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ECONOMIC INSIGHTS

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Quantitative Easing, Helicopter Money and Inflation: A Risk for Canada?

by Avery Shenfeld

Investors in most major markets have already lived through it, but Canadians are seeing their first taste of quantitative easing (QE). That has some pondering whether there are longer term consequences, particularly for inflation and the exchange rate, in unleashing the Bank of Canada as a megabuyer of at least \$5 bn in bonds per week. To put that number into perspective, it's more than enough to absorb all of the net issuance the federal government will need to finance a roughly \$200 bn deficit. Now add to that the tens of billions in provincial and corporate bond the Bank announced that it will acquire in an effort to contain spreads for those borrowers.

In the near term, of course, no one will be too worried about excessive inflation. The bond market clearly isn't pricing that in, with long rates at rock bottom levels (Table 1), and likely to remain subdued for the coming year.

To be sure, there will be selected sectors impacted by supply disruptions. Goods shipped by air freight are facing cost increases due to reduced flight capacity, and there's heavier demand for particular items in favour for guarantined households.

But overall, the global demand shock will have many prices looking very subdued, with overall CPI diving well below target this year (see Table 1), and a subsequent rebound largely tied to firmer gasoline prices next year. A spike average hourly earnings in March reflected disproportionately heavy job losses in low-wage hospitality sectors, not a kickstart to wage inflation.

Looking ahead, pay scales will cheapen up as unemployment climbs, reducing pressure on business costs but also impacting households' ability to sustain higher prices when they shop. Energy and materials costs have also taken a nosedive.

So the questions about inflation surround what happens as the economy recovers. Does QE help us get inflation back to the 2% target, or is there reason to fear an overshoot?

Does QE Mean "Printing Money?"

Canadian QE is similar to the US recipe, but with maple syrup on top, with its own flavour as it applies to the country's Large Value Transfer System. Typically that system, which governs overnight financial flows in Canada, clears with banks' lending to or borrowing from each other at very close to the overnight rate target, with no equivalent to the US concept of required reserve deposits at the central bank left over.

But as unsterilized BoC asset purchases ramp up under QE, financial institutions will have fewer bonds, and an excess of cash at the end of the day. These will end up deposited at the BoC as "settlement balances," on which the Bank will pay financial institutions the deposit rate, which has now been set to match the overnight target of 25 bps. Typically it would be a quarter point lower, a

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Table 1

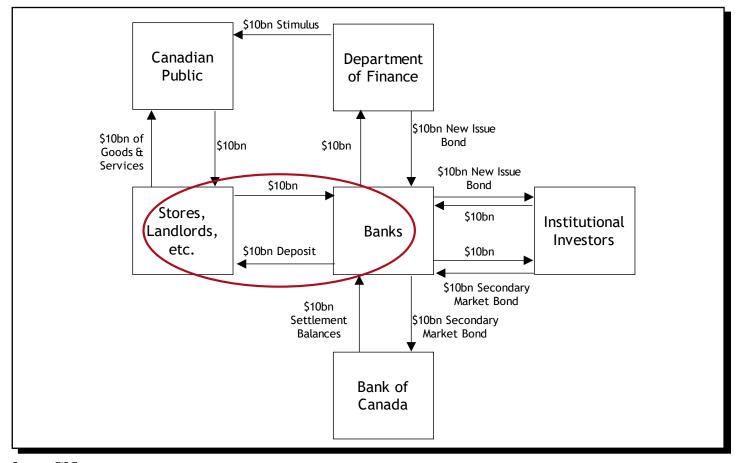
ECONOMIC UPDATE											
CA NA DA	19Q3A	19Q4A	20Q1F	20Q2F	20Q3F	20Q4F	21Q1F	21Q2F	2019A	2020F	2021F
Real GDP Growth (AR)	1.1	0.3	-10.2	-40.5	33.4	18.5	7.0	4.9	1.6	-6.9	6.8
Real Final Domestic Demand (AR)	3.1	0.7	-7.1	-29.6	18.2	14.1	7.2	5.1	1.2	-4.8	5.8
Household Consumption (AR)	2.0	2.0	-9.3	-28.4	20.8	16.1	7.5	4.9	1.6	-4.6	6.6
All Items CPI Inflation (Y/Y)	1.9	2.1	1.8	0.1	0.6	1.2	1.7	2.7	1.9	0.9	2.2
Unemployment Rate (%)	5.6	5.7	6.3	13.5	11.7	9.7	8.7	8.4	5.7	10.3	8.4
u.s.	19Q3A	19Q4A	20Q1F	20Q2F	20Q3F	20Q4F	21Q1F	21Q2F	2019A	2020F	2021F
Real GDP Growth (AR)	2.1	2.1	-5.8	-39.4	25.8	12.3	12.0	8.1	2.3	-6.2	7.0
Real Final Sales (AR)	2.1	3.1	-5.9	-38.5	22.1	12.7	12.5	8.2	2.2	-6.1	6.9
All Items CPI Inflation (Y/Y)	1.8	2.0	2.1	0.3	0.5	1.0	1.6	2.9	1.8	1.0	2.5
Core CPI Inflation (Y/Y)	2.3	2.3	2.2	1.4	0.9	1.0	1.3	2.2	2.2	1.4	2.1
Unemployment Rate (%)	3.6	3.5	3.8	12.0	8.7	7.8	7.2	6.7	3.7	8.1	6.5

Table 2

INTEREST	& FORFIGN	I EXCHANGE	RATES
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	2020		2021							
END OF PERIOD:	15-Apr	Jun	Sep	Dec	Mar	Jun	Sep	Dec		
CDA Overnight target rate 98-Day Treasury Bills 2-Year Gov't Bond 10-Year Gov't Bond 30-Year Gov't Bond	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		
	0.27	0.35	0.30	0.20	0.20	0.20	0.20	0.20		
	0.33	0.30	0.35	0.40	0.50	0.60	0.75	0.75		
	0.64	0.70	0.85	0.85	1.00	1.20	1.35	1.50		
	1.32	1.25	1.30	1.55	1.55	1.70	1.75	2.00		
<u>U.S.</u> Federal Funds Rate91-Day Treasury Bills2-Year Gov't Note10-Year Gov't Note30-Year Gov't Bond	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125		
	0.14	0.35	0.20	0.25	0.25	0.30	0.25	0.25		
	0.20	0.25	0.35	0.40	0.65	0.75	0.90	1.00		
	0.63	0.80	0.90	0.95	1.10	1.30	1.40	1.45		
	1.27	1.40	1.45	1.50	1.60	1.65	1.80	2.00		
Canada - US T-Bill Spread	0.13	0.00	0.10	-0.05	-0.05	-0.10	-0.05	-0.05		
Canada - US 10-Year Bond Spread	0.00	-0.10	-0.05	-0.10	-0.10	-0.10	-0.05	0.05		
Canada Yield Curve (10-Year — 2-Year)	0.31	0.40	0.50	0.45	0.50	0.60	0.60	0.75		
US Yield Curve (10-Year — 2-Year)	0.43	0.55	0.55	0.55	0.45	0.55	0.50	0.45		
EXCHANGE RATES CADUSD USDCAD USDJPY EURUSD GBPUSD AUDUSD USDCHF USDBRL USDMXN	0.71	0.69	0.70	0.71	0.73	0.72	0.72	0.71		
	1.41	1.45	1.42	1.40	1.37	1.38	1.39	1.41		
	108	105	104	103	101	100	100	99		
	1.09	1.11	1.13	1.14	1.15	1.15	1.16	1.16		
	1.25	1.29	1.32	1.34	1.37	1.37	1.33	1.35		
	0.63	0.57	0.56	0.56	0.56	0.57	0.58	0.59		
	0.96	0.95	0.96	0.95	0.95	0.95	0.96	0.95		
	5.24	5.00	4.80	4.80	4.50	4.40	4.40	4.30		
	24.0	22.0	21.0	22.0	21.0	20.5	20.5	20.0		

Chart 1
Financial Flows From \$10 bn in Fiscal Stimulus and QE



Source: CIBC

penalty rate to incentivize banks to lend to one another rather than hold a BoC deposit. These settlement balances will be the liability on the BoC balance sheet that offsets the bonds that will be added on the asset side.

Does this buildup of settlement balances constitute "printing money"? Not on its own. Settlement balances are not part of the money supply, defined as notes and coins plus certain deposits at financial institutions, with broader definitions adding a list of near-money deposits and assets.

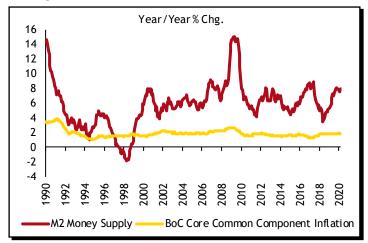
If banks took the lower interest rates that QE generates as a cue to increase lending, or seek to have more risky assets like loans to offset their increased holdings of low yielding deposits, that would add to money supply growth. But given their starting point, interest rates won't move much due to QE at this point. Whatever impact that low rates will have on that channel would largely have happened by setting the overnight rate at only 0.25%.

But the QE program could also be thought of as twinned with fiscal policy. Collectively, the two arms of policy are raining what has been called "helicopter money" on the economy. The Department of Finance is sending out cheques to Canadians, and financing that activity by issuing bonds. The BoC isn't buying those new issues but is mopping up the equivalent in the secondary market. With a target of at least \$5 bn per week, QE will roughly cancel out all of the Finance Department's net issuance.

Put the two together, and there is indeed money supply being added in the process (Chart 1). The employment benefits and business subsidies that Ottawa is sending out are ending up in the bank accounts of the businesses whose sales are lifted (as circled), thereby adding to monetary aggregates, relative to what otherwise would have been the case.

Without QE, the government's bond issuance would have been paid for with cash from investors, and that money coming out of those investors' accounts would simply

Chart 2
Core CPI Sees Little Response to Money Supply
Swings



Source: Bank of Canada

have matched off against the funds deposited by those receiving the government cheques. With QE, the central bank is putting the cash back into investors accounts by buying bonds from them.

Is that Inflationary?

Those of us with more years under our belt can recall the days in which money supply growth was thought to be key to predicting inflation. Indeed, back then, the Fed used money supply growth, not the overnight rate, to measure its policy setting.

These days, clients almost never ask us about money supply measures, because they've been proven to be less than helpful as leading inflation indicators (Chart 2). Shifts in asset holdings often lead to divergent trends based on exactly which of the money supply measures you pick. Canadian inflation can also be steered by global trends for goods we import, and has also been held in check by market expectations that the Bank of Canada would do what it takes to keep the CPI on target.

Instead of the money supply, the focus is on whether interest rate settings are low enough to spark inflation. But short rates were already at their effective lower bound before QE was launched. Even longer yields are starting from rock-bottom levels, leaving minimal room for QE to flatten the yield curve and drag them lower. Indeed, thus far, the launch of QE hasn't resulted in a consistent flattening, although perhaps the curve would

have steepened in its absence given the climbing deficit financing to be done.

If there is an inflation impact, could it be found in another old textbook maxim: price pressures are caused by too much money chasing too few goods? That's obviously not the issue in the trough of this deep recession. There are supply disruptions tied to factories closed due to worker illness and some logistics issues, but demand has collapsed even faster, toilet paper and masks aside.

Clearly, if we continued to run large scale federal deficit spending and funded that with a QE program when the economy was back in gear, inflation would inevitably rear its head. If that were not the case, then we could all be instantly rich by having Ottawa give each of us a cheque for \$10 million and pay for it by issuing bonds sopped up by the Bank of Canada.

What prevents that from working is that when we all tried to spend our millions, they wouldn't be worth much. Inflation at home, and a tumbling exchange rate when we all tried to buy foreign currencies for imports, would wipe out their value, as it did in Zimbabwe, Argentina or the German Weimar Republic. That will be \$100,000 for your coffee, sir.

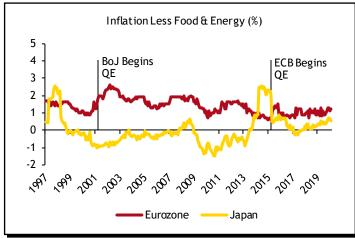
But none of the major central banks that used QE in the last decade (the US, Eurozone, UK and Japan) kept these programs on once inflation was closer to target and the economy was back to potential. Expect the Bank of Canada to wean us off QE on a similar timetable. The federal government won't have to lean on QE for its financing needs by then, since much of the run-up in the deficit is also tied to programs set to expire when hiring comes back.

Loony Tunes

The exchange rate offers another potential transmission channel for QE to stimulate both growth and inflation. Former Bank of Canada Governor David Dodge has cautioned that America's ability to conduct large scale QE without an inflation impact owes to the US dollar's pre-eminent position as a safe-haven asset.

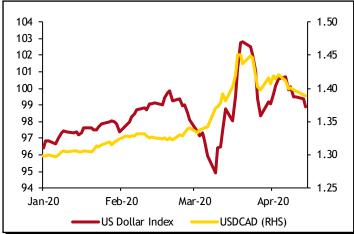
The result is that repeated doses of QE didn't result in a depreciation of America's greenback even if they created demand that flowed in part to imports and thereby widened the trade and current account deficit. Enough capital inflows from eager buyers of US dollar assets created the offset.

Chart 3 **Eurozone and Japan: No Sustained CPI Lift From QE**



Source: OECD

C\$ Weakened in Line With Broad USD Gains



Source: Bloomberg

American consumers also benefit from what's known as pricing-to-market. Foreign auto makers, for example, might be matching prevailing prices for comparable US vehicles, so even if the dollar did depreciate, the inflation response from import prices would be muted.

Still, the persistence of low inflation post-QE hasn't been just a made-in-America tale. Japan, and the Eurozone also managed to avoid the scourge of inflation having undertaking QE programs (Chart 3).

No doubt, the exchange rate is an important economic variable for inflation in Canada, in that so many of our consumer goods are imported. But we don't see a major risk that FX effects will transmit into a loonie tailspin or an inflation spike in Canada.

True, some countries that announced large scale QE programs have in the past seen the FX market respond by taking their currencies to weaker levels. That might be due to fears of driving up import demand and widening trade deficits. Or it could be simply that QE is taken as a signal that the central bank will also keep interest rates low for a more protracted period than other countries, thereby impacting capital flows.

But an exchange rate is always a relative price against other currencies. When you have huge QE programs underway in the US, Canada and elsewhere, it's not clear which currency investors should be dumping and which they should be loading up on.

The Canadian dollar has weakened in recent months, but it's hard to attribute that move to a QE announcement. The dollar-Canada move lines up just as well with the plunge in oil prices. And for the most part, the loonie's depreciation has been in synch with the general trend of other major currencies against the dollar (Chart 4). As for a trade and current account deficit, we've been trapped in a persistent run of red ink since 2008. CIBC had therefore projected that a 1.40 dollar-Canada rate would be inevitable even in the absence of this shock or the QE program.

So Why Bother?

If QE isn't going to put much further downward pressure on bond yields, or drive inflation aggressively, why do it? That's easy. It's better than not doing it. Heavy deficit spending in the absence of QE might have pushed up longer rates, nullifying some of the benefits of the BoC's cuts to overnight rates. In fact, the Bank of Canada might have to use a more directed approach, perhaps even announcing a target for five-year rates (which are key to mortgage markets) to ensure that QE has its intended effects.

Eschewing both the fiscal largess and the QE program, leaving the helicopters grounded and not raining fresh money on the economy, would risk turning a deep coronavirus recession into a protected depression. This is the right policy for these times, and if withdrawn judiciously as the economy turns the corner, one that won't leave us with problems in its aftermath.

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