August 18, 2020 - (Vol. IV, No. 48)

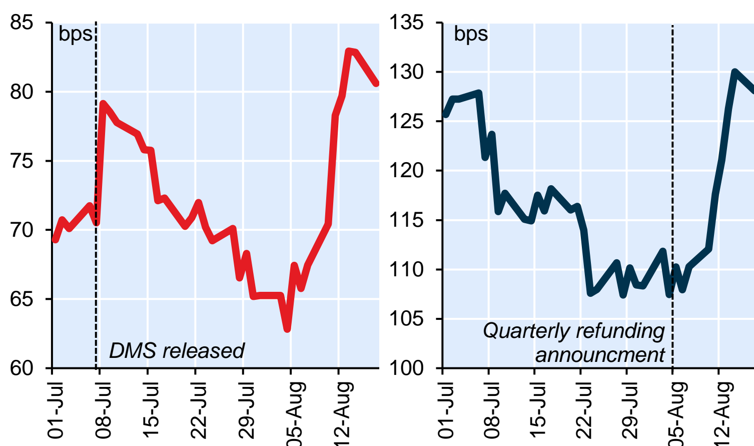
Market View – Let's twist again, like we did last crisis

By Taylor Schleich

Two weeks ago, the US Treasury released its quarterly refunding documents which showed a marked shift in treasury issuance out the curve. With long-term rates at record lows, why not? It's a similar strategy that was adopted by the Government of Canada a month ago in its 2020-21 *Debt Management Strategy*. Back then, the GoC market got spooked by the surge in bond supply out the curve and we saw the curve steepen decisively in the days following. We've seen a similar reaction south of the border to the early August announcement.

Chart 1: Curves steeper on supply announcements

Canada (L) and US (R) 2s-30s curve since July



Source: NBF, Bloomberg

Indeed, for both countries, the shifting of issuance out the yield curve has been significant. The weighted average term to maturity has been extended by well over a year in the current quarter versus 2019. All else equal then, we should expect a decisive steepening in yield curves on the back of such a fundamental shift in funding mechanics, right? Well, all else is not equal in this case as there's a major wildcard that complicates our simple issuance arithmetic: central banks.

Table 1: Supply up, especially in the long-end

Treasury (top) and GoC (bottom) actual/expected nominal issuance by quarter

US (US$bln)	2019	2020	2020	% change	
Tenor	Aug-Oct	May-Jul	Aug-Oct	Q/Q	Y/Y
2-year	120	138	156	13%	30%
3-year	114	132	150	14%	32%
5-year	123	141	159	13%	29%
7-year	96	123	150	22%	56%
10-year	75	90	108	20%	44%
20-year	0	54	69	28%	-
30-year	51	60	72	20%	41%
Total	579	738	864	17%	49%
Weighted average term (years)	7.17	8.15	8.36	+0.21	+1.20

Canada (C$bln)	2019	2020	2020	% change	
Tenor	Jul-Sep	Apr-Jun	Jul-Sep	Q/Q	Y/Y
2-year	12.0	24.0	42.0	75%	250%
3-year	4.8	13.5	15.0	11%	213%
5-year	8.2	27.5	20.0	-27%	144%
10-year	3.0	13.5	20.0	48%	567%
30-year	1.4	5.0	9.0	80%	543%
RRB	0.4	0.4	0.4	0%	0%
Total	29.4	83.5	106.0	27%	261%
Weighted average term (years)	5.15	6.12	6.59	+0.47	+1.44

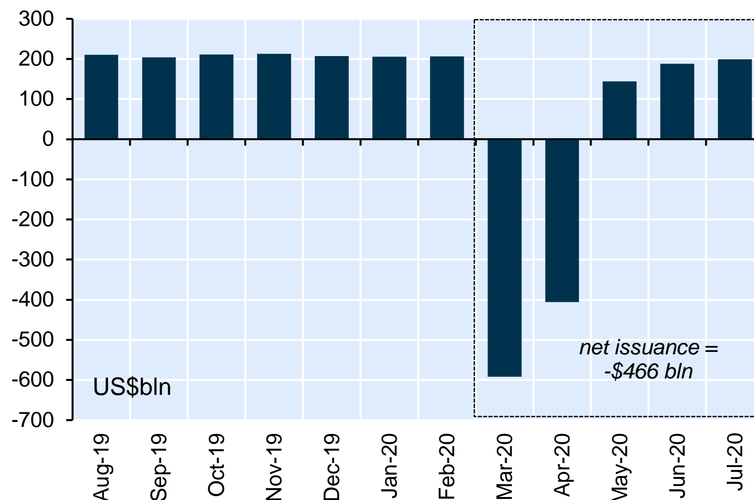
Source: NBF, GoC, BoC, US Treasury

Scary supply surge?

Both the BoC and Fed have been on a serious buying spree since March, purchasing a suite of debt products with the chief among those being sovereign government bonds. A direct result of this of course, has been soaring central bank balance sheets which have now started to stabilize as many of the initial crisis-response measures (e.g. repo operations) have wound down. But Treasury/GoC purchases still rage on and don't look to let up anytime soon. Another important consequence of this intervention, which often goes less discussed than the effect on balance sheet assets, is the impact on bond supply. With fiscal stimulus aplenty (at least before July 31 in the US) and deficits soaring to post-WWII records, governments have had to tap financial markets for extraordinary bond lifts. Fortunately for sovereign borrowers, investor demand hasn't had to rise commensurately as the BoC and Fed have ensured that issuance to financial markets has actually slowed since the central bank pandemic response got underway.

Chart 2: Net treasury issuance negative since March

Treasury term debt issuance less central bank treasury purchases

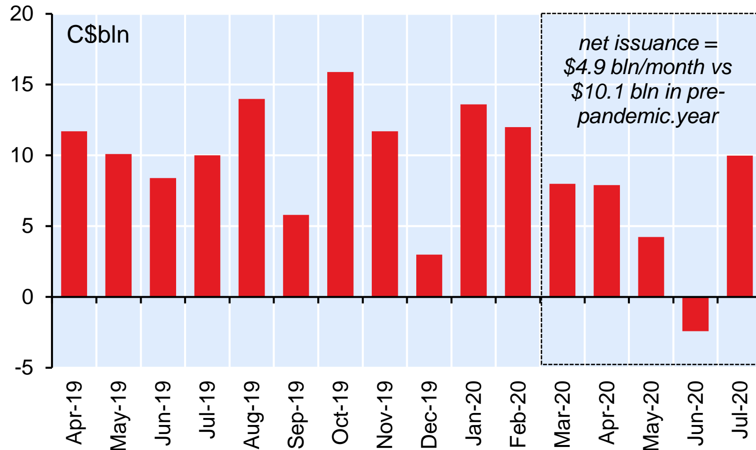


Source: NBF, New York Fed, US Treasury | Note: Issuance and purchases exclude bills

In the US, we've seen negative net issuance since March. However, this story is really a function of outsized Fed purchases in March and April. Now, with purchases by the New York Fed stabilizing at just over $80 billion per month, net supply has returned to positive territory. On the surface, the nominal coupon issuance increases of nearly $100 billion per month (+$285 billion for the Aug-Oct quarter, see Table 1) should on the surface justify the hiccups we've been seeing in treasury markets and at auction over the last weeks. However, once the pace of QE is taken into consideration the net increase from a year ago isn't nearly as drastic. Netting out Fed purchases, nominal coupon issuance for the three months ended October 31st should be about $615 billion compared to the $537 billion in the same three months in the prior year. To be sure, a 15% increase is nothing to scoff at but is a far cry from the nearly 50% increase implied by looking at gross figures on their own.

Chart 3: Net GoC issuance slows during COVID

GoC issuance less BoC QE purchases

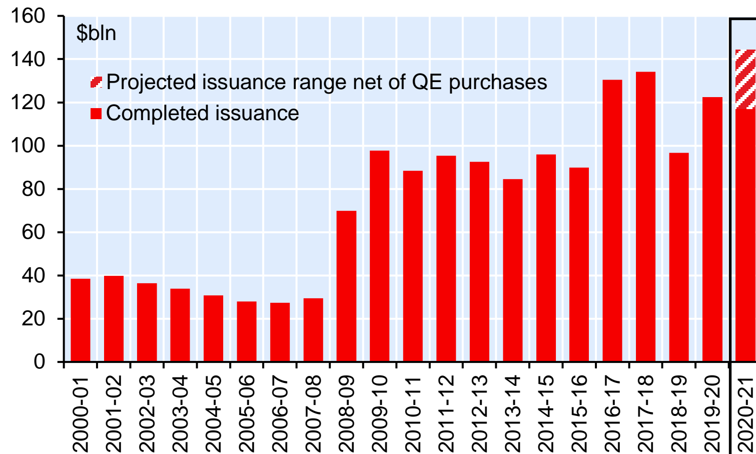


Source: NBF, Bank of Canada | Note: Issuance and purchases exclude bills. 13% BoC auction allotment is not netted from total.

For the GoC market, the story is similar. For calendar Q3, the ~C$106 billion in issuance will be nearly four times higher than the amount issued in the same quarter in 2019. However, with over C$60 billion in expected BoC purchases in the quarter, net issuance should come in at a much more modest $45 billion (not including the Bank's usual 13% allotment at auction). For the full fiscal year, the $410 billion in expected bond issuance should be offset by at least $270 billion in central bank purchases (based on $5 billion per week through fiscal year-end). The resulting ~$140 billion, which would still set a record for issuance, would be just $18 billion higher than 2019-20 and $4 billion greater than the current record set in 2017-18. As we've written before, the supply story north of the border isn't as scary as it seems.

Chart 4: GoC supply not unlike past years

GoC issuance by fiscal year net of central bank QE purchases



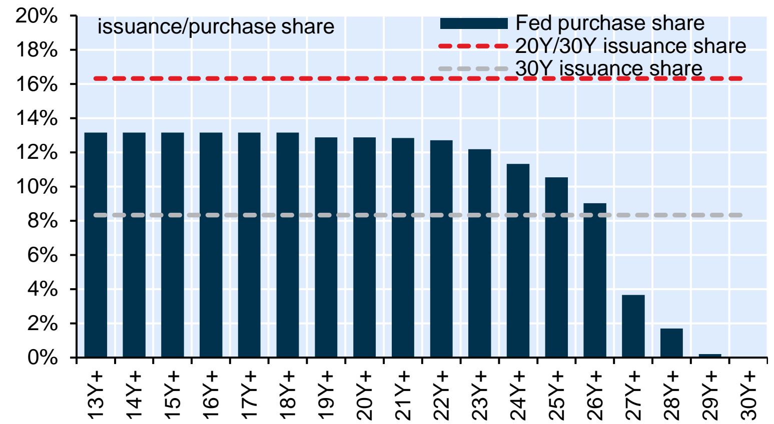
Source: NBF, Bank of Canada, GoC | Note: 2020-21 is expected not completed issuance

The anatomy of central bank purchases

The combination of better-than-expected economic data and falling COVID case counts in the US have helped spark a significant steepening in the treasury curve in August. But, as mentioned earlier, supply dynamics have also played a role demonstrated by last week's 30-year treasury auction. Clearly, the $4 billion jump in the auction size left investors spooked as the 30-year bid-to-cover dropped precipitously from July and the bond sold off a couple basis points immediately afterwards. On its own, the rise in 30-year issuance isn't really a problem. Depending on how you bucket the '30-year sector', Fed purchases are actually disproportionately higher than the share of issuance here. But with the addition and rapid expansion of the 20-year term, the flood of new bonds is outpacing QE, both on an absolute and relative-to-supply basis. Indeed, despite the significant shift in issuance out the curve, there hasn't been a commensurate terming out of the Fed's treasury purchases. The weighted average term of the Fed's purchases has remained steady between 6 and 7 years. This is broadly consistent with the Fed's first two rounds of QE back in the immediate aftermath of the global financial crisis.

Chart 5: Issuance disproportionate to purchases

Fed purchase share by maturity bucket versus 20Y and 30Y issuance share

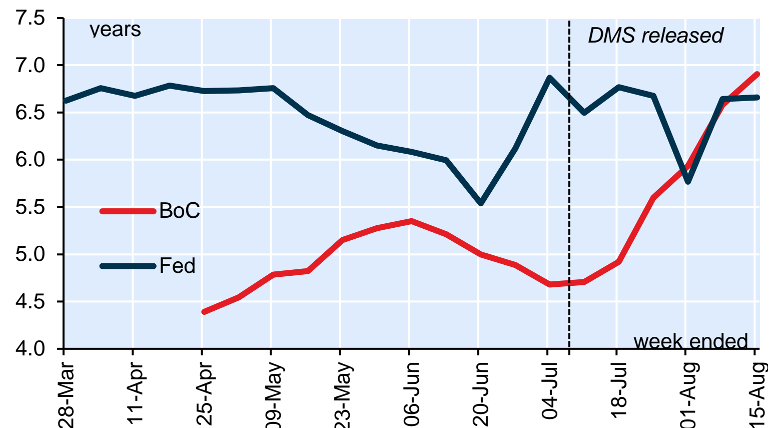


Source: NBF, New York Fed, US Treasury | Note: Purchases/issuance share are of nominal bonds/notes only.

In Canada, the central bank has been far more reactive to the shift in issuance strategy from the sovereign. Upon the release of the government's *Debt Management Strategy*, the Bank of Canada responded by shifting out the average term of its government bond purchases—the average weekly bond lift by the Bank of Canada has been about 2 years longer than before. Admittedly, part of this shift is likely due to the lack of bonds available in the front-end of the curve forcing the Bank to move its buying elsewhere (short-end purchases have gone from $2 billion/week in April to just over $750 million this past week). Even still, purchases hadn't been exactly proportional to issuance before.

Chart 6: BoC terming out, while the Fed is not

4-week moving weighted average term of government bond purchases

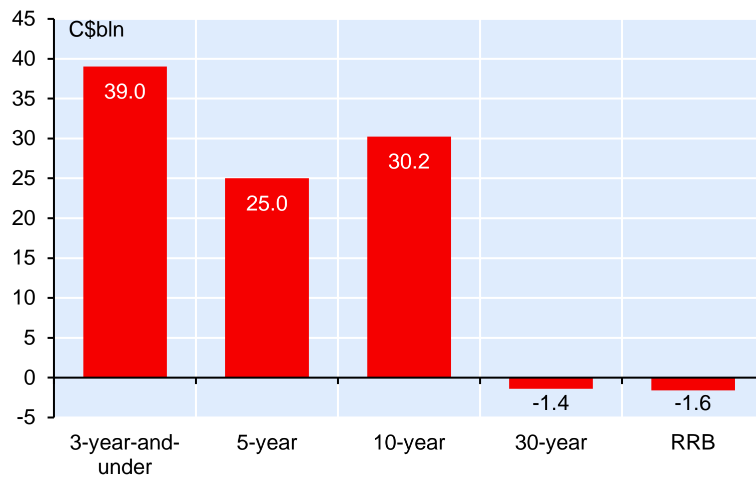


Source: NBF, Bank of Canada, New York Fed

All told, using the BoC's classification for the '30-year sector', net issuance to the long end is actually on pace to be negative this year after accounting for QE and regular auction purchases. In the 10-year sector, on the other hand, net issuance should pop by $30 billion. Despite this, the 10s-30s Canada curve remains steeper than it was prior to the release of the DMS. Additionally, despite the disparities between the long-end of the curve in Canada and the US, GoC long bonds have lagged US 30s since June. In our view, long Canadas look very attractive versus treasuries at current valuations. And looking ahead, it would appear that the balance of risk points even more in Canada's favour. Firstly, with the Government of Canada having already laid out its full-year issuance plan, the sticker shock of the bond program has already been realized. For the US, $600/week unemployment benefits have now long expired and a potentially multi-trillion dollar stimulus is in the pipeline. Should it significantly exceed the $1 trillion price tag that Senate Republicans laid out in their plan in recent weeks, the next quarterly refunding statement could mean another upside surprise to the US debt issuance program.

Chart 7: Negative net supply out the curve

GoC issuance by sector net of QE and auction purchases



Source: NBF, Bank of Canada | Note: 3-year-and-under purchases includes '2-year' sector and 'short-end' sector. Purchases for the rest of the fiscal year are based on most recent purchase size.

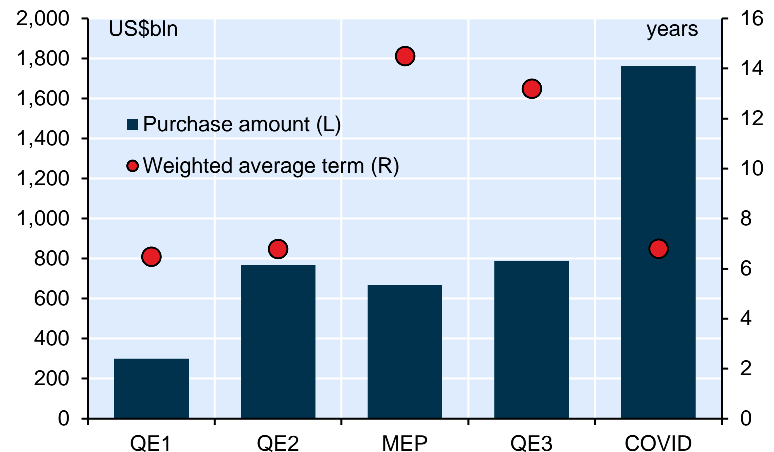
What comes next?

While we've seen supply dynamics drive the treasury curve steeper, we're hesitant to project that continuing in the future. So far the Fed has been somewhat vague on how it will conduct its Treasury purchases going forward (currently, it says it will "increase its holdings of [treasuries] and [RMBS and CMBS] at least at the current pace to sustain smooth market functioning"), but we do know it will "use its full range of tools to support the U.S. economy". An unsavoury back-up in yields may be perceived as removing much-needed accommodation and could prompt a response from the Fed. While many market watchers have called for the adoption of yield curve control, whereby a target interest rate is set for a specific point on the yield curve (see Japan's 0% 10-year target or Australia's 0.25% 3-year target for the preeminent examples), this may be less effective on long rates if a 3-year or 5-year target point is used. The efficacy of such a measure may be limited as well if, as expected, an outcome-based forward guidance framework is implemented to anchor the front-end. Further, the most recent Fed minutes didn't show much enthusiasm for the policy tool from the Committee.

Instead, the solution could be another program in the Fed's bag of tricks: the Maturity Extension Program (MEP), or as its better known, Operation Twist. Under the last iteration of this program in 2011-12, the Federal Reserve extended the duration of its portfolio through the purchase of two thirds of a trillion dollars in long-dated treasuries financed by the sale of a roughly equivalent amount of short-dated treasuries. The weighted average term of treasury purchases under this program rose from roughly 6.5 years under QE1 and QE2 to 14.5 years under the MEP, while average term of bond sales was roughly 1.8 years. The anticipation and implementation of this program led to 2s-10s and 2s-30s curve flattening by 100 bps and 150 bps respectively. While outright yields back then we're much higher than they are today, this would surely reduce pressure on the long-end in the current environment going forward. And with one of the Fed's concerns about ongoing central bank purchases being the effect on the balance sheet size, financing long-end purchases through the sale of short-term securities would be balance sheet neutral on a dollar value basis (of course, the duration would lengthen meaning it would take longer for assets to run-off). We'll be keeping a close eye on the July meeting minutes on Wednesday to see if this discussion generated any traction.

Chart 8: COVID-19 versus GFC Fed response

Amount and weighted average term of Fed purchases: GFC vs. COVID-19



Source: NBF, New York Fed | Notes: QE1 runs Nov-08 to Mar-10. QE2 runs Nov-10 to Jun-11. MEP runs Sep-11 to Dec-12. QE3 runs Jan-13 to Oct-14. COVID response begins on March 15. MEP was financed by a roughly equivalent amount of selling of short-term treasuries.

Bottom Line: In the current environment, we like owning Canadas versus Treasuries, particularly in the long-end. Within the Canadian market, we don't think further steepening is justified owing to supply dynamics and we could see last week's steepening reverse course. For the US, the future isn't as clear cut as uncertainty on fiscal stimulus and Fed policy clouds the outlook. But as the Fed has demonstrated, it would rather err on the side of accommodation. For now, it may be comfortable with the bear steepening that's characterized the market in recent weeks. However, we'd be inclined to lean against any *significant* further steepening from here as a terming out of Fed purchases could be enacted to keep long rates in check. This may not be a September FOMC meeting event, as the focus will likely be on policy rate forward guidance and the potential completion of the monetary policy framework review. However, if/when another stimulus package is deployed, a commensurate sell-off in bond yields could force the Fed's hand.

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