

November 7, 2023 - (Vol. VII, No. 84)

# Playing Canada's cash machine (December 1<sup>st</sup>/2<sup>nd</sup>)

By Warren Lovely & Taylor Schleich

**T-18**  
(weekdays  
to 1-Dec-23)

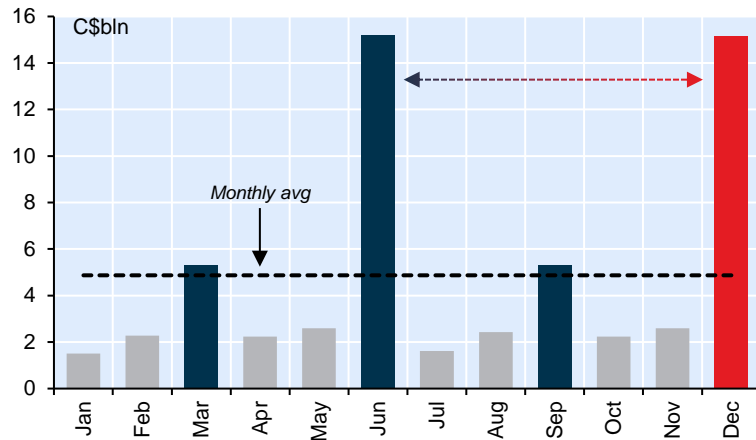
As we write this, December 1<sup>st</sup> is precisely 18 weekdays away. That places us squarely in the heart of a traditional 'seasonal sweet spot' for Canadian rates. Back then, by popular demand, is our detailed look at seasonal tendencies going into and coming out of the outsized wall of bond market cash that starts to arrive on December 1<sup>st</sup>. (Note: The cash deluge continues on December 2<sup>nd</sup>, with less significant though hardly trivial coupon/roll adjustments coming on December 15<sup>th</sup> and 18<sup>th</sup> too.) As in prior years, this specialized *Market View* highlights key elements of the December cash flow effect, dissecting the performance record in Canadian rates (outright yields, curves, butterflies and cross-market). We draw attention to the more consistently profitable aspects of cash flow seasonals.

As always, we urge caution when interpreting empirical results. Today's market location is far from 'normal', yields being relatively elevated, curves still inverted and cross-market levels in some cases at extremes. Nor are cash flows the only thing to be holding sway in the days to come. Both the FOMC and the BoC are data dependent, so material surprises on inflation, jobs, growth or other key indicators could alter the thinking on policy rates. (Note: This year's final decision from the BoC comes December 6<sup>th</sup>, the FOMC following one week later on December 13<sup>th</sup>.) We also await an important fall economic statement from the federal government, which should include an update to the GoC domestic debt management strategy and (we hope) a final decision on CMB consolidation (or lack thereof). And of course, there's no shortage of geopolitical intrigue to keep market participants on their toes.

### An empirical examination of Canada's December cash flow effect, based on 13Y sample from 2010-22

**Chart 1: Heavy seasonal concentration of bond index cash**

Projected FTSE Canada Universe Bond Index cash flows: 2023 by month

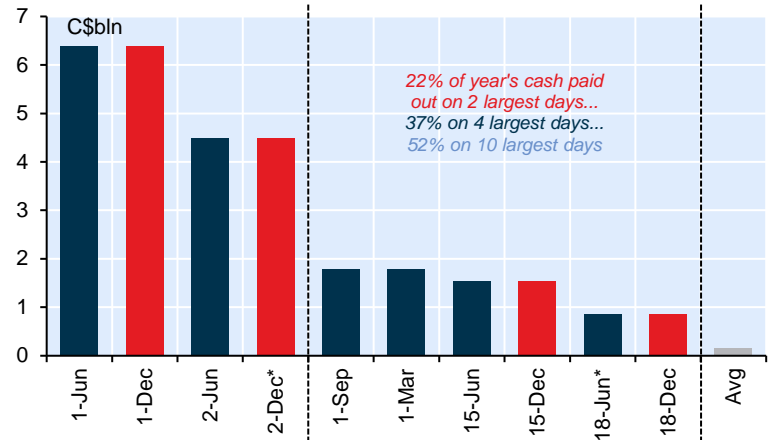


Source: NBF, FTSE Russell | Note: Based on estimated cash flows at start of year

In terms of bond market cash, Jun & Dec are the main events. BoC QT means more bonds are held by end investors, with 2023 cash setting a record for the month of December (+13% y/y).

**Chart 2: Cash rains down on a handful of days (notably Dec 1<sup>st</sup>/2<sup>nd</sup>)**

Largest projected FTSE Canada Universe Bond Index cash flow days: 2023

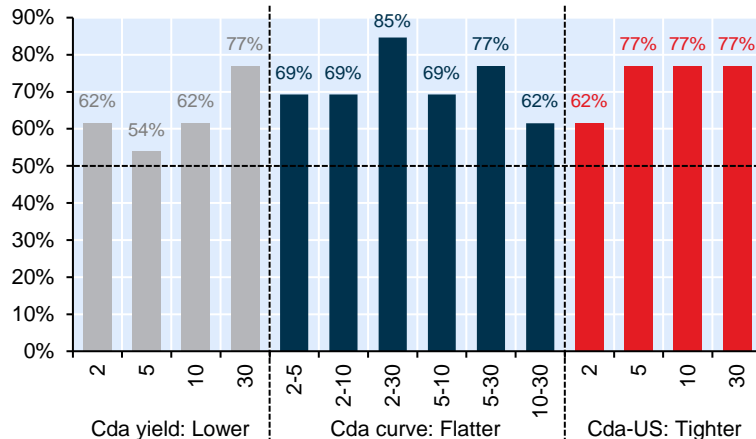


Source: NBF, FTSE Russell | Note: Asterisk denotes a day that falls on weekend in 2023

December cash is heavily concentrated on the 1<sup>st</sup>, 2<sup>nd</sup> & 15<sup>th</sup> of the month, where coupon & roll effects drive waves of duration extension. We detailed specific index effects [here](#).

**Chart 3: A handful of consistently profitable elements**

13Y success rates vs. expected direction in Canadian rates 20D up to 1-Dec

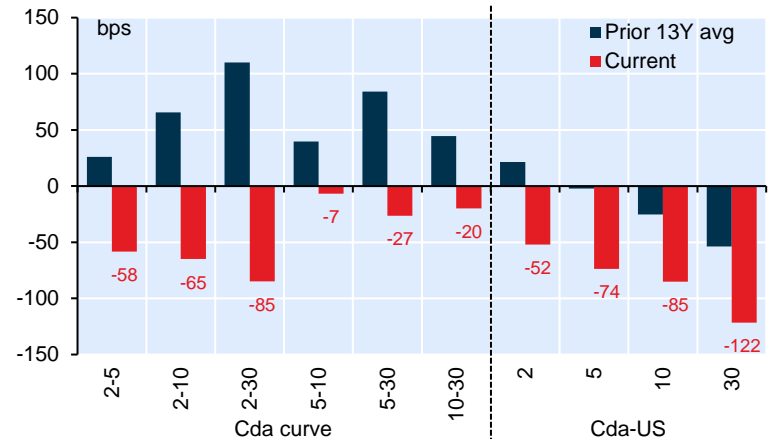


Source: NBF, Bloomberg | Note: Success rates based on 13Y period from 2010-22

All else equal, December seasonals support flatter curves & relative performance of Canadas vs. USTs. Success rates (pre or post cash flows) aren't necessarily 100%, however. Looking at moves in the days leading up to 1-Dec, Canada-US 5s, 10s & 30s tighten more often than not.

**Chart 4: Current vs. average levels, there's no comparison!**

Canada yield curves & differentials: Current vs. avg level 18-20D before 1-Dec

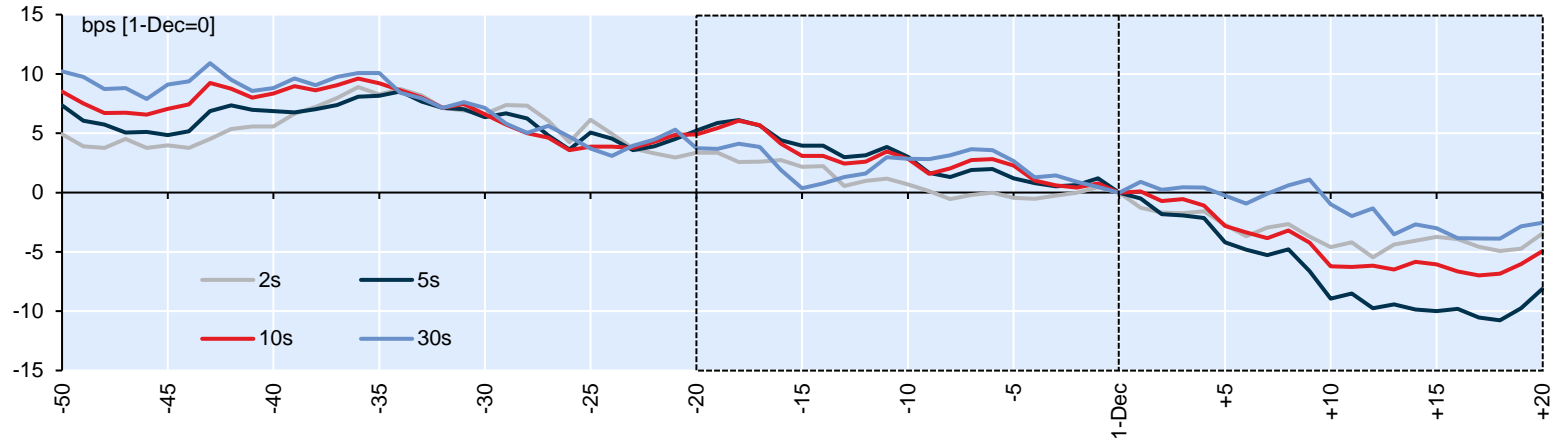


Source: NBF, Bloomberg | Note: Prior 13Y avg (T-20) based on 2010-22; current is T-18

GoC yield curves remain flatter (inverted) relative to the 'average' location for this time of year. Duration extension may add a seasonal flattening bias, but policy rate re-pricing is a major consideration. Meantime, RV screens show Canadas as relatively rich to USTs vs. past periods.

### Chart 5: Historically, it has paid to be long Canada vs. US heading into 1-Dec, keeping trade on for much of December

Cumulative change in Canada-US yield differentials relative to 1-Dec, based on prior 13Y average (2010-22)

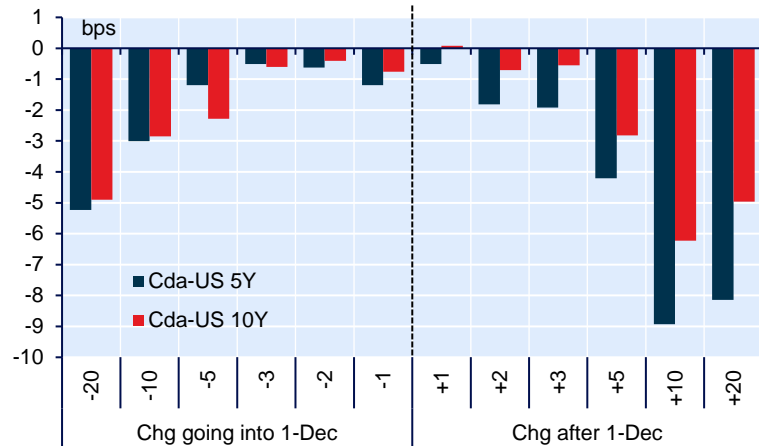


Source: NBF, Bloomberg | Note: Cumulative change in yield differentials based on generic benchmarks; horizontal axis reflects weekdays relative to 1-Dec (which is set to 0)

We tend to observe material & sustained outperformance of Canada vs. the US heading into December's large cash flows. As for post-December 1<sup>st</sup> performance vs. the US, historical success rates (based on 2010-22) appear best in 5s. We caution that past performance is no guarantee, particularly with Canadas trading at noted premiums across the curve and central banks data dependent.

### Chart 6: Canada-US tends to perform pre & post 1-Dec

Avg change in Canada-US 5s & 10s leading up to & following 1-Dec (2010-22)

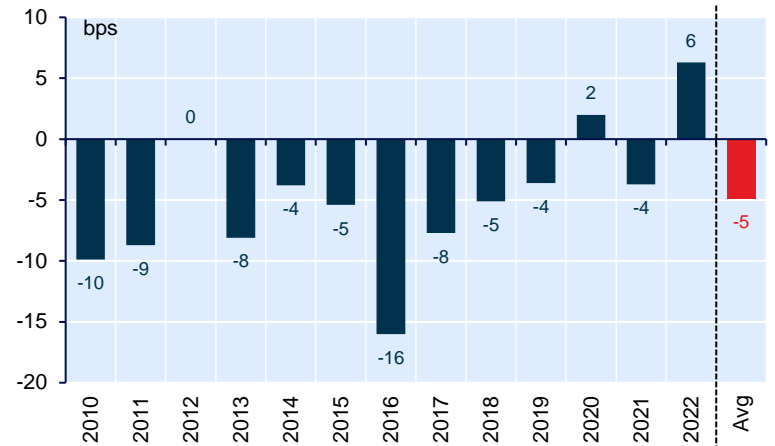


Source: NBF, Bloomberg | Note: Avg chg for given number of weekdays vs. 1-Dec

History suggests it pays to put the Canada-US trade on early (i.e., now). It likewise tends to be profitable to maintain a long Canada, short US bias into mid-December (if not year-end).

### Chart 7: Cda-US 10s tighter 10 of 13 times, but not in 2022!

Net change in Canada-US 10s in 20D leading up to 1-Dec

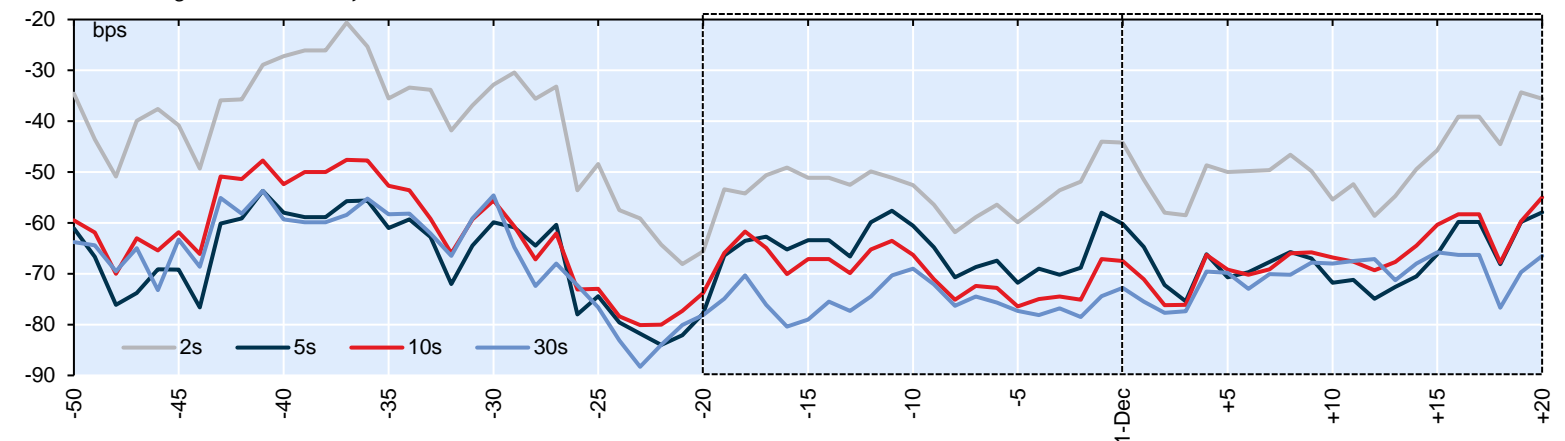


Source: NBF, Bloomberg | Note: Based on relative changes in generic 10Y benchmarks

Looking at the net change in the 20D going into 1-Dec, Canada 10s outperformed USTs in 10 of the 13 years in our post-GFC sample. We bucked that trend last year, however...

### Chart 8: Canada outperformance faced headwinds going into last 1-Dec, but immediate follow was reasonably solid

Cumulative change in Canada-US yield differentials relative to 1-Dec-2022

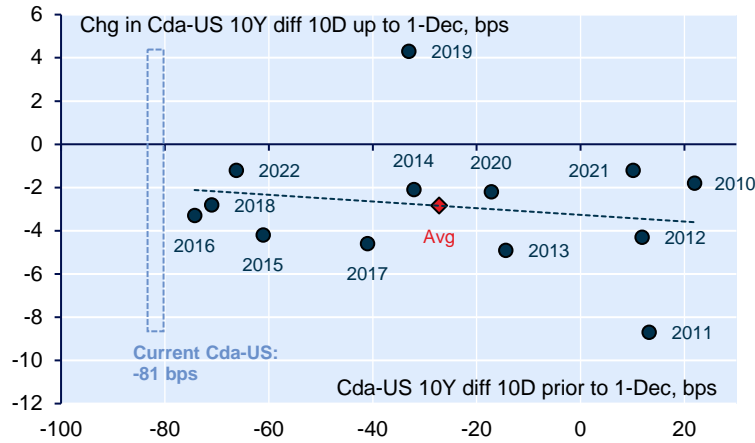


Source: NBF, Bloomberg | Note: Cumulative change in yield differentials based on generic benchmarks; horizontal axis reflects weekdays relative to 1-Dec-22

Further reflecting on 2022, data surprises and refined central bank messaging spawned severe volatility during our focus window. North American rates rallied hard into December, with this broad directionality making it hard to secure the traditional pre-cash performance. With yields stabilizing/bottoming in/around the start of December, Canada's gained a bit of relative ground vs. USTs.

**Chart 9: Canada performance impervious to location?**

Change in Canada-US 10s relative to prevailing level 10D before 1-Dec

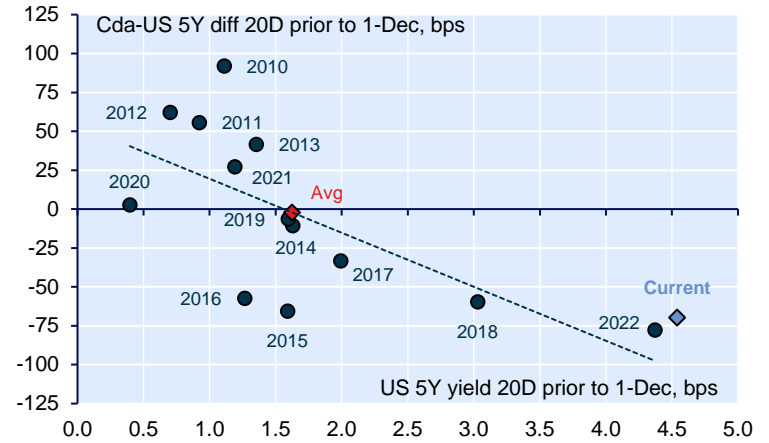


Source: NBF, Bloomberg | Note: Current -81 bp level as of 7-Nov

In the past, seasonal cash supported Canada vs. US, even when starting from notionally 'rich' territory. Saying that, we haven't seen Canada this rich to Treasuries in our post-GFC sample.

**Chart 10: Underlying market level & direction a consideration**

Canada-US 5s relative to underlying US yield level 20D before 1-Dec

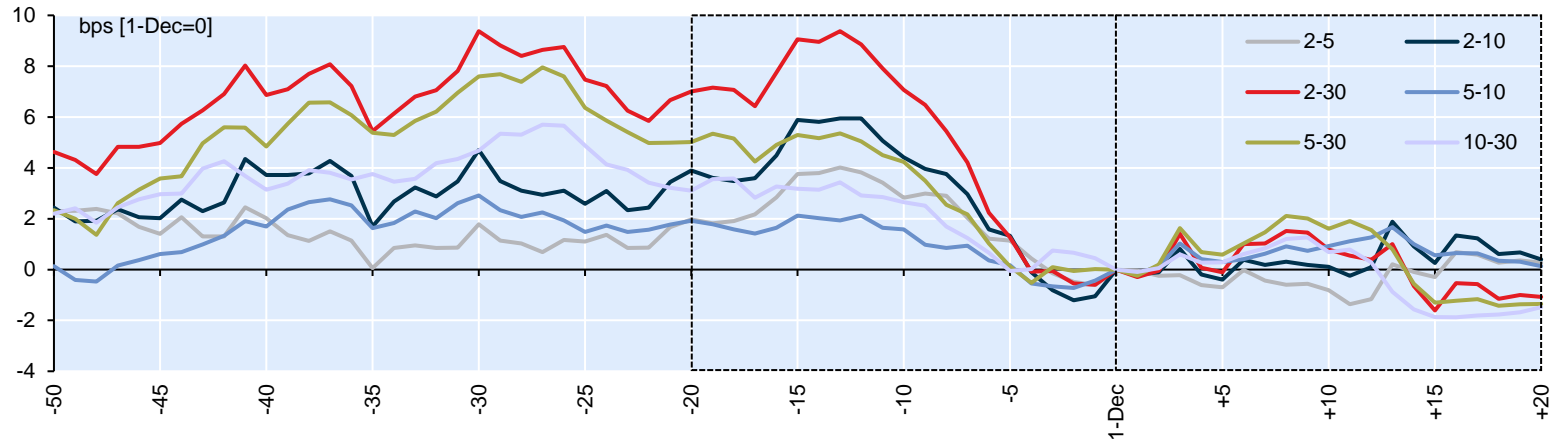


Source: NBF, Bloomberg | Note: Current levels 4.59% & -74 bps as of 7-Nov

Canada moved into (& retains) a noted premium in today's higher yield environment. On top of policy rate considerations, US budget anxiety has investors demanding a greater term premium.

**Chart 11: The flattener has, on average, been very much in vogue in the lead-up to 1-Dec**

Cumulative change in key Canada yield curves relative to 1-Dec, based on prior 13Y average (2010-22)

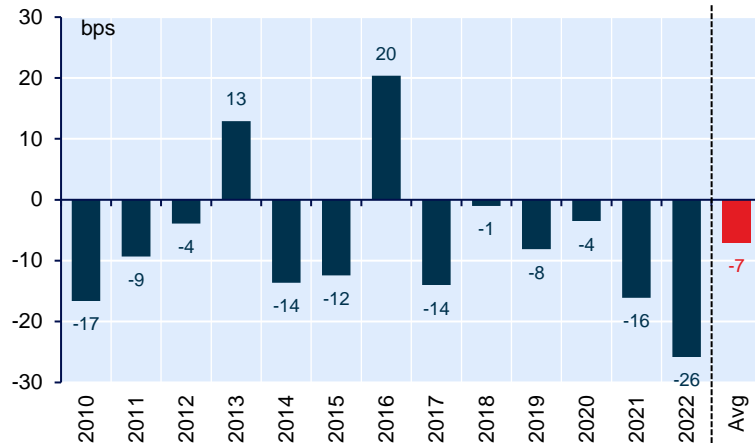


Source: NBF, Bloomberg | Note: Cumulative change in yield differentials based on generic benchmarks; horizontal axis reflects weekdays relative to 1-Dec (which is set to 0)

Historically, there's a distinct tendency towards flatter curves as investors positioned for duration extensions in/around December 1<sup>st</sup>. Most curves have flattened no less than two-thirds of the time in the 10D heading into December, Canada 2s30s seeing the most consistent & significant flattening. As noted, we're at relatively extreme levels today, all major GoC curves inverted as of 7-Nov.

**Chart 12: This is what 85% success looks like (for Cda 2s-30s)**

Net change in Canada 2s-30s curve in 20D leading up to 1-Dec

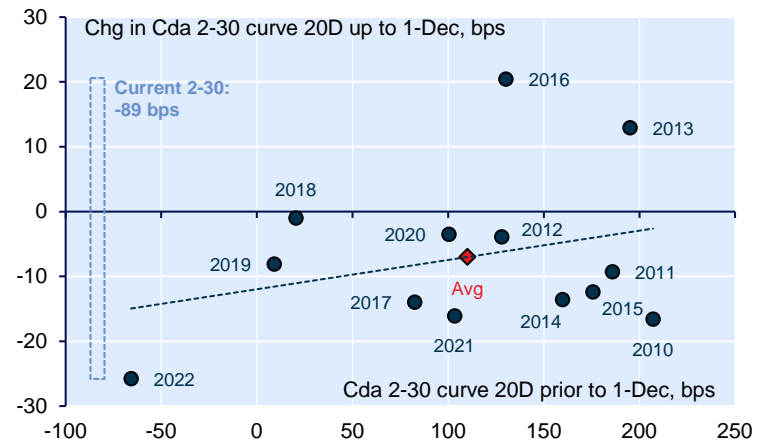


Source: NBF, Bloomberg | Note: Based on relative changes in generic 2Y/30Y benchmarks

The 2s30s curve flattened in 11 of the past 13 years going into December 1<sup>st</sup>. That included a significant flattening last year, which admittedly lost steam as year-end came into view.

**Chart 13: Caution: Curve flatter (more inverted) than 'normal'**

Change in Canada 2s-30s curve relative to level prevailing 20D before 1-Dec

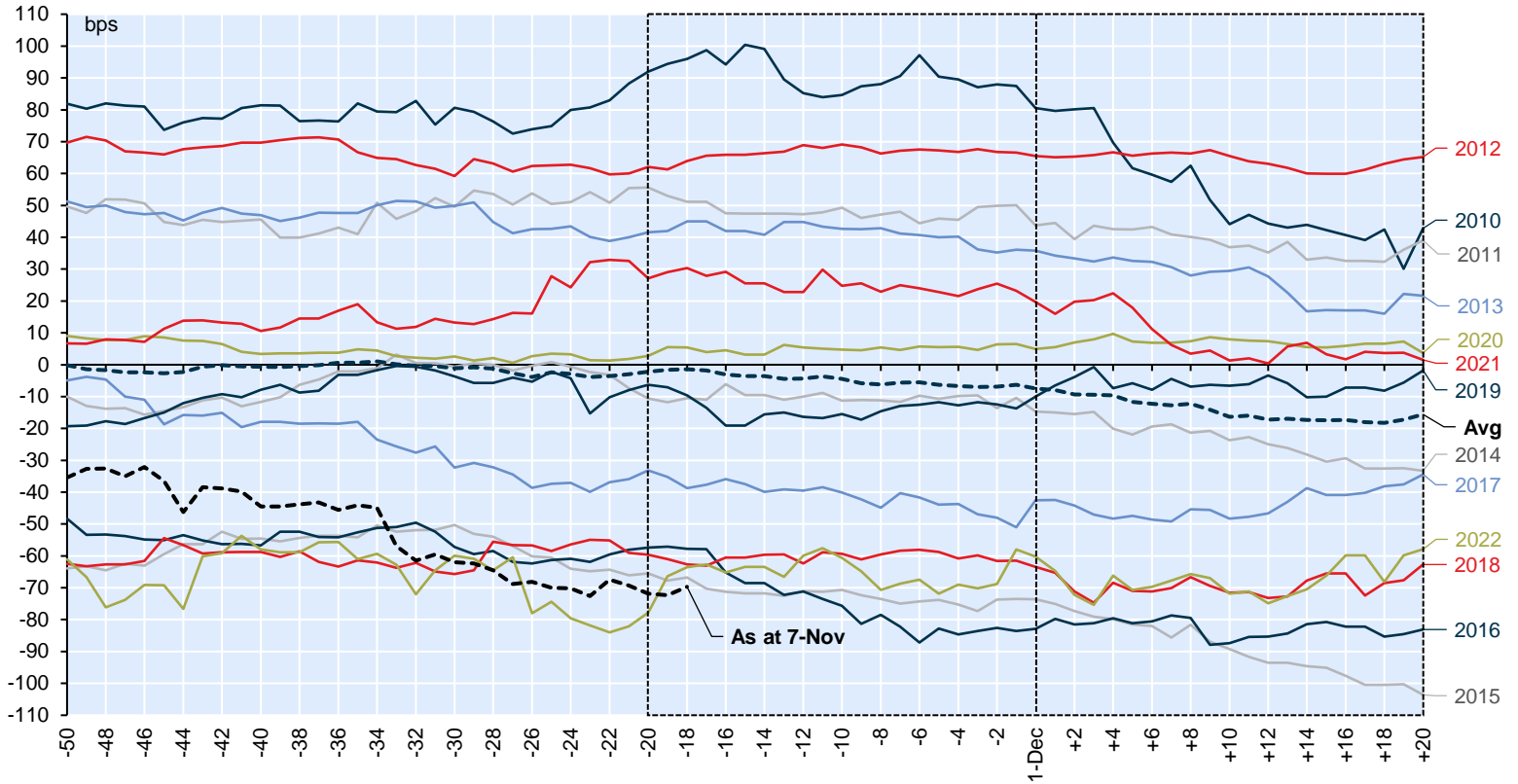


Source: NBF, Bloomberg | Note: Current level -86 bps as of 2-Nov

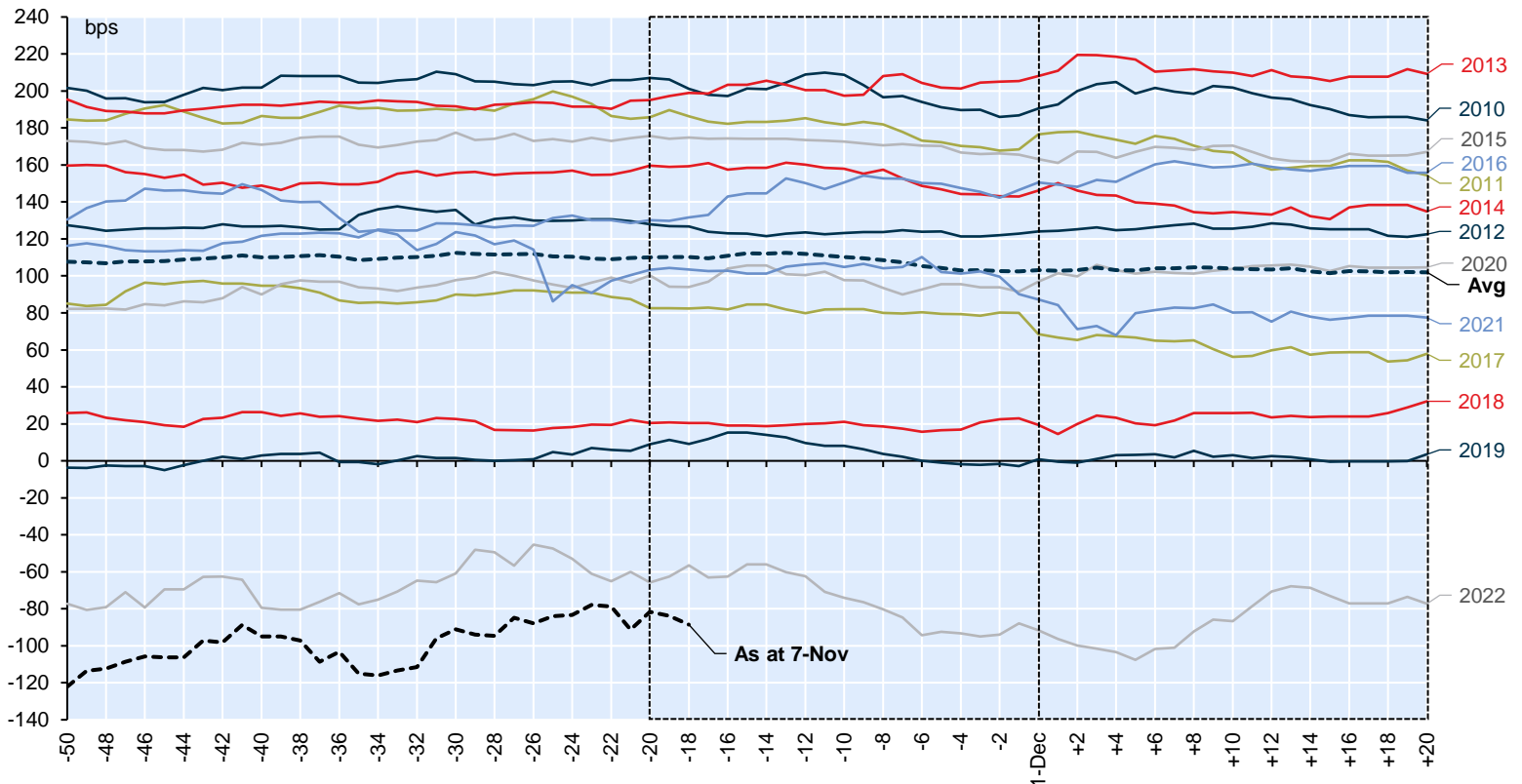
In the past, the flattener tended to work irrespective of starting location. But we've never kicked off the seasonal cash flow trade from such inverted levels, which is a potential complication.

## Charts 14-15: Visualizing today's relatively extreme levels (cross-market & curve) compared to prior years

Evolution of Canada-US 5Y yield differential pre & post 1-Dec, including current trajectory (up to 7-Nov)



Evolution of Canada 2s30s yield curve pre & post 1-Dec, including current trajectory (up to 7-Nov)



Source: NBF, Bloomberg | Note: Yield differentials & yield curves based on generic benchmarks; horizontal axis reflects weekdays

As in 2022, deviation from 'average' remains the name of the game. Today's 5Y premium to USTs, at -70 bps, stands 1.3 standard deviations inside of the mean for this time of year (based on our 13Y sample). The Z-score on Canada's 2s30s curve is extreme, the current 89 bp inversion roughly 2½ SDs flatter than average. Extreme levels argue for caution, even when cash is flooding in.

**Table: Average moves & detailed performance record in Canadian rates**

Average move & success rates in Canada interest rates (yields, curves, flies, x-mkt) leading up to & following December 1<sup>st</sup> (13Y sample, based on 2010-22)

		Canada Outright				Canada Curves						Canada Flies			
Wk days		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
Before 1-Dec	-20	-0.8	-2.8	-4.7	-7.8	-2.0	-3.9	-7.0	-1.9	-5.0	-3.1	-0.1	3.0	-0.8	1.2
	-10	0.2	-2.6	-4.2	-6.9	-2.8	-4.4	-7.1	-1.6	-4.2	-2.7	-1.2	1.4	-1.8	1.1
	-5	-2.2	-3.3	-3.5	-3.4	-1.1	-1.3	-1.3	-0.2	-0.1	0.1	-1.0	-1.0	-1.4	-0.2
	-3	-0.7	-0.5	0.1	-0.6	0.1	0.8	0.1	0.7	-0.1	-0.8	-0.5	0.2	1.6	1.4
	-2	-0.9	-0.4	0.3	-0.3	0.5	1.2	0.5	0.7	0.1	-0.7	-0.2	0.4	1.9	1.4
	-1	0.0	0.7	1.1	0.6	0.6	1.0	0.6	0.4	0.0	-0.4	0.2	0.6	1.5	0.9
After 1-Dec	+1	-0.9	-0.9	-1.1	-1.2	0.0	-0.2	-0.3	-0.2	-0.2	-0.1	0.1	0.2	-0.1	-0.1
	+2	-0.3	-0.6	-0.4	-0.4	-0.2	-0.1	0.0	0.1	0.2	0.1	-0.4	-0.4	-0.2	0.1
	+3	-0.9	-1.2	-0.1	0.5	-0.2	0.8	1.4	1.0	1.6	0.6	-1.3	-1.9	0.2	0.4
	+5	-0.3	-1.0	-0.7	-0.4	-0.7	-0.4	-0.1	0.3	0.6	0.3	-1.0	-1.3	-0.7	0.0
	+10	-1.1	-1.9	-0.9	-0.3	-0.8	0.1	0.8	0.9	1.6	0.7	-1.7	-2.4	-0.6	0.2
	+20	1.9	2.2	2.3	0.9	0.3	0.4	-1.1	0.1	-1.3	-1.5	0.1	1.6	1.9	1.6
Success rate (%)	-20	62%	54%	62%	77%	69%	69%	85%	69%	77%	62%	54%	46%	54%	54%
	-10	46%	46%	54%	85%	62%	69%	77%	69%	77%	69%	54%	54%	54%	38%
	-5	62%	54%	54%	62%	62%	54%	38%	31%	46%	46%	62%	54%	54%	38%
	+5	54%	54%	38%	38%	54%	62%	38%	31%	31%	31%	54%	62%	62%	46%
	+10	46%	62%	62%	54%	54%	31%	31%	31%	31%	46%	46%	54%	46%	46%
	+20	23%	46%	54%	46%	46%	38%	46%	54%	62%	69%	54%	46%	54%	46%
Test >		Lower yield				Flatter curve						Belly outperformance vs. wings			

		Canada-US Differential				Canada-US Boxes						Canada-US "Fly Trap"			
Wk days		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
Before 1-Dec	-20	-3.4	-5.2	-4.9	-3.7	-1.9	-1.5	-0.4	0.3	1.5	1.2	-2.2	-3.4	-2.7	-0.8
	-10	-0.7	-3.0	-2.8	-2.9	-2.3	-2.2	-2.2	0.2	0.2	0.0	-2.5	-2.5	-2.1	0.2
	-5	0.4	-1.2	-2.3	-2.6	-1.6	-2.7	-3.1	-1.1	-1.5	-0.4	-0.5	-0.2	-2.4	-0.7
	-3	0.3	-0.5	-0.6	-1.5	-0.8	-0.9	-1.7	-0.1	-0.9	-0.9	-0.7	0.2	0.0	0.8
	-2	0.0	-0.6	-0.4	-0.9	-0.6	-0.4	-0.9	0.2	-0.3	-0.5	-0.9	-0.3	0.1	0.7
	-1	-0.4	-1.2	-0.8	-0.5	-0.8	-0.3	0.0	0.4	0.7	0.3	-1.2	-1.5	-0.6	0.2
After 1-Dec	+1	-1.3	-0.5	0.1	0.9	0.8	1.4	2.2	0.6	1.4	0.8	0.2	-0.6	0.6	-0.2
	+2	-1.7	-1.8	-0.7	0.2	-0.1	1.0	1.9	1.1	2.0	0.9	-1.2	-2.2	0.0	0.2
	+3	-1.7	-1.9	-0.6	0.5	-0.2	1.2	2.2	1.4	2.4	1.0	-1.6	-2.6	0.2	0.4
	+5	-2.7	-4.2	-2.8	-0.3	-1.5	-0.1	2.4	1.4	3.9	2.6	-2.9	-5.4	-2.7	-1.2
	+10	-4.6	-8.9	-6.2	-1.0	-4.3	-1.6	3.6	2.7	8.0	5.2	-7.0	-12.3	-6.9	-2.5
	+20	-3.5	-8.1	-5.0	-2.6	-4.7	-1.5	0.9	3.2	5.6	2.4	-7.9	-10.3	-3.9	0.8
Success rate (%)	-20	62%	77%	77%	77%	62%	62%	54%	38%	46%	38%	54%	46%	54%	54%
	-10	54%	77%	92%	69%	69%	77%	62%	54%	54%	62%	62%	69%	69%	38%
	-5	62%	69%	77%	69%	62%	77%	62%	69%	62%	54%	46%	38%	77%	54%
	+5	62%	69%	62%	46%	62%	54%	31%	38%	15%	15%	69%	77%	62%	62%
	+10	77%	77%	62%	46%	85%	54%	23%	31%	8%	15%	92%	100%	69%	62%
	+20	54%	69%	62%	46%	77%	54%	46%	31%	23%	46%	69%	69%	62%	46%
Test >		Relative outperformance of Canada				Relatively greater flattening in Canada						Relative outperformance of Canada belly			

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-US yield differentials=tighter, etc; Canada-US "fly trap" represents a Canada butterfly vs. US butterfly trade involving six bonds



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