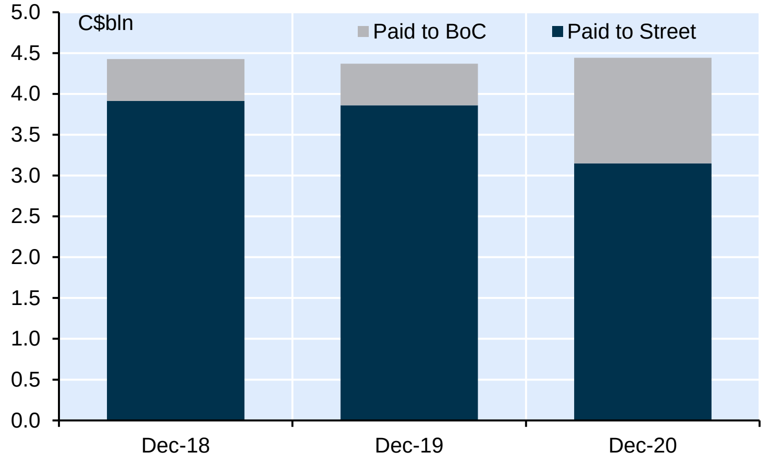
What of that extreme 2016 experience? Interestingly, it coincided with the last Presidential election, where Mr. Trump rose to power. As the dust settled on the election result, risk rallied and rates sold off. The move in rates was further fueled by positioning for a Fed rate hike, which was telegraphed ahead of time and ultimately came to pass in mid-December. In contrast, the BoC was in no rush to hike, as Canada had more slack to close up in the wake of the 2015 oil price collapse. Whatever the catalyst, the sharp back-up in U.S. interest rates allowed for Canada to grossly outperform four years ago.

Chart 8: 2020's GoC bond stock is considerably larger…
Outstanding C$ GoC bonds with Jun/Dec maturity dates



Source: NBF, Bloomberg | Note: Based on C$ GoC bonds bearing Jun/Dec maturity

Chart 9: … but QE means more GoC coupons go to BoC
Distribution of GoC December coupon payments: BoC vs. all other investors

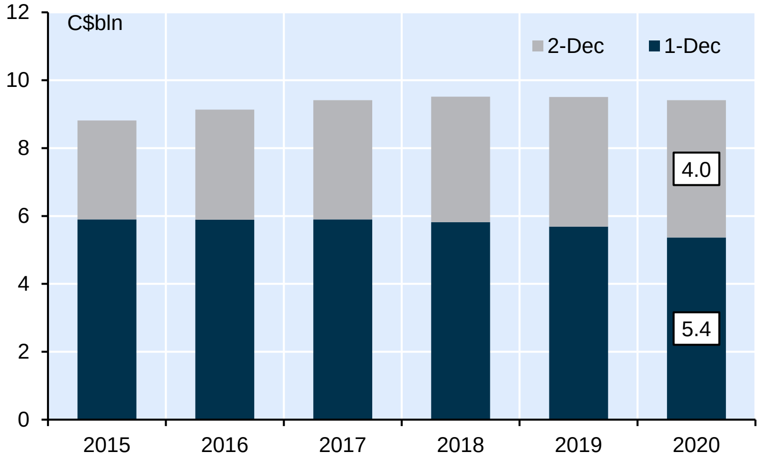


Source: NBF, Bloomberg | Note: Based on C$ GoC bonds bearing Jun/Dec maturity

It goes without saying that the political backdrop is once more top of mind. U.S. rates are being heavily influenced by an expectation of post-vote stimulus. A Democratic sweep would seem to support the traditional long Canada, short U.S. bias. So too might the evolving monetary policy backdrop at the Fed vs. the BoC. The former will tolerate (welcome?) a modest inflation overshoot, while the BoC may stick to the straight and narrow road that is its existing regime. Back to the fiscal landscape, Canada has rushed out its own stimulus, financed via large-scale bond issuance. That means that today's relevant GoC bond crop is notably larger than in years gone by, implying a larger dose of cash in 2020 right? Hold up. See text at right.

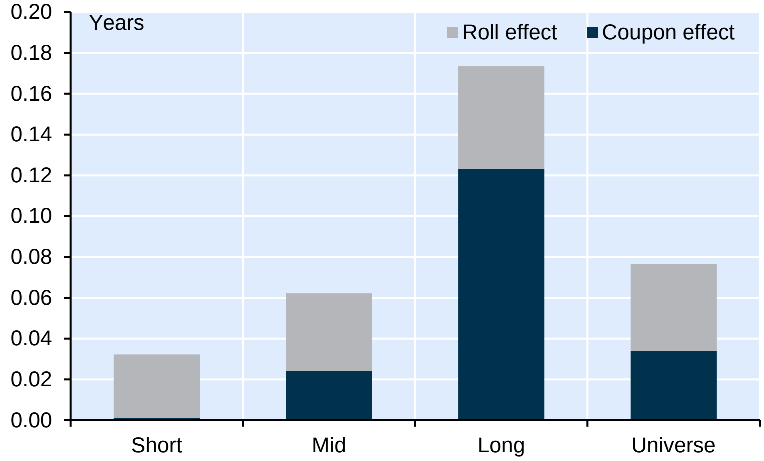
Notwithstanding a considerably larger crop of GoC bonds bearing a June of December maturity, today's ultra-skinny yields are pulling down the weighted average coupon. Then there's the BoC QE impact, where large-scale purchases—currently C$5 billion/week—mean more GoC coupons are getting paid to the central bank than ever before. If anything, the decline in the weighted average coupon paid to the street has been exacerbated by the composition of the Bank's purchases, given at least an initial focus on illiquid and relatively higher-coupon off-the-runs. All that being said, there's still a healthy stockpile of bonds (GoC and other sectors) held by end investors, meaning a sizeable slug of December cash to go to work.

Chart 10: Some C$9½bln of Index cash coming Dec 1st/2nd
Projected FTSE Canada Universe Bond Index cash flows



Source: NBF, FTSE Russell | Note: Based on simulations as at 8-Oct each year

Chart 11: Duration of Universe poised to extend (like always)
Change in duration of FTSE Canada Universe Bond Index: 30-Nov to 2-Dec



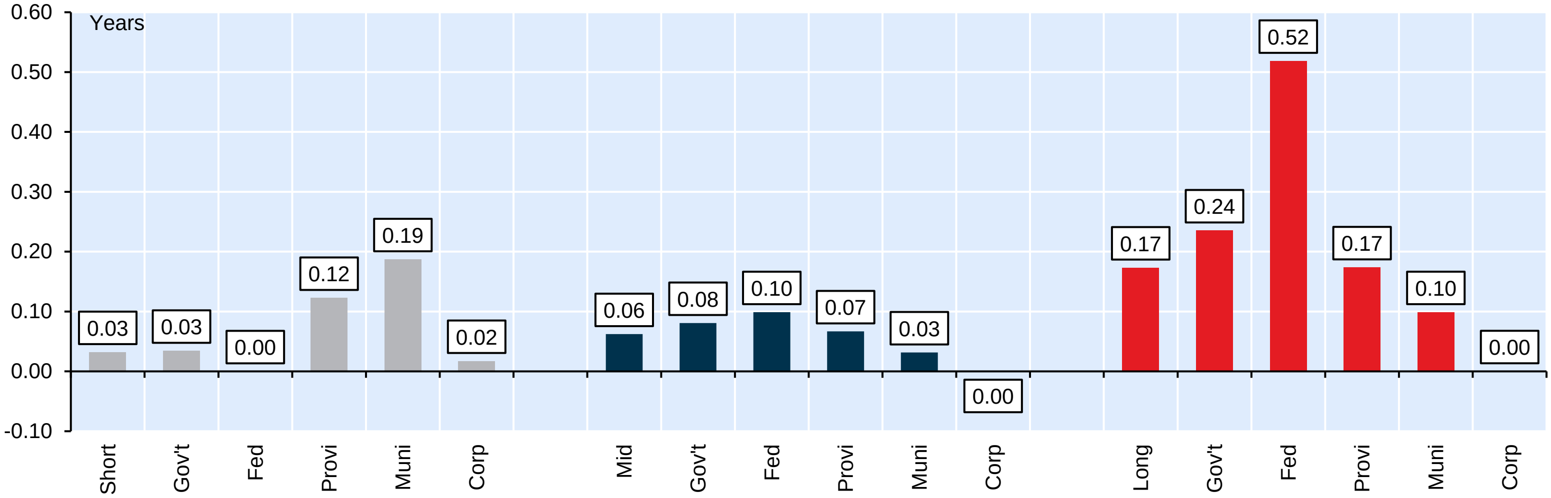
Source: NBF, FTSE Russell | Note: NBF simulations based on closing prices from 13-Oct; assumes no change in yield curve

Allow us to switch gears somewhat, in order to touch on projected impacts for the FTSE Canada Universe Bond Index. We currently estimate Universe cash flows of C$5.4 billion on December 1st, with a further C$4.0 billion arriving on December 2nd. This two-day combined cash tally of C$9½ billion isn't bigger than prior years, but is hefty in absolute terms all the same. Consider that the average daily interest income of all Universe bonds is ~C$140 million, making the December 1st/2nd cash dump an 8-10 standard deviation event.

We estimate that early December's super-sized coupons and related rollouts will add 0.08 years to the Universe index from November 30th to December 2nd (ceteris paribus). As an aside: A single rollout in the RRB Index will see duration skyrocket (by ~ 1½ years) in that particular slice of Canada's domestic bond market. All else isn't always equal, but the looming coupon/rollout/rollover effect should generate interest in longer-dated Canada bonds (nominals and tips).

Chart 12: Breaking down the Index extension from November 30th to December 2nd

Projected change in modified duration of FTSE Canada Universe Bond Index by bucket & sector: 30-Nov to 2-Dec (i.e., 2-day combined impact)

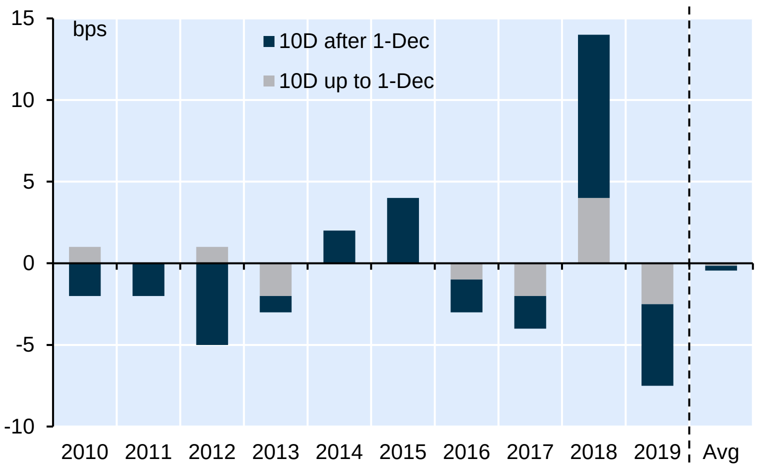


Source: NBF, FTSE Russell | Note: NBF simulations based on closing prices from 13-Oct; assumes no change in yield curve

The above chart isolates projected changes in modified duration over the two large cash flow days of December 1st and 2nd by bucket (i.e., Short, Mid, Long) and sector (i.e., Federal, Provincial, Corporate, etc). As it stands, seven bonds with combined holdings of ~C$11½ billion will drop out of the Universe on either December 1st or 2nd. The largest of those is Q 4.25% 12/01/2021, with C$7.5 billion currently outstanding. As you can see, the anticipated duration extension (assuming a steady yield curve) should end up being particularly pronounced in the Long index (i.e., 10-years plus). More specifically, we project the duration of the Long Federal component will shoot up by more than 0.5 years. That projected extension captures both outsized GoC coupons and the rolling over (from Long to Mid) of the CAN 0.5% 12/01/2030 bond. Note also that Ontario's fresh 10-year—ONT 1.35% 12/02/2030 with C$750 million currently outstanding—will also drop out of the Long sub-index on December 2nd, having been first issued less than a week ago. At the margin, that will contribute to an extension in that particular segment.

Chart 13: Cash supports provis, but results less consistent

Change in Ontario 10Y bond spread pre & post 1-Dec

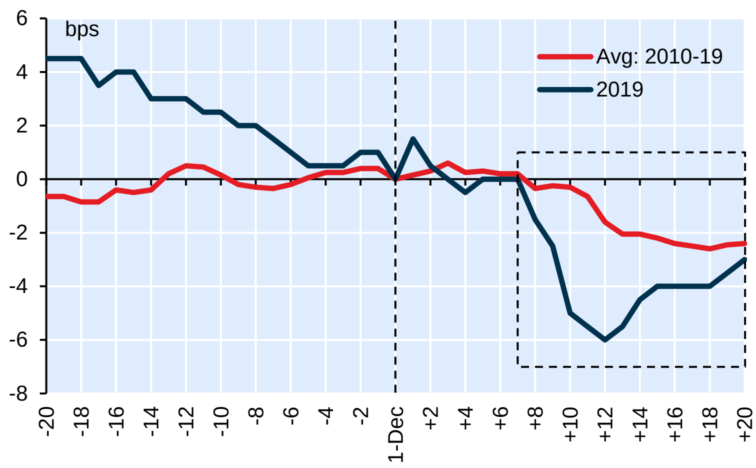


Source: NBF, Bloomberg

You won't find the same predictability in provincial credit spreads as you do in Canada-U.S. rates. On average, there's been an ever-so-slight tightening of spreads in/around December 1st. We'll reiterate our warning that averages mask divergent performances over the years, in this case held back by a very ugly 2018. Looking at the 20 trading days centred on December 1st, Ontario 10s have tightened 70% of the time, including a particularly nice move last year. Saying that, the record shows provincials have often lagged U.S. IG CDX around the key date. Nor has a credit curve flattener been a clear and consistent winner in years gone by, although as noted above, there will be a non-trivial extension of provincial sub-indices this December.

Chart 14: Bigger spread rally tends to come into year-end

Cumulative change in Ontario 10Y bond spread relative to 1-Dec



Source: NBF, Bloomberg

As we've highlighted previously, the bigger move in provincial credit often comes in the last handful of trading days of the year. Investors get a final infusion of cash mid-December, and by all outward appearances, tend to chase spreads tighter once the new issue machine shuts down for the holidays. Past performance may be no predictor of future gains, but in 9 of the past 10 years, Ontario 10s have rallied in final 10 days of the calendar year. Unlike the December 1st scorecard, end-of-year performance of provincial credit appears to be superior to U.S. IG CDX. We will further explore the ins and outs of this credit trade as we get closer to December.

Table: Spotlight on Canadian rates... A detailed look at how successful December 1st trades have been

Average move & success rates in Canada interest rates (outright yields, curves, butterflies & vs. U.S.) leading up to & following December 1st (based on 2010-19)

		Canada Outright				Canada Curves						Canada Flies			
		2-year	5-year	10-year	30-year	2s-5s	2s-10s	2s-30s	5s-10s	5s-30s	10s-30s	2s-5s-10s	2s-5s-30s	2s-10s-30s	5s-10s-30s
Days before / after 1-Dec	-20	2.7	2.5	1.6	-1.9	-0.1	-1.1	-4.6	-1.0	-4.5	-3.5	0.9	4.3	2.4	2.5
	-10	2.1	0.3	-1.3	-3.5	-1.8	-3.4	-5.6	-1.6	-3.8	-2.2	-0.2	2.0	-1.2	0.6
	-5	-0.7	-1.1	-0.9	-1.1	-0.4	-0.2	-0.4	0.1	0.0	-0.1	-0.5	-0.4	-0.1	0.3
	-3	0.2	0.8	1.8	1.1	0.7	1.7	1.0	1.0	0.3	-0.7	-0.3	0.4	2.3	1.7
	-2	0.4	1.6	2.7	1.9	1.1	2.2	1.4	1.1	0.3	-0.8	0.0	0.9	3.1	1.9
	-1	1.1	2.0	2.5	2.1	0.9	1.4	0.9	0.5	0.1	-0.5	0.3	0.8	1.8	1.0
	+1	-1.1	-1.0	-1.2	-1.2	0.1	0.0	-0.1	-0.2	-0.2	0.0	0.3	0.3	0.0	-0.1
	+2	-1.4	-0.6	0.2	0.7	0.8	1.6	2.1	0.8	1.3	0.5	-0.1	-0.6	1.1	0.3
	+3	-2.6	-1.9	-0.4	0.7	0.6	2.1	3.3	1.5	2.7	1.2	-0.9	-2.1	1.0	0.3
	+5	-2.1	-1.9	-1.5	-0.4	0.2	0.6	1.7	0.4	1.5	1.1	-0.2	-1.3	-0.6	-0.8
	+10	-0.3	0.2	0.2	0.3	0.4	0.5	0.5	0.1	0.1	0.0	0.3	0.3	0.5	0.1
	+20	0.4	0.6	-0.9	-2.3	0.2	-1.3	-2.6	-1.5	-2.8	-1.3	1.7	3.0	0.0	-0.2
Success rate (%)	-20	50%	50%	60%	70%	70%	70%	80%	70%	70%	60%	60%	50%	50%	50%
	-10	40%	40%	50%	80%	60%	70%	70%	70%	70%	60%	50%	50%	50%	40%
	-5	50%	50%	50%	60%	60%	50%	40%	30%	40%	50%	60%	50%	50%	30%
	+5	70%	60%	40%	40%	50%	50%	30%	30%	20%	20%	50%	60%	60%	50%
	+10	40%	50%	50%	50%	40%	30%	30%	30%	40%	50%	30%	40%	40%	40%
	+20	20%	40%	50%	50%	50%	40%	50%	70%	70%	70%	40%	40%	50%	50%

		Canada-US Differential				Canada-US Boxes						Canada-US "Fly Trap"			
		2-year	5-year	10-year	30-year	2s-5s	2s-10s	2s-30s	5s-10s	5s-30s	10s-30s	2s-5s-10s	2s-5s-30s	2s-10s-30s	5s-10s-30s
Days before / after 1-Dec	-20	-4.7	-8.0	-6.8	-5.4	-3.3	-2.1	-0.7	1.2	2.6	1.4	-4.5	-6.0	-3.6	-0.2
	-10	-0.8	-3.5	-3.2	-2.7	-2.7	-2.5	-2.0	0.2	0.7	0.5	-2.9	-3.5	-3.0	-0.3
	-5	-0.6	-2.3	-3.1	-2.9	-1.7	-2.5	-2.3	-0.7	-0.5	0.2	-1.0	-1.2	-2.6	-0.9
	-3	-0.1	-1.3	-1.1	-1.6	-1.2	-1.0	-1.5	0.2	-0.3	-0.4	-1.4	-0.9	-0.6	0.6
	-2	0.0	-0.9	-0.7	-1.1	-0.9	-0.7	-1.1	0.2	-0.1	-0.4	-1.2	-0.8	-0.3	0.6
	-1	-0.2	-0.8	-0.4	-0.3	-0.6	-0.2	0.0	0.4	0.6	0.2	-1.0	-1.1	-0.3	0.2
	+1	-0.7	0.1	0.6	1.3	0.8	1.4	2.1	0.5	1.3	0.7	0.3	-0.4	0.6	-0.2
	+2	-1.4	-1.4	-0.3	0.5	0.0	1.1	1.9	1.1	1.9	0.8	-1.0	-1.9	0.2	0.2
	+3	-1.6	-1.3	0.0	1.1	0.3	1.6	2.7	1.3	2.4	1.1	-1.1	-2.2	0.4	0.2
	+5	-3.3	-4.5	-3.4	-0.4	-1.2	-0.1	2.9	1.1	4.1	3.0	-2.3	-5.3	-3.1	-2.0
	+10	-4.2	-8.9	-6.8	-0.7	-4.7	-2.6	3.5	2.1	8.2	6.2	-6.8	-13.0	-8.8	-4.1
	+20	-3.8	-8.9	-5.7	-1.4	-5.1	-2.0	2.3	3.1	7.4	4.3	-8.2	-12.6	-6.3	-1.2
Success rate (%)	-20	60%	90%	90%	90%	70%	70%	50%	30%	40%	30%	70%	60%	60%	40%
	-10	60%	90%	90%	70%	70%	80%	60%	50%	50%	60%	60%	70%	80%	50%
	-5	60%	70%	80%	70%	60%	70%	50%	60%	50%	50%	50%	50%	80%	60%
	+5	70%	70%	60%	50%	60%	50%	30%	30%	10%	10%	70%	80%	60%	70%
	+10	80%	80%	70%	50%	80%	50%	20%	30%	10%	10%	**100%**	**100%**	80%	70%
	+20	50%	70%	60%	50%	80%	50%	40%	30%	20%	40%	70%	70%	70%	50%

Source: NBF, Bloomberg | Note: Success rates reflect the percentage of time the expected direction of trade held; examples of the a priori direction of trade include: Canada outright=lower yield; Canada curves=flatter; Canada-U.S. yield differentials=tighter, etc; Canada-U.S. "fly trap" represents a Canada butterfly vs. U.S. butterfly trade involving six bonds

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