

Myrmikan Research

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The Path to Hyperinflation

We teeter at the pinnacle of the largest credit bubble in history. It was fraying already in early 2019. In May of that year, 63% of surveyed economists forecast a rate hike no later than 2020: the promised post-2008 normalization eleven years in the making. The fed funds futures market, on the other hand, implied an 80% chance that the Fed would cut rates—the market knew, and long before the CCP exported its virus from Wuhan.

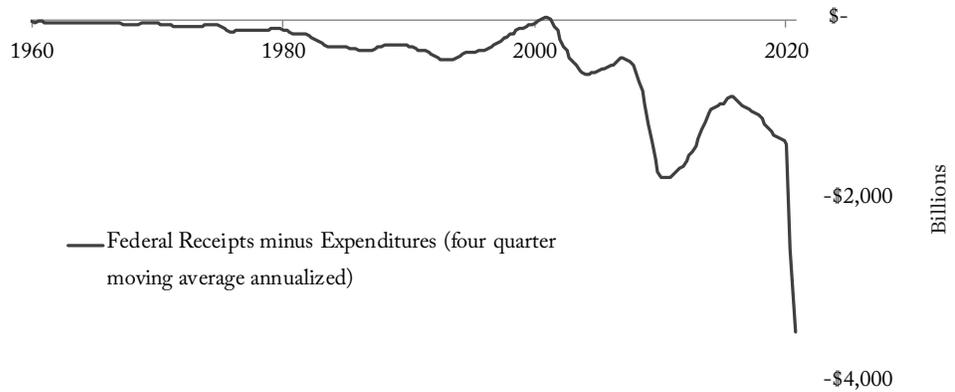
The repo market—the primary funding mechanism for Treasury bonds and mortgages—imploded that September. Repo funding costs surged overnight to a 7% premium to the fed funds market rate. Within two weeks, the Fed had printed \$181 billion to fund the repo dealers (and thus the government) to prevent the credit contagion from spreading. A week later Fed chairman Powell announced that the Fed's balance sheet would begin expanding indefinitely.

Six months later the virus gave the Fed the excuse it needed to spike its balance sheet from \$3.7 trillion in September 2019 to \$7.8 trillion today. If the virus hadn't come from China, the Fed would have had to invent it.

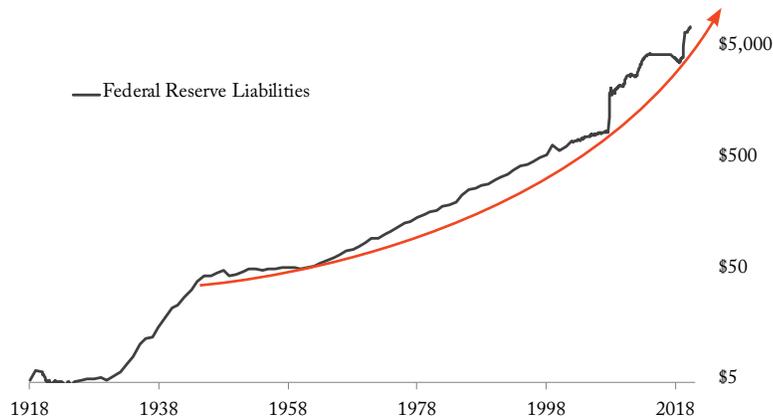
The Fed's epic money-printing was proactive to bail out the repo dealers in the shadow banking system and also necessary to cover federal deficits. Myrmikan's December 2018 letter posited that the next credit bust would send the federal budget deficit to at least \$3 trillion per year. The argument was simplistic but not unreasonable: The past three major recessions—following S&L failures in the 1990s, the internet bubble in the early 2000s, and the housing bubble in the late 2000s—saw federal spending soar 18%, 15%, and 25%, respectively, because of Keynesian “automatic stabilizers.” Federal revenue for each successive recession was neutral, down 13%, and down 20%, respectively, as an ever larger part of the economy became part of the bubble-making machine. Taking federal revenue and spending figures for 2018 and assuming—conservatively—that conditions the next time would be no worse than after the housing bubble popped yielded a \$3 trillion annual deficit during the next recession. The federal deficit for 2020 was, in fact, \$3.1 trillion.

The Congressional Budget Office recently projected a \$2.3 trillion federal deficit for 2021 (up from its \$1.8 trillion estimate made last September). And this is before any of the new spending proposed by the Biden/Harris regime, which recently presented a budget that would generate a \$3.8 trillion deficit in 2021: like newly ascended Roman emperors who had to pay off the Praetorian Guard, Biden/Harris has to pay off the constituents that placed them into power.

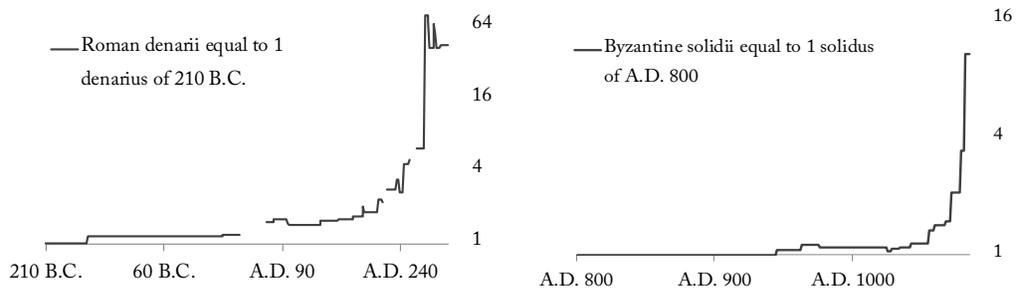
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The level of borrowing proposed would, of course, necessitate a further acceleration of the pace of money printing by the Fed: who else would or could buy Treasury bonds in the quantities necessary to fund such spending. The chart below shows the quantity of Fed liabilities (i.e., dollars) on a logarithmic scale: an increasing slope indicates an increasing rate of increase, a trend that must continue if the federal government is to remain liquid.

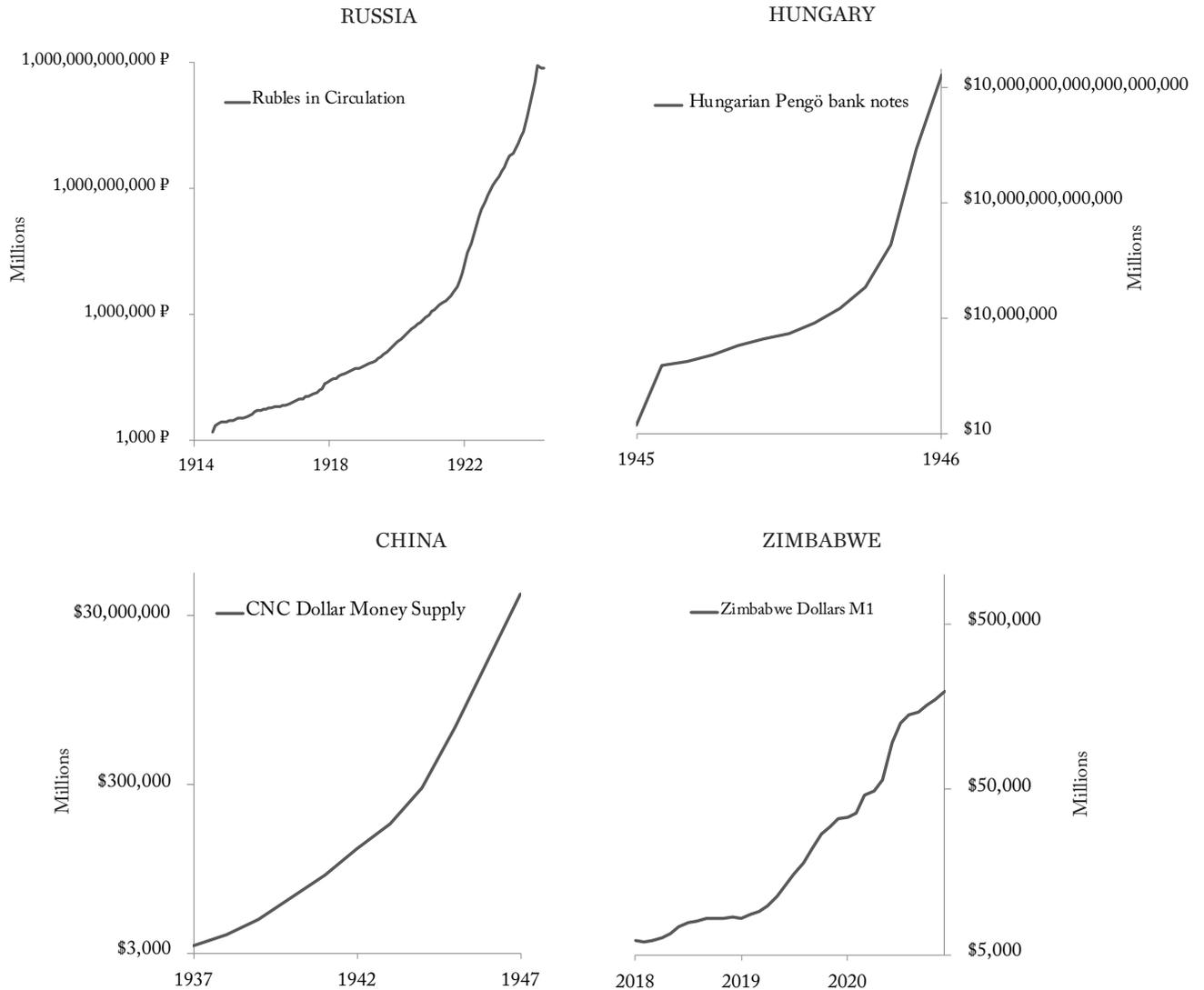


Note that the increase in Fed liabilities is a *parabolic* line on a *logarithmic* scale. Such growth is an absurdity in the real world and cannot persist for long. Two examples show below exhibit the termination of such experiments: Rome and Byzantium. Both had stable currencies that underlay their commercial and military power. Once the demands of the state outran the ability to raise taxes, the expedient of money printing ended currency and empire both.



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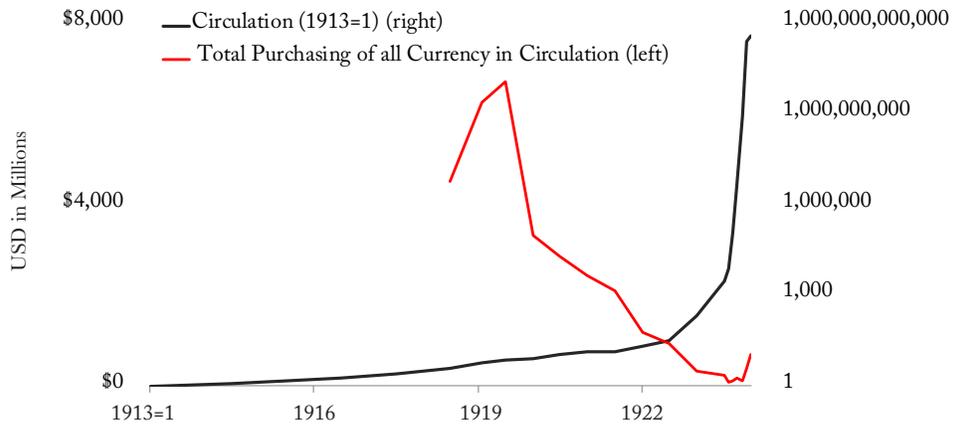
Modernity offers more swift and dramatic examples of this phenomenon, of course. Below are just four of many episodes: Russia, Hungary, China, and Zimbabwe (not its storied inflation of 2008 but over just the past three years). Observe the same pattern of a curve on a logarithmic scale. Note as well that the curve is not smooth: there is a bend, some crisis that prompts an extreme acceleration toward the final destruction of the currency.



The charts above show only the increase in the money supply. They do not show the value of that money, which tends at first to exhibit surprising resilience and then collapses at a rate faster than the rate of money printing would imply.

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The chart below shows Weimar money printing on a logarithmic scale (note the same dynamics as above) and also the total value of the currency (not the value of each currency unit).



The chart above demonstrates that at first the purchasing power of each currency unit fell more slowly than the increasing quantity of money would imply (increasing the total value of the currency). But then there was a sudden inflection after which purchasing power losses dramatically outran the pace of money printing until the entire currency (not just each currency unit) was worth almost nothing.

There is a reason, beyond shifting confidence, why the total value of a currency can move independently of its quantity. All banking systems begin by adding liquidity to gold and silver: banks accept bullion deposits and issue claims to that bullion. The claims, being perfectly uniform and backed by bullion, are more liquid than bullion itself, and so the market prefers them. Healthy central banks also issue currency backed by commercial invoices and so-called anticipation taxes (taxes the government has already levied but not yet collected, this in the days before electronic transfer).

As long as central bank liabilities are backed by solid assets, the value of each currency unit will be stable no matter what their quantity. To illustrate: posit a bank that issues 100 notes for 1 oz of gold each. Now assume that the notes plunge in value by 50%. The bank could buy them all back using 50 ozs and still have 50 ozs of gold in the Treasury. In other words, a bank (central or otherwise) with solid assets can and will intervene in the market to stabilize the value of its liabilities (this is, in fact, more or less how the precious metals ETFs work). Therefore, an increase in a central bank's liabilities need not imply currency debasement, depending on what assets back the issuances. As Adam Smith pointed out:

The increase in paper money, it has been said, by augmenting the quantity, and consequently diminishing the value of the whole currency, necessarily augments the money prices of commodities. But as the quantity of gold and silver, which is taken from the currency, is always equal to the quantity of paper which is added to it, paper money does not necessarily increase the quantity of the whole currency.

When a central bank issues new currency against speculative assets, such as government bonds, the situation is very different. The currency may well stay strong as long as the government remains solvent and/or the bonds remain well bid. If the assets a central bank holds suddenly becomes worthless, however, then so does the currency it issues *regardless of its quantity*.

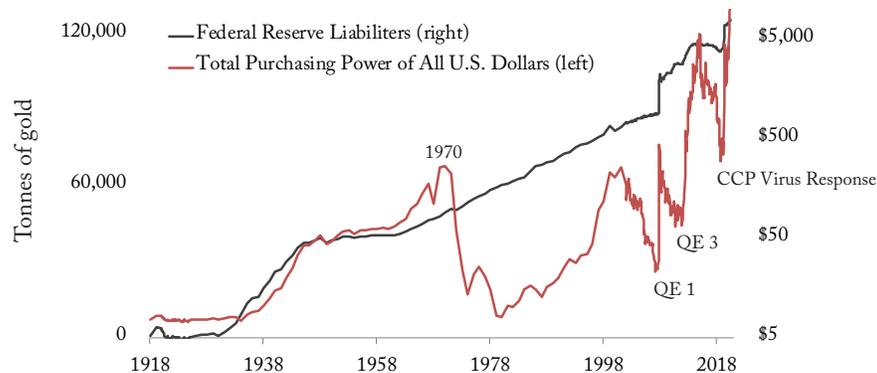
Hyperinflation generally occurs when the government forces its central bank to buy government bonds to fund persistent deficits even while the value of the those bonds are collapsing. So it's not just that the quantity of notes is increasing but the collateral backing them is also rapidly becoming impaired.

In these cases, unlike the hypothetical gold example above, there is no way for the central bank to intervene in the market to support its currency. The more it tries, in fact, by selling marketable assets to buy back its own currency, the worse the situation becomes because less collateral remains for the currency that remains outstanding—the same dynamic that drive a conventional bank run or the unwinding of an investment vehicle. This simple and obvious truth explains why central banks that find themselves defending their currency always fail: the market attacks them only because their currencies are overvalued, and the more the bank sells its good collateral to buy back its own currency, the worse the situation becomes.

To prove the point, economist Thomas Sargent examined the balance sheets of the central banks of four hyperinflating countries in the 1920s and concluded that it was persistent losses on the central banks' balance sheets that caused the hyperinflations, not the quantities of money:

We have further seen that it was not simply the increasing quantity of central bank notes that caused the hyperinflation, since in each case the note circulation continued to grow rapidly after the exchange rate and price level had been stabilized. Rather, it was the growth of fiat currency which was unbacked, or backed only by government bills, which there never was a prospect to retire through taxation.

With this understanding of what determines the value of currency, let us look again at the chart of the quantity of base dollars—only this time, as with the chart of Weimar marks, adding a line representing the total value of all U.S. currency in gold terms.



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The chart shows that the massive ramp in the supply of currency in the 1930's was met with an equivalent increase in the value of the total currency: in other words, each currency unit held its value as the supply increased. The explanation is simple: total Federal Reserve assets rose four times between 1933 and 1942, and the Federal Reserve's gold reserves rose five times. Federal Reserve liabilities went from being 51% backed by gold to 71% backed by gold during this period, so of course the currency unit remained stable.

But then the Keynesians took control of money and credit. By the end of 1970, the Federal Reserve had bought so many government bonds and lost so much gold that its liabilities were backed only 12% by gold. And yet through 1970 the total value of the U.S. currency had increased at a faster rate than the increase in quantity, just like at beginning of Weimar. This was the 1960s bubble interacting with gold fixed at \$35/oz by the Bretton Woods system. Eventually, the U.S. succumbed to European governments demanding redemption of their dollars into gold, the bubble burst, and the total value of U.S. currency fell back to the levels previously seen in the 1920s, despite a much larger population, economy, and, therefore, need for money.

Unlike Weimar, however, the U.S. was not bankrupt in 1980. The inflation had been the result of economic hubris relying on America's vast economic power, printing money intentionally to adhere to insane Phillips' Curve policies (the fallacy that consumer inflation and unemployment levels anti-correlate) and to bail out the occasional overly-aggressive bank (policies that have become institutionalized). Now, however, the situation is worse. The U.S.—indeed, the whole world—is hopelessly in debt: consumers, businesses, banks, and especially the state.

The chart above clearly shows that every time the Fed suddenly increases the money supply (to fund the state and preserve the bubble), the total value of the currency increases (just like at the beginning of Weimar and the 1960s). This is because the first effect of money printing is to lower interest rates to encourage borrowing, creating a spike in the demand for dollars and frenetic activity in certain economic sectors.

On January 27, Fed chairman Powell held a press conference during which he boasted: "If you look at the sectors of the economy that are interest rate sensitive, you will see very strong activity: housing, durable goods, automobiles; so, our policies are working."

Surprisingly, it was the Bloomberg Fed correspondent who asked Powell the operative question: "Your policies are working and maybe you can do more; but the question is can you stop doing it when it's time?" Powell answered: "We had all the same questions after the global financial crisis: we raised interest rates, we froze the balance sheet size, and then we shrank the balance sheet size. There is no reason why we won't be able to do that again."

Of course the Fed can do all that again, but then what happens to the overcapacity in the interest-rate sensitive parts of the economy that the Fed is now encouraging? As Austrian economic theory predicts and history has borne out, each monetary intervention must increase in scale and scope to prevent economic and political collapse.

But there will come a time when money printing begins to lower, not increase, the total value of the dollar, when that red line in the previous chart starts heading downwards despite (or, all of a sudden, because of) stimulus spending. At that point, the purchasing power of the state will begin to collapse even as the central bank is ordered to purchase more Treasuries. The U.S. will face a stark choice: follow the hyperinflationary path trod by so many other nations and empires or balance the federal budget.

Imagine the societal conflict that would follow if the government suddenly had to live within its means. And higher taxes will not avail. With federal, state, and local taxes already surpassing 50% in the jurisdictions with the most income and wealth, higher tax rates probably produce less tax revenue not more. The only other choice will be less spending, whether by choice by means of budget cuts or by necessity as the currency collapses.

Given the evil that government does, given that government is, as H.L. Mencken quipped, “the common enemy of all well-disposed, industrious and decent men,” this outcome should be welcomed. However, the industrious and decent should first make sure they have protected their wealth by holding gold.



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