

## Is QE in the eye of the beholder?

By Taylor Schleich

With the initial financial market shock of COVID nearly twelve months behind, it's safe to say Canadian and U.S. monetary policy is now all about QE. As policy rates are anchored at effective lower bounds, it's QE that will be subject to marginal tweaking first (i.e. before any rate hikes are in order). And please forgive us if you've heard us say this before, but relatively speaking, the Bank of Canada's QE program is punching well above its weight vis-à-vis the Fed. As a share of population, GDP, national deficits, issuance or outstanding debt, the C\$4 billion weekly pace at the BoC is more aggressive than the US\$80 billion in monthly U.S. treasury purchases at the Fed (Chart 1).

However, if you dig into the BoC's January Monetary Policy Report, you'd see the central bank take a somewhat different stance. In their view, the degree of stimulus they've provided is in line with, or perhaps slightly less than, that of the Fed. To make this argument, the Bank shows its own, the Fed's and other central banks' bond purchases since March 2020 as a share of GDP (Chart 2). Respectfully, such an approach overlooks a couple important factors. Firstly, the BoC, in addition to its QE program, buys 13% of all (nominal) GoC bonds auctioned. They had been doing this for decades before COVID-19 so its not necessarily pertinent to the discussion of stimulus. However, it is important when looking at the ownership share of the GoC market. And here we see that the Bank currently holds just under 40% of all GoC bonds and is on a pace to hit 50% by year-end (assuming a C\$4bn/week pace against our baseline issuance expectations). The Fed, meanwhile? They own just 28% of the massive US\$16 trillion Treasury market (bonds, notes, TIPS, FRNs). Moreover, the pace of increase here is much slower (Chart 3). It's true that this is due to larger pre-COVID deficits and debt levels stateside. Had the U.S. been on a more restrictive fiscal path over the prior decade, the Fed too might be buying up a majority of the market at its current pace. Ultimately though, the size of the underlying bond market you're drawing from is an important consideration when it comes to QE—the amount of bonds out there is finite after all. We've heard BoC Governor Tiff Macklem cite research suggesting a 50% ownership share could start to become problematic for a domestic bond market. While the Fed runs little risk of crossing this threshold anytime soon, the BoC's current glide path would have us there in relatively short order (Chart 4).

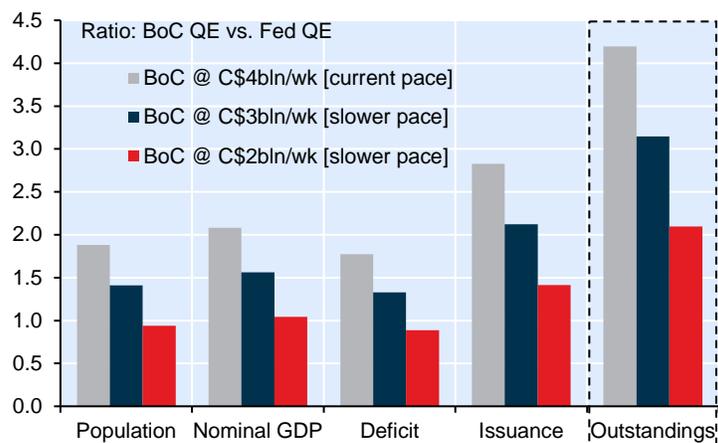
In terms of stimulus, it is true that in a vacuum the BoC/Fed response has been similar in the COVID-19 era (i.e. since the beginning of March). But the key distinction here is timing. Nearly two-thirds of the Fed's bond purchases occurred in March and April, while just 12% of the BoC's purchases took place during this time (Chart 5). Indeed, while the total stock of bonds removed is an indicator of the total stimulus/liquidity provided, what's arguably more influential now is the ongoing flow. As the BoC notes in its MPR, "The flow of purchases puts ongoing downward pressure on yields, which reduces borrowing costs for households and businesses." It's here where the BoC's QE program looks so outsized.

Another important consideration, as the BoC would tell you, is the maturity of QE purchases: "The maturity of purchases matters because when they are tilted toward longer-maturity securities, more term risk is removed from markets". While our above analysis focuses on the absolute amount of bonds being purchased, we find that even the per-dollar-level of stimulus (i.e. the weighted average term of QE) is greater at the BoC after their October 'calibration'. This comes despite the fact that the average term of a given Treasury note/bond is a few months longer than that of a GoC (Chart 6). That is to say, the BoC is removing relatively more duration from a relatively shorter duration pool of bonds.

Ultimately, we continue to expect a near-term paring of the BoC's QE pace to C\$3 billion per week. A weak first quarter characterized by job losses amidst a second round of government-imposed lockdowns might mean this won't come to fruition at the March meeting (even if we're already operating at too fast a pace). However, by April, assuming our recovery narrative remains firmly in place (including an economy that has sufficiently reopened), the BoC will have the data it needs to confidently step down QE without too much backlash or confusion from onlookers. And as we saw in October, an overall QE reduction needn't mean that the amount of stimulus needs to fall by a commensurate amount. Indeed, we could see bond buying shifted further out the curve, increasing the weighted average term of purchases. With issuance growing by the most out in the long end, we see more room for buying here going forward.

**Chart 1: The 'flow' of QE is much stronger at the BoC vs. Fed...**

Relative size of BoC QE vs. Fed QE, scaled to economic/fiscal/debt metrics

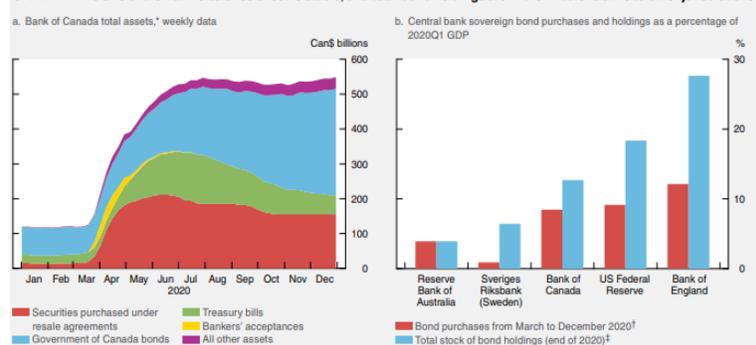


Source: NBF, Bloomberg, BoC, Fed, StatCan, GoC, US Treasury, US Census Bureau, PBO, CBO Notes: Based on existing QE size; population as at 1-Jul; GDP as at 2020:Q4; deficit for 2020 FY as per latest PBO/GoC guidance; issuance as per latest quarterly funding schedules; month-end o/s as at 31-Jan

**Chart 2: ... even though total QE might be comparable**

Excerpt from Box 2 of Bank of Canada's January Monetary Policy Report

**Chart 2-B: The size of the Bank's balance sheet is stable, and total bond holdings are in the middle relative to other jurisdictions**



\* In this chart, Government of Canada (GoC) bonds purchased in primary markets are measured at amortized costs. All other bonds, including GoC bonds purchased in secondary markets, are measured at fair value. † All other assets includes provincial treasury bills and bonds, corporate bonds and commercial paper. A full list of assets can be found on the Bank of Canada's website.

† Data include all nominal sovereign bond purchases. Data for the Sveriges Riksbank also include inflation-protected securities purchases. Data for the Reserve Bank of Australia are from December 11, 2020.

‡ Data include all sovereign bonds, including purchases at primary auctions for balance sheet management. Total stock for the Sveriges Riksbank is for November 30, 2020. Data for the Reserve Bank of Australia are from December 11, 2020.

Source: Bank of Canada January MPR

**Chart 3: Fed ownership share roughly steady; GoC climbing**

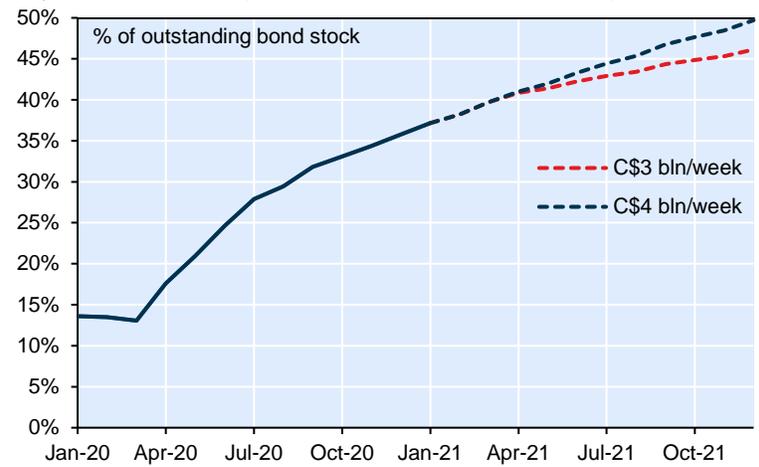
Central bank ownership share of outstanding bond stock



Source: NBF, BoC, Fed, SIFMA, Bloomberg | Note: Includes nominal, inflation linked bonds and FRNs. Does not include bills.

**Chart 4: Even slowing purchases keeps ownership rising**

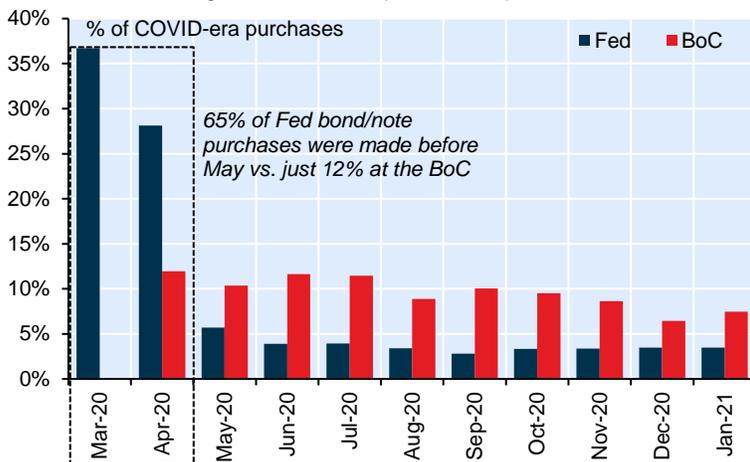
Projected BoC ownership share of GoC market by weekly QE pace



Source: NBF, BoC | Note: C\$3 bln/week assumes slowing is made at April meeting.

**Chart 5: Most of Fed QE came last spring; not the case at BoC**

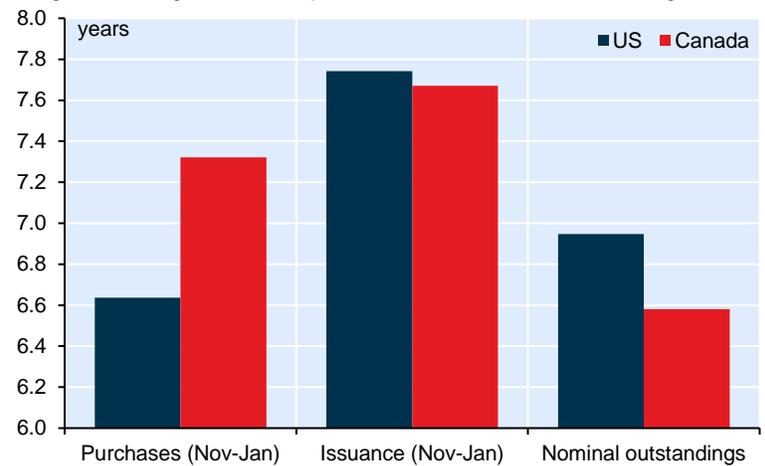
Share of COVID-era government bond purchases by month, central bank



Source: NBF, BoC, NY Fed | Notes: Excludes bill purchases. Includes all purchases since 1-Mar-2020 through Jan 2021. Does not include GoC purchases at auction.

**Chart 6: Greater per dollar stimulus at BoC after calibration**

Weighted average term of QE purchases, issuance and outstandings



Source: NBF, BoC, NY Fed, Treasury, Bloomberg | Note: Nominal outstandings include GoC bonds, UST notes, bonds and FRNs (excludes RRBs and TILs). Purchases and issuance exclude bills. Outstandings as of 12-Feb-21.



## Economics and Strategy

### Montreal Office 514-879-2529

**Stéfane Marion**

*Chief Economist and Strategist*  
stefane.marion@nbc.ca

**Paul-André Pinsonnault**

*Senior Economist*  
paulandre.pinsonnault@nbc.ca

**Daren King**

*Economist*  
daren.king@nbc.ca

**Matthieu Arseneau**

*Deputy Chief Economist*  
matthieu.arseneau@nbc.ca

**Angelo Katsoras**

*Geopolitical Analyst*  
angelo.katsoras@nbc.ca

**Jocelyn Paquet**

*Economist*  
jocelyn.paquet@nbc.ca

**Kyle Dahms**

*Economist*  
kyle.dahms@nbc.ca

**Camille Baillargeon**

*Intern Economist*  
camille.baillargeon@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

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