VERIPATH
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Veripath Q2 2022 Newsletter

> *"Integrity is telling myself the truth. And honesty is telling the truth to other people."*
> — Spencer Johnson

This quarter's letter is short and is no more than a simple series of facts and questions. Will inflation persist if the economy slows rapidly as the yield curve seems to indicate? If inflation persists how can you control it in Canada, a country with the following items at record levels, without triggering a recession and a stock, bond and real estate downturn?

- Aggregate debt
- Residential real estate prices
- Investment into residential real estate as a driver of economic growth
- Central bank sovereign bond holdings
- Structural fiscal deficits / pace of federal debt accumulation

Remember the only practical tool the Bank of Canada ("BoC") has to control inflation is its ability to influence the money supply via bond market purchases/sales thereby influencing interest rates. The only tool the federal government has at its disposal is to reduce its deficit spending.

AGGREGATE DEBT LEVELS: Canada is one of the most indebted developed nations in the world – this will have consequences for managing inflation as even small rate hikes may have large real economy consequences. Unwinding a large sovereign bond position (such as the BoC holds and must reduce) into an arguably saturated market may move interest rates more than expected or can be tolerated by the economy.

> *"Despite a voluminous and often fervent literature on "income distribution," the cold fact is that most income is not distributed: It is earned."* — Thomas Sowell

> *"The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy; it consists in tracing the consequences of that policy not merely for one group but for all groups."*
> — Henry Hazlitt

Chart 1: Country by Country Total Aggregate Indebtedness

	Debt as % of GDP	Govt debt as % of GDP	Private debt as % of GDP
Japan	444.7	237.1	207.6
Canada	356.1	89.9	266.2
France	351.4	98.4	253
US	318.7	106.9	211.8
UK	310.8	86.8	224
Italy	301.6	135.5	166.2
South Korea	283.7	37.9	245
China	258.4	50.6	207.8
Australia	236.9	41.4	195.5
Germany	215.8	61.7	154.1
Russia	211.4	14.6	196.8
Turkey	200.1	30.2	170
Mexico	170.1	35.4	134.7
Brazil	157.5	87	70.5
South Africa	128.5	56.7	71.8
India	122.9	68.1	54.8
Argentina	108.4	86.1	22.3
Indonesia	70.3	30.1	40.2
Average	235.96	75.24	160.72

Source: Icecap Asset Management, IIF

RESIDENTIAL REAL ESTATE PRICE RISKS: Canada has one of the most expensive residential real estate markets in the world – this will have consequences for managing inflation as this is a highly leveraged asset class.

> *"Inflation is taxation without representation."*
> — Milton Friedman

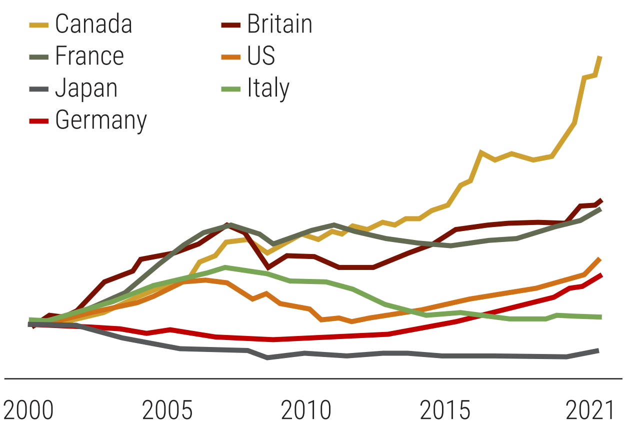
Chart 2: Gauges of Residential Price Risk

	Rank	Price-to-Rent Ratio	Price-to-Income Ratio	Real Price Growth (%)	Nominal Price Growth (%)	Credit Growth (%)
New Zealand	1	156.8	143.9	27.6	23.1	1.5
Czech Republic	2	169.7	140.9	25.8	20.2	2.4
Hungary	3	160.5	131.4	19.5	11.2	-0.5
Australia	4	141.5	119.7	23.7	21.1	-3.3
Canada	5	154.9	143.0	17.6	12.2	-4.7
Portugal	6	156.0	146.8	11.6	9.4	-2.0
US	7	139.2	135.9	18.7	11.7	-2.5
Austria	8	134.1	140.9	14.9	11.9	-1.3
Russia	9	157.6	99.8	22.8	11.6	-1.4
Luxembourg	10	166.5	143.7	12.1	8.2	-5.7
Netherlands	11	148.8	137.8	16.7	7.8	-3.3
Germany	12	147.6	135.9	12.2	7.2	-0.9
Sweden	13	129.2	116.3	11.1	8.0	-1.2
Switzerland	14	121.7	121.2	8.3	7.0	-1.7
UK	15	126.8	120.1	10.5	6.0	-4.1
Chile	16	132.3	124.5	11.9	6.9	-7.8
South Korea	17	113.5	100.4	9.9	6.7	3.1
Japan	18	114.8	109.1	7.3	7.4	1.3
France	19	127.3	112.6	7.3	4.5	-2.3
Spain	20	129.5	124.7	6.3	2.2	-6.4
Poland	21	121.4	108.2	12.1	3.4	-6.4
Greece	22	129.6	103.7	7.9	6.4	-7.0
Ireland	23	124.6	114.8	13.9	7.0	-12.6
Colombia	24	121.8	114.1	7.7	2.2	-6.2
Denmark	25	126.4	114.1	4.1	0.6	-6.4
Belgium	26	117.3	108.3	6.0	1.4	-5.6
Norway	27	122.4	111.0	8.1	4.3	-13.6
Finland	28	101.0	101.6	3.9	0.7	-2.3
Italy	29	103.0	94.7	4.1	0.9	-3.3
South Africa	30	103.6	100.0	3.4	-2.2	-7.1

Source: Bloomberg Economics, BIS, OECD

> *"Here we shall have to say simply that all government expenditures must eventually be paid out of the proceeds of taxation; that inflation itself is merely a form, and a particularly vicious form, of taxation."*
> — Henry Hazlitt

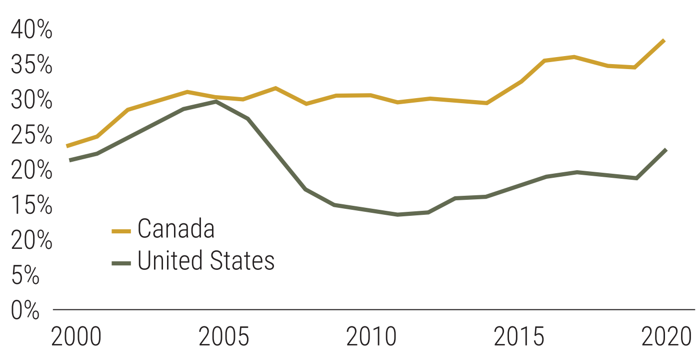
Chart 3: G7 Countries, Real House Prices (2000 average = 100)



Source: Federal Reserve Bank of Dallas

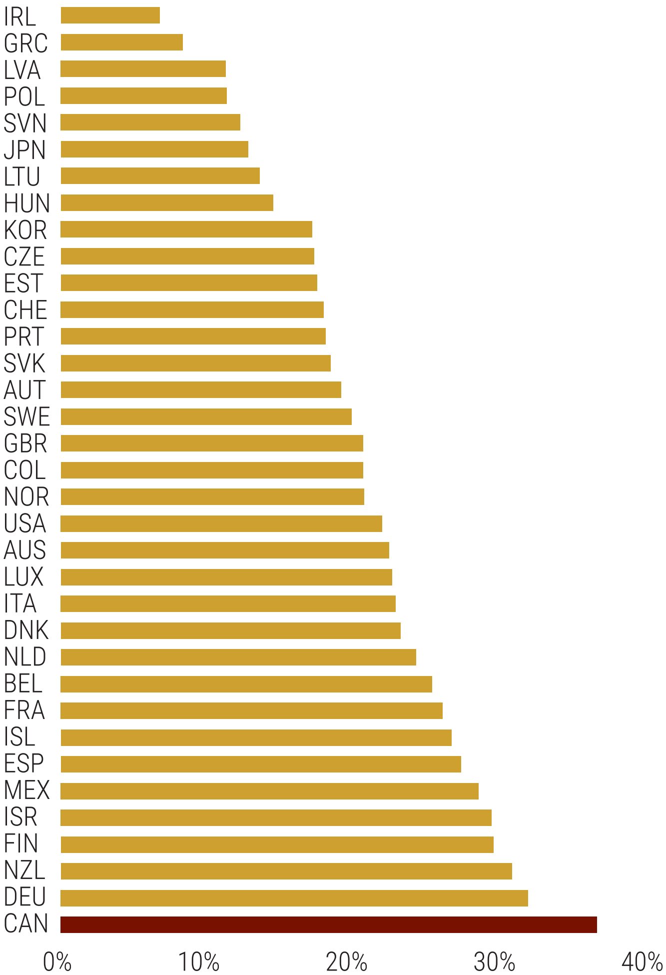
DISPROPORTIONATE INVESTMENT INTO RESIDENTIAL REAL ESTATE AS A DRIVER OF ECONOMIC GROWTH: Canada is one of the economies in the world most reliant on residential house investments to drive economic growth – this will have consequences for managing inflation if the economy is not to experience a severe downturn. Canada spends the most on residential housing in the world – remember that most residential housing is a depreciating consumption good, not strictly speaking a capital investment. Residential investment consumed 37% of gross fixed capital formation ("GFCF") in 2020, up 11% from the previous year. In 2000, this number was just 22%, so it's now consuming 66% more of Canada's fixed capital investment.

Chart 4: Annual Share of GFCF Spent on Residential Investment in Canada versus the United States.



Source: OECD, US Federal Reserve

Chart 5: OECD Share of Investment Spent on Housing (annual share of fixed capital formation spent on residential investment in OECD member countries)



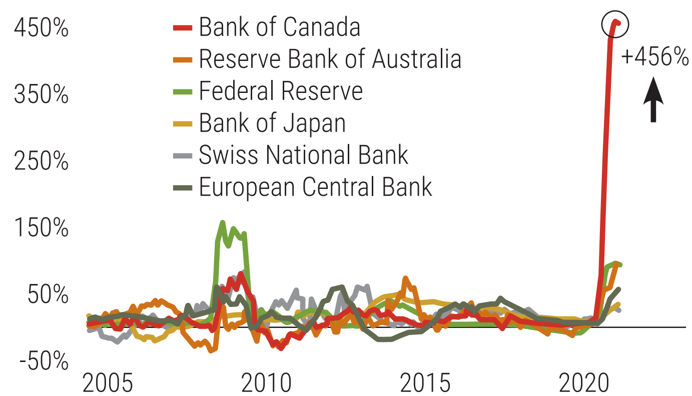
Source: OECD, US Federal Reserve

BANK OF CANADA SOVEREIGN BOND HOLDINGS: The BoC's balance sheet grew the fastest of any central bank in the developed world over the last 30 months – this will have consequences for managing inflation as arguably this must be unwound into an unreceptive bond market. Who is buyer for $300 billion to $400 billion of Canadian sovereign debt at current interest rates? Yet that's exactly what the BoC must find to sterilise its balance sheet and in turn have any chance of quickly driving down inflation – real estate and debt servicing costs for the federal government will be materially negatively impacted.

> *"In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual."* – Galileo Galilei

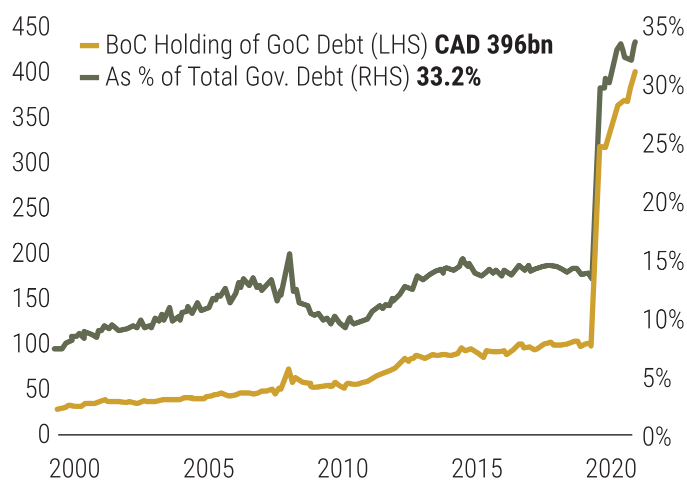
> *"Fallacies do not cease to be fallacies because they become fashions."* – G.K. Chesterton

Chart 6: Central Bank Balance Sheets Assets to Nominal GDP (YoY Growth)



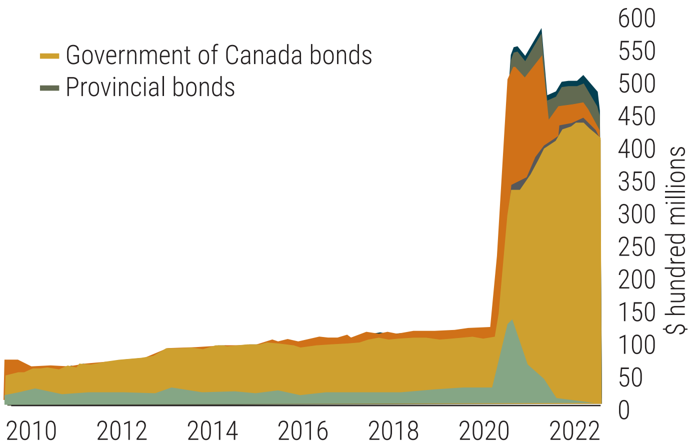
Source: Bloomberg, Crescat Capital

Chart 7: Growth in BoC Balance Sheet (Government of Canada Debt)



Source: Bloomberg

Chart 8: Bank of Canada Assets ($billion, month end – note the > $400 billion in Government of Canada bonds)



Source: Bank of Canada

CANADA'S FEDERAL DEBT/FISCAL DEFICIT STRUCTURE: Canada's structural fiscal deficit has increased by over 1% of GDP and over a six-year period, the Federal government has increased Canada's national debt by approximately 300% – this two-fold impact will have consequences for managing inflation as the federal government is likely to find debt reduction or program cuts politically inconvenient. I think it fair to say that the pace of the accumulation of Canada's government debt is not on a sustainable trajectory and in fact over the last 6-7 years has provided the accumulation of necessary inflationary fuel for the current burst of inflation. Looking forward and deconstructing the federal budget to evaluate new and ongoing permanent programs costs it appears that Canada's structural budget deficit at the federal level has been increased by more than $20 billion per annum. This higher level of structural (permanent) deficit effectively acts as on offsetting inflationary force against any BoC tightening and keeps the consequences of BoC tightening on the private sector rather the public sector. In a report by Scotiabank Chief Economist Jean-Francois Perrault

> *"Inflation itself is a form of taxation. It is perhaps the worst possible form, which usually bears hardest on those least able to pay."* – Henry Hazlitt

> *"The larger the percentage of the national income taken by taxes the greater the deterrent to private production and employment. When the total tax burden grows beyond a bearable size, the problem of devising taxes that will not discourage and disrupt production becomes insoluble."*
> – Henry Hazlitt

and Rene Lalonde, the bank's director of forecasting they concluded *"the output losses that the BoC must engineer to rein in inflation are falling disproportionately on the private sector...In effect, high levels of fiscal spending will necessitate an unnecessarily large crowding out of private spending...Less government consumption would lead to a lower path for the policy rate and take some of the burden of adjustment away from the private sector."*

CONCLUSION: What are the answers to the questions posed in the introduction of this letter? What are the consequences for portfolio construction and capital deployment? Will the BoC and the federal government try to balance all the conflicting pressures and simply end up with a low growth, high interest rate, high inflation economy – i.e., mild stagflation as a "*muddle-through*" solution that in the end will simply delay the inevitable adjustments to government spending and debt levels. The answers remain to be seen. It should be noted that I do not intentionally single out the current federal government, as it seems unlikely that any political party, at any level federal, provincial or municipal has an answer to this question or in practice even seems to want to try to arrive at one. Given the daunting magnitude of the issues, from the perspective of an office seeking politician it is much better to continue to focus on topics that will lead to being re-elected. However, as voters is it fair to hand these issues to the next generations? I leave you with a quote from Herbert Hoover exactly on topic *"Blessed are the young for they shall inherit the national debt"*.

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About Veripath

#300, 4954 Richard Rd SW,
Calgary, AB T3E 6L1
www.veripathpartners.com

Veripath is a Canadian alternative investment firm. Members of Veripath's management team have been investing in farmland since 2007. Veripath is focused on risk first and invests in a way that seeks to reduce operational, weather, geographic and business-related risks while capturing the pure return from land appreciation for its investors. Our goal is to partner with farmers for the long-term using innovative lease arrangements and/or land-unit swaps to give certainty to farming operations.