

ON MONEY, DEBT, INFLATION & WEALTH PRESERVATION

Reading time ~ 12 min.

Lots of people around the world are worried about their lifetime savings. A friend recently asked: "My father-in-law has left my wife an inheritance of US\$ 100.0 million in cash. As you know, my wife and I make a good living and don't really need that money. We have decided to leave the entire inheritance to our kids.

Where should we invest that \$100.0 million, for the next thirty years, to protect its purchasing power – from inflation, currency depreciation or even default?

Although we are not Canadians, we were thinking of buying Canada, sort of speak, because we think it is one of the most stable and safe countries in the world today. But how could we invest in Canada? Simply buy land in Canada? What would you suggest?"

In this note we will share with you a simple framework, which should make it easier to think about the issues of **(1)** money printing & government debt, **(2)** runaway inflation, and **(3)** wealth preservation. To save time, we will use US dollars as an example. The same logic can then be applied to any other currency or economy. This note consists of three parts. Today we are publishing *Part One* entitled *Money & Debt*.

Over the last few years, various newspapers, magazines and bloggers have published hundreds of charts showing skyrocketing M2 money supply numbers (see Table 1). Based on these charts people then argue that a galloping inflation is inevitable. It is no surprise, therefore, that many are worried about their lifetime savings, especially over a thirty-year horizon.

Table 1. M2 as % of GDP

Country	2007	2010	2015	2020
Armenia	18%	15%	17%	35%
Azerbaijan	16%	20%	16%	28%
Brazil	29%	35%	38%	53%
Canada	51%	63%	70%	97%
China	149%	176%	202%	215%
France	65%	73%	81%	118%
Georgia	13%	14%	17%	28%
Germany	70%	76%	86%	103%
Italy	62%	72%	83%	110%
Japan	137%	156%	173%	211%
Korea	117%	126%	129%	166%
Russia	39%	43%	42%	52%
Spain	82%	96%	98%	123%
Turkey	39%	50%	51%	66%
UK	108%	135%	111%	144%
USA	52%	59%	68%	92%

Source: Central Banks' data



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The total amount of money in circulation (let's take M2) of any country, in our example America, is essentially that government's *de facto and de jure* guarantee that the money can be used to buy goods, services, pay off debt or purchase assets.

This means that for the US government there is little difference between government bonds or money in circulation. Anyone can instantly convert cash into government bonds and vice versa. We could argue, therefore, that money in circulation is also government debt. We must remember, however, that it doesn't make much sense to look at debt without considering assets. More on this later.

The only difference between money and government bonds is that the government doesn't pay any interest to money holders while it pays an interest rate of around 2.0% per year (in case of America) to those who hold government bonds. What matters for investors, therefore, is the overall level of government debt and government obligations, not money supply statistics. This brings us to the next part of our paper called Government Debt.

"Repeat after me: government debt is money we owe to ourselves; government debt is money we owe to ourselves; government debt is money we owe to ourselves.... It only makes us poorer if it crowds out investment — which it isn't doing."

Prof. Paul Krugman, Nobel Laureate in Economics.

In early 2001, total U.S. federal government debt was about \$5.7 trillion, or 55% of US GDP. By early 2021, this number was at around \$28.0 trillion, or 130% of US GDP. This begs the question – how much US federal debt is too much? And what will happen if we reach the point of "too much government debt"? Table 2 shows the Debt/GDP ratio of several economies.

Table 2. General Government Debt as % of GDP

Country	2007	2010	2015	2020
Armenia	16%	40%	49%	67%
Azerbaijan	4%	5%	18%	20%
Brazil	64%	63%	73%	101%
Canada	67%	81%	91%	115%
China	29%	34%	41%	62%
France	65%	85%	96%	119%
Georgia	23%	32%	37%	61%
Germany	64%	82%	72%	73%
Italy	104%	119%	135%	162%
Japan	175%	208%	231%	266%
Korea	27%	29%	41%	48%
Russia	8%	10%	15%	19%
Spain	36%	61%	99%	123%
Turkey	38%	40%	27%	42%
UK	42%	75%	87%	108%
USA	65%	95%	105%	131%

Source: IMF

The first trap to avoid is to never compare government finances with household finances. Governments, unlike households, have an unlimited lifespan. This means government debt can be refinanced (or rolled over) indefinitely (assuming that debt is issued in local currency).

The second trap to avoid is to never look at government debt without looking at the size of the economy. This principle is closely related to the first principle mentioned above. To understand why this second principle is important, we have to look at the third principle below.

If the cost of government debt (government bond yields) is lower than the nominal growth rate of the economy, then debt relative to GDP will automatically decline, *without paying it off*. For example, if the US economy expands by 4.5% per year (in nominal terms, which means an inflation rate of 2.5% per year plus a real GDP growth rate of around 2.0%) but the average cost of US government bonds remains around 2.0% per year, as it currently is, America's Debt/GDP ratio will fall every year.

Therefore, for government debt issued in local currency the most important number is the difference between economic growth (let's call it "**g**") and cost of debt (let's call it "**r**"). As long as **g > r** debt trajectory is sustainable (we are assuming that it is a functional government, that doesn't run perennial budget deficits).

One last point about government debt, especially US government debt, is related to foreign ownership. Every economy keeps a balance of assets it owns abroad and what foreigners own in that economy. That net balance, between Assets and Liabilities, is called the *Net International Investment Position (NIIP)*.

America (all American residents, businesses and government collectively) owns about US\$ 30.0 trillion of assets abroad whereas foreigners (again, public and private combined) own about US\$ 40.0 trillion of assets in America. This means America's NIIP is about \$10.0 trillion (30 trill assets - 40 trill liabilities or slightly more than 50% of America's GDP (foreigners own more assets in America than Americans own abroad).

Table 3 shows the NIIP of other countries.

Table 3. NIIP as % of GDP

Country	2007	2010	2015	2020
Armenia	-30%	-74%	-75%	-82%
Brazil	-36%	-41%	-21%	-28%
Canada	-13%	-19%	21%	64%
China	26%	25%	15%	15%
France	-9%	-9%	-13%	-24%
Georgia	-68%	-98%	-124%	-149%
Germany	20%	26%	46%	72%
Italy	-23%	-20%	-19%	-2%
Japan	48%	55%	61%	74%
Korea	-16%	-12%	14%	27%
Russia	-11%	1%	25%	35%
Spain	-92%	-92%	-87%	-79%
Turkey	-46%	-46%	-44%	-56%
UK	-9%	-9%	-24%	-24%
USA	-9%	-17%	-41%	-62%

Source: IMF

As long as America keeps importing more than it exports (current account deficit or let's simplify and look at the trade deficit), so as long as America runs a trade deficit, its NIIP will keep growing (foreigners will keep accumulating assets in America faster than Americans abroad).

The problem is that one day foreign investors will realise that they have too much exposure to US\$ denominated assets – bonds, stocks or real estate – and will decide to diversify, by investing in other economies/currencies. At this point American assets will need to pay a premium to keep attracting foreign investments. This premium will then get reflected in higher government bond yields (Treasury bond yields would likely rise from 2% to 3%), lower stock prices (stocks could fall by 10-12%), a depreciation of the US\$ (US\$ could depreciate by 10-15%), or a combination of all three.

To conclude, we have argued that **(a)** money supply is another form of government obligation; **(b)** government debt to GDP is on a sustainable path if $g > r$; **(c)** it makes a big difference who buys government bonds, locals or foreigners; and, **(d)** US stock markets, government bond yields and the US\$ will indicate when the US government debt starts to worry foreign investors. We will address our friend's question about his inheritance in Part 3 of this note.

End of Part 1.

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