Myrmikan Research

January 13, 2023

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Usury Bites

Money supply growth has turned negative. There are 279 billion fewer dollars in existence today than there were a year ago (Myrmikan's definition of a "dollar" is a unit of liability of the Federal Reserve). M1 money supply, which includes demand deposits, has shrunk by $346 billion year-over-year. Simple math tells us that credit markets will implode if the Fed allows this trend to continue.

To illustrate, imagine a model economy in which there exists $100 in gold. The owners lend it out for 10% interest. The next year, the lenders are owed $110 in gold. But where is the extra $10 of gold supposed to come from? (Mining and minted may have produced another dollar or two, but this new money is probably owned by the lenders anyway). This was the usury problem that the ancients wrestled with for millennia. Aristotle called the making of money through interest "against nature" since, unlike chickens or cattle or crops, gold and silver do not self-increase.[1] If the lenders forbear collection for another year, they are owed $121, and the imbalance between money owed and money in existence grows worse.

Francis Bacon observed: [Usury] bringeth the treasure of a realm or state into a few hands. For the usurer being at certainties, and others at uncertainties, at the end of the game most of the money will be in the box; and ever a state flurisheth when wealth is more equally spread."

The first time the usury experiment was run in well-recorded history was in sixth-century B.C. Athens (there are hints from earlier times). Plutarch recorded the predictable results:

> The disparity of fortune between the rich and the poor, at that time, also reached its height; so that the city seemed to be in a truly dangerous condition, and no other means for freeing it from disturbances and settling it, to be possible but a despotic power. All the people were indebted to the rich; and either they tilled their land for their creditors … or else they engaged their body for the debt, and might be seized, and either sent into slavery at home, or sold to strangers; some (for no law forbade it) were forced to sell their children, or fly their country to avoid the cruelty of their creditors.

1 "The most hated sort [of gaining wealth], and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural object of it. For money was intended to be used in exchange, but not to increase at interest. And this term interest, which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Wherefore of all modes of getting wealth this is the most unnatural." Aristotle, *The Politics*..

This situation naturally leads to demagogues, whether Julius Caesar or Robespierre or Elizabeth Warren, determined to redistribute wealth back to the people, whether through money printing, default, or taxes, usually a combination.

Usury created all manner of social failures, the reason the ancients tried so hard to suppress it. The modern answer to the problem was simple: instead of basing money on metal, governments began to base their money on government bonds, the volume of which could be easily manipulated by the state. If $110 were owed in an economy with only $100 in circulation, simply put another $10 into circulation, and in aggregate the usury problem goes away.

Or so it seems: this monetarist policy creates its own social failures. First, banks increase the supply of credit primarily to those bidding on assets, which pushes asset prices higher and, in effect, decreases discount rates. Falling discount rates tilt investment towards capital-intense, long-duration projects. Printing the $10 to fill the interest hole is not enough to sustain the artificially elongated structure of projection: more is needed to prevent the liquidation of malinvestments and stabilize prices. But then more money creation creates an even larger bid on assets, still lower discount rates, and more malinvestments in an increasing progression.

Second, overinvestment in capital-intensive projects results in the premature substitution of labor with automation, reducing incomes for the working class. At the same time, rising capital prices encourage manic trading in stocks and frenetic combinations of new and existing companies, benefiting banks, brokerage firms, law firms, accounting firms, consultancies, boosting incomes for the intellectual class. The livelihood of those with the highest incomes becomes dependent upon accelerating money printing. The financial class makes large donations to those in politics and academia who defend the system. The economic losers decry the injustice of "free markets" and embrace socialism.

Third, if usury operates to move wealth from borrowers to lenders, diluting the currency has the opposite effect. Unlike in ancient times, creditors tend not to be dissolute aristocrats but middle-class savers and the mass of workers through pension plans. Continual debt relief moves wealth from savers to spenders, from the prudent to the reckless, from the frugal to the prodigal. The more debt is forgiven, the more borrowers will take on more debt, the faster the central bank must print to bail them out, and the more wealth is transferred to the worst economic actors.

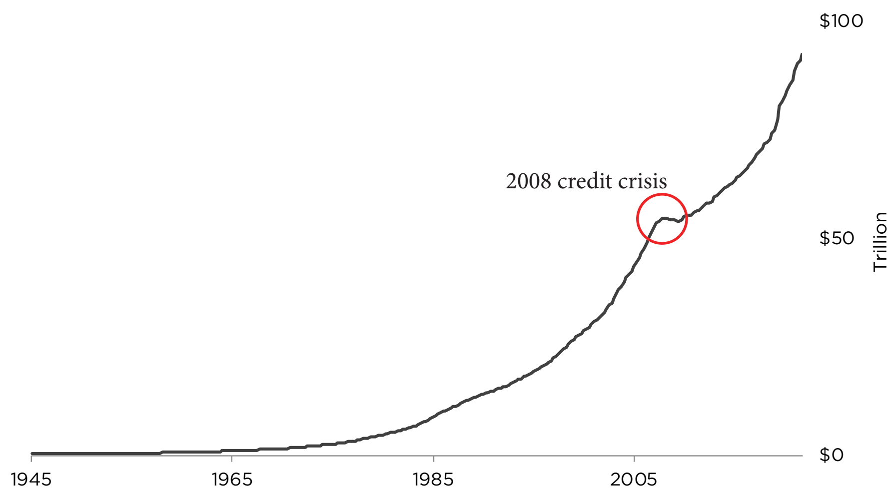
The fourth social failure of monetarism concerns the method by which most central banks create money: they do not distribute the new money evenly—they generally are required to buy government debt, at least in the initial stages of the credit cycle. Responding to the plight of borrowers unable to service their debts thus serves to divert ever more resources to the state. Central bankers, pleading maintenance of the economy, enable the explosion of the regulatory and welfare state by freeing the government from the practical limits imposed by direct taxation. The expansion of government serves to undermine the economy further, degrading the real value of the government bonds.

Fifth, because the central bank's printing press directs the new money to the state, not the debtors who actually need it, demagogues rise to direct the new money to favored constituents, creating dependency on government handouts and suppressing the need to work for large portions of the population, while making conditions worse for non-favored constituents.

Sixth, because the new money is not actually "printed" but rather lent into existence, it carries its own usurious interest burden: the more money the central bank issues, the more it must issue to avoid collapse, leading to exponential growth.

In other words, not just bubble companies, but the whole social and political and economic and financial structure becomes dependent on accelerating money printing. The following chart shows the necessary effect of the monetarist policy and why 2008 was a near-death experience for the modern American system:

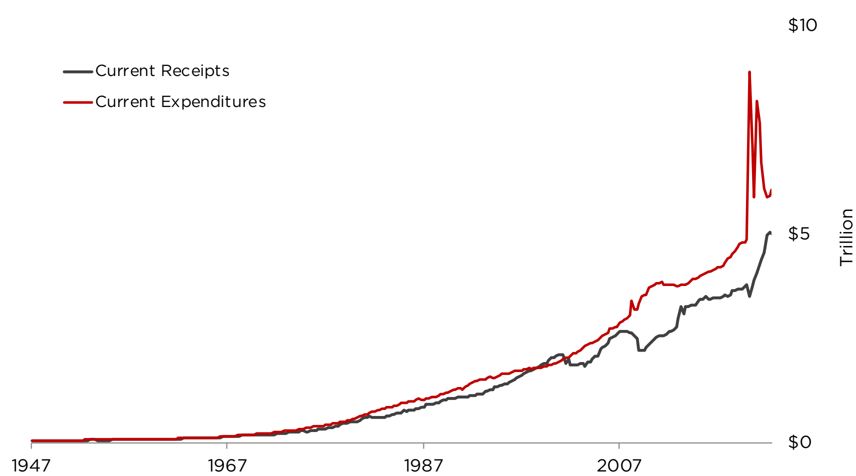
TOTAL DEBT SECURITIES AND LOANS: ALL SECTORS[1]



Now the money supply is falling, and set to shrink more—and this while demand for money, as determined by interest rates, is rising. If these trends continue, it will be the end of the world as we know it.

But it won't continue because the Fed's core mission is to fund the state. So let us examine the federal government's finances.

FEDERAL GOVERNMENT FINANCES[2]



1 Board of Governors of the Federal Reserve System (US), All Sectors; Debt Securities and Loans; Liability, Level [TCMDO].

2 U.S. Bureau of Economic Analysis, Federal Government Current Receipts [FGRECPT] minus U.S. Bureau of Economic Analysis, Federal Government: Current Expenditures [FGEXPND].

At first glace it may not look so bad. Spending is well off of the COVID highs and tax receipts are soaring. But let us ponder. That spike in tax receipts reflects the sugar-high of stimulus activity, up 33% from Q1 2020.

In early 2021, 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." Now they are working in reverse. Jobs in interest-rate sensitive sectors will vanish; and the overcapacity and forward-consumption created from stimulus means the job losses will be enormous.

The tech sector is also extremely sensitive to money supply growth: many Silicon Valley companies have enormous valuations while carrying debt and producing negative cashflows. If the money supply is shrinking, from whence will the equity capital come from to save them from insolvency? Adding to the flurry of tech layoffs last year, 2023 opened with Amazon announcing 18,000 layoffs, Salesforce.com cutting its staff by 10%, Doordash by 6%, Vimeo by 11%, and others. It will get much worse.

Then there is the bleeding edge of credit itself: real estate private equity. Real estate has the longest duration of any asset class, and private equity lockups allow managers to focus on the most illiquid (and rate sensitive) portion of this market. In December, Blackstone gated its $69 billion real estate fund, and Starwood limited withdrawals from its $15 billion real estate fund. Last week, BlackRock suspended withdrawals from its $4.2 billion UK property fund. Again, as the money supply shrinks, and it becomes impossible to make interest payments (in aggregate), losses will get much larger. This is only the beginning.

As the economy collapses due to higher interest rates, tax receipts will fall markedly. Federal receipts fell 12% in the slowdown of 2000 and 17% in 2008. The fall from current levels will be greater: capital gains revenue will be especially impacted as asset values plunge, and a graduated income-tax regime turns small declines in income into large drops in tax receipts. Of note, federal receipts in December were down 6.5%, and the recession hasn't even started yet.[1] To model future deficits, let us assume, generously, that government receipts dip just to pre-COVID highs, which would be a decline of 25% from the peak.

On the expenditure side, spending is down from the COVID hysteria highs, but (as the chart above shows) spending is trending up again from a much higher bottom. The looming recession will trigger Keynesian "automatic stabilizers" spending as well as calls for more stimulus.

Interest on government debt is also set to balloon. Fiscal hawks have warned since the days of Reagan that the federal debt is unsustainable, and warnings so oft repeated become ignored. The growing debt has not been a problem for decades partially because of the dynamic described above: Treasuries are used by the banking system to create credit, credit creation lowers interest rates, lower rates make the burden of debt fall—at least as long as the debt is growing exponentially. In addition, the eurodollar system means that foreigners also need Treasuries as collateral, allowing the dollar to remain the world reserve currency and the U.S. to run huge trade deficits despite the appalling finances of Congress and the Federal Reserve.

Alas, exponential growth cannot continue forever in a finite world, and the dynamics that have supported the federal debt are reversing. First, interest rates are rising: dividing federal interest payments into the debt outstanding shows that the overall interest burden

1 https://www.wsj.com/articles/federal-deficit-widened-to-85-billion-in-december-11673551008

plummeted from 14% in 1982 to below 2% in Q1 of 2022. The weighted average duration of Treasury debt is only five years, meaning that the Fed's 4% rates will swiftly cause the interest burden to double—combine this with the fact that federal government debt has increased 34% just since 2020 means that tax revenue applied to interest payments will soar over the next couple of years. It has already started, in fact: federal interest payments since October are 37% higher than during the same period a year ago.

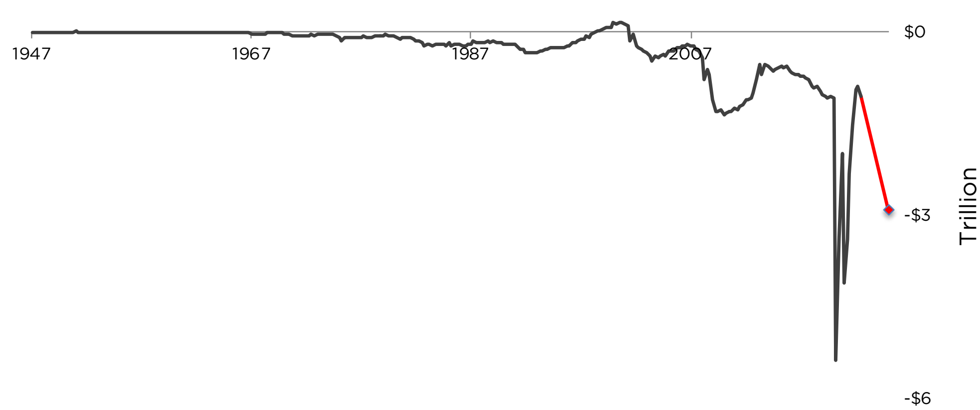
Worse, the government has until now been shielded from much of the interest it owed: the Federal Reserve is required to remit its profits back to the Treasury, and the so-called social security trust fund (and other government trust funds) use their surplus to purchase Treasuries. As discussed in Myrmikan's previous letters, the Federal Reserve is now making losses because it owns long-term Treasuries fixed at low interest rates, whereas it pays out rising spot interest rates on bank reserves and to depositors of the reverse repo facility. The Fed has had operating losses of $20 billion just since September, and it will not remit any money to the Treasury until (or unless) it makes back its growing losses. This means the Treasury suddenly faces the real interest burden of the Treasuries owned by the Fed.

As for the social security trust fund, operating income went negative in 2021, forcing it redeem $56.3 billion of Treasuries. The trustees report that this will continue indefinitely.[1] Whereas surplus social security income was used for current spending over the past few decades, current taxes will now have to cover growing social security deficits.

And remember there's a war on, and wars are expensive.

If we assume, heroically, that the looming recession causes spending to increase by only 10% from current levels (interest on the debt will be half of that increase) and that tax revenues dip to pre-COVID highs, the chart below shows what the federal government's finances would look like.

FEDERAL GOVERNMENT: CURRENT RECEIPTS MINUS CURRENT EXPENDITURES



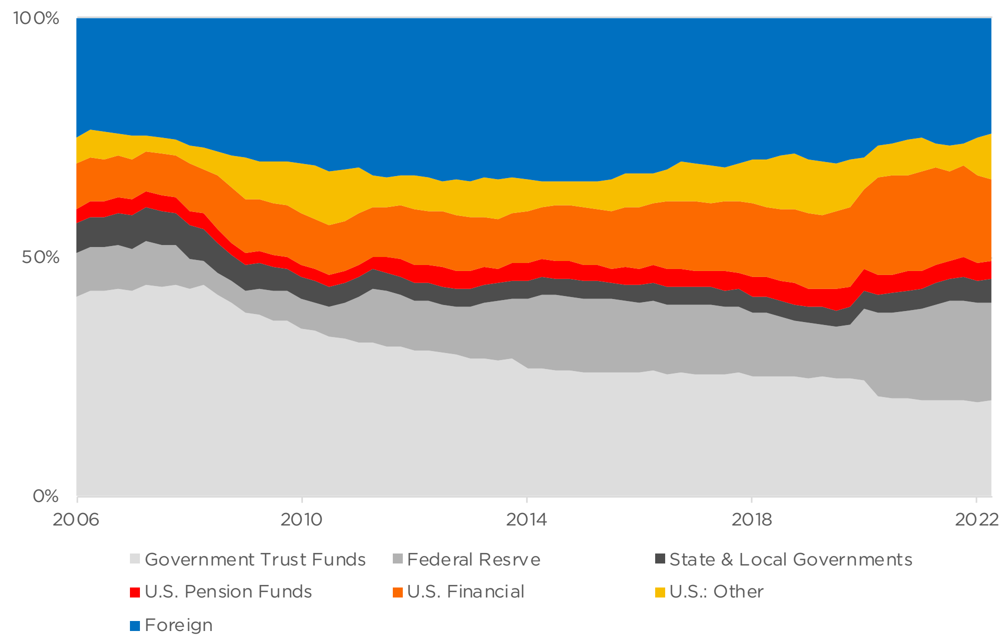
That the U.S. gets to a $3 trillion annual deficit using fairly modest assumptions, without any COVID to blame or 2008-style financial meltdown is terrifying. Who is going to buy all of those Treasuries? Per above, the Fed is reducing its holding as part of its battle against inflation. The government trust fund Ponzi schemes are reducing their positions because the population is aging (and people tend take early retirement in recessions).

1 https://www.ssa.gov/policy/trust-funds-summary.html

Perhaps more ominously, foreign holders are also reducing their positions: just in the past year, Japan has decreased its holding from $1.32 trillion to $1.08 trillion as it sells Treasuries to support the yen. China has reduced its holding from $1.06 trillion to $0.91 trillion for geopolitical reasons. Total foreign ownership has declined from $7.7 trillion to $7.2 trillion.[1]

The chart below shows the extent of the problem: two-thirds of the exploding debt is owned by the Fed, government trust funds, and foreigners, all of whom are reducing their exposures on an absolute (not just relative) basis.[2]

ESTIMATED OWNERSHIP OF U.S. TREASURY SECURITIES



To repeat: who is going to buy the enormous quantity of Treasuries that the government must issue to stay current with its expenditures? High rates will attract some domestic savings, as the yellow band above shows. But this will starve private enterprise of capital and is not nearly large enough to absorb sales from the aforementioned groups as well as additional supply.

There is one answer only: the Federal Reserve. It must print or die. The Fed needn't buy all of them: once the pivot happens, financial players will front-run the Fed, earning a free profit and making the Fed's job easier. Unlike previous pivots, however, the Fed will be in uncharted territory. The Fed historically has started printing when inflation is low and falling because a recession is sapping demand (and U.S. recessions are transmitted to the rest of the world through the eurodollar market, lowering global commodity prices). This time, however, the Fed will have to pivot no matter what inflation is doing or else watch the largest debtor in the world, the federal government, default.

The market senses this already. The current fed funds rate is 4.33%. The Treasury yield peaks at the 6-month term at 4.76%, meaning the market expects another two 25 basis point tightenings. The two-year yield is trading at 4.12%—this is the average rate the market expects over the next two years. Since the market expects rates over the next twelve months to be 4.7%, it means that the market expects the average nominal rate for

1 https://ticdata.treasury.gov/Publish/mfh.txt
2 https://www.fiscal.treasury.gov/reports-statements/treasury-bulletin/current.html

the subsequent year to be around 3.6%, or quite a bit of loosening from the peak. It is also worth noting that the two-year yield began 2023 at 4.40%, so the yield curve is becoming more inverted.

All of this assumes a mere recession. What happens if there is a financial meltdown? The large banks are pretty well insulated this time, but banks are not the only entities to create credit. Consider FTX: $16 billion of customer money went somewhere to someone. Yet until the moment the fraud was revealed, depositors lived their lives as if they also had that same $16 billion. The economy suffered $16 billion of lost demand on the day the fraud was revealed and not before.

Blackrock and Blackstone real estate funds are similar. The recipients of the investors' money got to use the money (now held by third party recipients of those recipients), and the investors received statements that their balances were increasing, representing cash they could withdraw at any time. Then, suddenly, they are told they can't get their money. Over the next several months it will transpire that the money is mostly gone: compounding debts cannot be settled when the money supply is shrinking.

The Fed will discover that printing the $3 trillion annually to fill the hole in the government's finances will not be enough, in the same way that printing the $10 to solve the $100 usury problem is not enough. The Fed will have to print more than necessary to fund the state—it has to sustain the malinvestments and the entire parasitic intellectual class. But with foreigners already withdrawing their bids on Treasuries, doing so will risk the dollar's reserve status.

Rhetoric from Powell and other Fed governors is: higher yields for longer to slay inflation. The bond market does not believe it. Neither does gold, which has spiked from $1,618/oz on September 28 to above $1,900/oz currently. This jump in price has evoked surprisingly little commentary, suggesting we are early in the move. The miners have bounced well off the bottom, but not to the extent that the move in gold would warrant, again suggesting we are early in the move. The gold market spent two years shaking out those late to the party in 2020. Now it is time for the next leg higher.