

Myrmikan Research

October 18, 2022

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The Final Bubble is Bursting

It has been a dark two years for gold investors. As with the crash in 2013, which occurred while the Fed was printing money, it seems bizarre that gold should be going down during high inflation. The gold market is forward looking, however, and has been telegraphing the collapse in commodity prices, real estate, and equity markets that has only recently commenced. Yet recent travails in the largest finance markets—the yen, the pound, large banks like Credit Suisse, and now illiquidity in the U.S. Treasury market—all suggest we are near the next run in the gold price.

The Fed's decision to spike interest rates has put foreign countries in a quandary: either increase domestic rates commensurately, accepting the economic and political consequences, or keep rates low and watch the currency collapse as traders sell it to buy dollars to capture the higher rates in the U.S.

Japan chose the latter path and saw the yen travel from 114 to the dollar in March to 149, a 23% devaluation in just seven months. Ominously, the yen paused at its current level only because on September 22, the Bank of Japan dumped \$21 billion USD onto the market to buy yen. This currency intervention was Japan's first since the Asian crisis in 1998, and it worked! The yen rose 2.3%. But, now, only three weeks later, the yen is already 2% lower than it was before the intervention. The Bank of Japan has \$110 billion in a cash account at the Fed. After that is gone, it will have to start selling its \$1.2 trillion in U.S. Treasury bonds, pushing U.S. rates higher and, therefore, the yen lower even while the intention will be to do the opposite.

Great Britain is ensnared in a similar dynamic but took a different strategy. The pound has lost 18% in the past year, with over a third of that decline occurring suddenly in late September. Unlike Japan, the Bank of England allowed interest rates on gilts (U.K. treasury bonds) to rise, adopting the Fed's reasoning that higher rates are needed to combat inflation. The crisis came when the new Chancellor of the Exchequer announced a budget encompassing tax cuts and energy subsidies: i.e., less revenue and more spending. Someone would have to fund the resulting increase in the deficit, and it wouldn't be the Bank of England, which is trying to end the money printing. Gilt prices collapsed, yields soared—simple supply and demand.

It turns out that U.K. pension funds, which are stuffed with gilts, have been leveraging them up through so-called LDI strategies (Liability Driven Investing). Pensions owe money to retirees over long periods of time. In olden times, they would have had capital sufficient to generate the income necessary to fulfill these obligations. In a low and falling interest rate environment, however, pension funds need to enhance their income, and the only way to do that is through leverage.

Enter LDI strategies, which come in multiple flavors. The repurchase market (repo), for example: a pension fund agrees to sell a gilt to a bank and buy it back at a

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fixed price at a fixed date. While the process sounds complex and is, repos are in essence margin loans: the pension fund receives cash in return for handing over its securities as collateral. It can then use that cash to purchase additional gilts, and then repo those, and so on. As a Bank of Montreal marketing document puts it: “A repo allows a pension scheme to create leveraged exposure to gilts, in turn helping them to manage their liability risks [that is, the amount it has to pay to retirees] in a capital efficient manner.”¹ As with a margin loan, if the value of the collateral declines, the borrower must hand over more or be liquidated.

LDI managers also use swaps: if a pension fund were to buy a bond, it would experience a loss if rates increase and vice versa (if a fund pays \$100 for a bond yielding 4%, and rates later increase to 5%, the bond will decline in value because no one would then pay the same \$100 to get only 4%). With a swap, the pension fund receives a fixed income stream from a bank and pays the bank a variable income stream based on variable market rates. If rates do not change, then the payments balance. If rates fall, then the fund pays out less than it gets, creating a profit, and vice versa. In other words, a swap mimics the gain and loss profile of a bond with respect to movement in rates, the difference being that the pension fund did not need to expend the capital to buy a bond. Again, as BMO explains: “By entering into a swap ... the scheme has assets free to invest in growth asset classes, such as equity, diversified growth fund’s (DGFs), etc.” In other words, it is just another version of a margin loan, using sovereign bonds as collateral to speculate on equity prices.

The banks also offer “index total return swaps” whereby the pension scheme can agree to pay a bank a floating interest rate (LIBOR) in return for synthetic exposure to an equity index (as with the bond swap, the fund receives any upside but owes any downside, and without having to put up any initial capital, enabling large degrees of leverage). Note that in British English the word *scheme* does not have the negative connotation that it has in American English, though perhaps that will soon change.

BMO warns investors: “However, if interest rates were to rise [or equity indices fall]... the swap would have a negative value. So some of the ... cash in the example above would need to be held back in case interest rates did indeed fall.” Not only that, banks market swaps by arguing that there are not enough long-term gilts to satisfy pension scheme demand, but banks are prepared to establish swaps on demand with maturities up to fifty years. This means that as rates rise, part of the money that current workers pay into these schemes will go straight to the bank counterparties ... for up to five decades. And consider the effect of rising rates on index total return swaps: the LIBOR-based payments increase at the same time that banks demand payment to reflect falling equity markets.

If rates rise suddenly, not only are current workers pilfered of their retirement contributions, but pension schemes need to sell assets to meet margin calls. If they cannot raise assets in time, the banks will simply dump the gilt collateral onto the market.

And this is exactly what began to happen when rates soared after the Chancellor released his proposed budget. As gilt prices fell, U.K. pension funds—which have invested £1.5 trillion into LDI schemes—began getting margin calls, forcing them to

¹ <https://www.bmogam.com/uploads/2021/06/bf77d0fc81b9310168bcb5280e7ebf1e/ldi-explained.pdf>

dump gilts, which sent rates higher still, and threatened a complete unwind. Bank of England Deputy Governor Jon Cunliffe explained to Parliament:

The Bank was informed by a number of LDI fund managers that, at the prevailing yields, multiple LDI funds were likely to fall into negative net asset value. As a result, it was likely that these funds would have to begin the process of winding up the following morning. In that eventuality, a large quantity of gilts, held as collateral by banks that had lent to these LDI funds, was likely to be sold on the market, driving a potentially self-reinforcing spiral and threatening severe disruption of core funding markets and consequent widespread financial instability.¹

It seems incredible, but a large chunk of U.K. pensions was just hours from being completely vaporized. But then, on September 29, the Bank of England announced that it would “postpone” the gilt sales that were scheduled to begin the following week and would instead purchase gilts “on whatever scale is necessary to effect this outcome” of “ordinary market conditions,” but only through October 14.² Instead of selling gilts to contain inflation, as planned, they would buy them to protect favored, levered investors.

Is this not precisely the quandary that Ludwig von Mises described as the endpoint of all credit bubbles? “There is no means of avoiding the final collapse of a boom brought about by credit expansion. The alternative is only whether the crisis should come sooner as the result of a voluntary abandonment of further credit expansion [i.e., the Bank of England’s selling gilts and allowing the financial institutions to collapse], or later as a final and total catastrophe of the currency system involved [i.e., printing money on whatever scale is necessary to maintain the credit structure].”

As with the Bank of Japan, the intervention had immediate effect: 10-year gilt yields tumbled from 4.54% to 3.74% (a huge move in sovereign bond land). But by October 10, yields were back to 4.55%, and the Bank of England was forced to increase the scale of its interventions. The market was incredulous that a time-based intervention would work, but the strategy was political: the bank was signaling the new prime minister that she had only until the 14th to fire the Chancellor, and she complied. The pound and the gilt market staged an impressive rally, with the 10-year yield falling back to 3.88%, by the end of Friday the yield was back up to 4.39%, but then yesterday saw it fall back to 3.97%. These are enormous intraday moves, especially when considering that the yield was below 2% in mid-August and below 1% merely a year ago.

Wherever the pound and rates trade in the moment, we know the interventions must continue to increase over time. Let us reread more of the eloquent Mises to remind ourselves why:

If the market rate of interest is reduced by credit expansion, many projects which were previously deemed unprofitable get the appearance of profitability [because of the reduced cost of capital]. The entrepreneur who embarks upon their execution must, however, very soon discover that his calculation was based on erroneous assumptions. He has reckoned with those prices of the factors of production which corresponded to market conditions as they were on the eve of the credit expansion. But now, as a result of credit expansion, these prices have risen. The project no longer appears so promising as before. The businessman’s funds are not

¹ <https://www.scribd.com/article/599005943/Bank-Of-England-Intervention-Prevented-Destructive-Spiral-After-Mini-Budget>

² <https://www.bankofengland.co.uk/news/2022/september/bank-of-england-announces-gilt-market-operation>

sufficient for the purchase of the required factors of production. He would be forced to discontinue the pursuit of his plans if the credit expansion were not to continue. However, as the banks do not stop expanding credit and providing business with “easy money,” the entrepreneurs see no cause to worry. They borrow more and more. Prices and wage rates boom. Everybody feels happy and is convinced that now finally mankind has overcome forever the gloomy state of scarcity and reached everlasting prosperity....

There are only two alternatives.

One, the expanding banks may stubbornly cling to their expansionist policies and never stop providing the money business needs in order to go on in spite of the inflationary rise in production costs. They are intent upon satisfying the ever increasing demand for credit. The more credit business demands, the more it gets. Prices and wage rates sky-rocket. The quantity of banknotes and deposits increases beyond all measure.... The whole currency system breaks down. Its unit's purchasing power dwindles to zero. People resort to barter or to the use of another type of foreign or domestic money. The crisis emerges.

The other alternative is that the banks or the monetary authorities become aware of the dangers involved in endless credit expansion before the common man does. They stop, of their own accord, any further addition to the quantity of banknotes and deposits. They no longer satisfy the business applications for additional credits. Then the panic breaks out. Interest rates jump to an excessive level, because many firms badly need money in order to avoid bankruptcy. Prices drop suddenly, as distressed firms try to obtain cash by throwing inventories on the market dirt cheap. Production activities shrink, workers are discharged.

Thus, credit expansion unavoidably results in the economic crisis. In either of the two alternatives, the artificial boom is doomed. In the long run, it must collapse.... The artificial prosperity cannot last because the lowering of the rate of interest, purely technical as it was and not corresponding to the real state of the market data [for real savings], has misled entrepreneurial calculations. It has created the illusion that certain projects offer the chances of profitability when, in fact, the available supply of factors of production was not sufficient for their execution.¹

Myrmikan has read and reread these lines over the years and quoted them more than once. The previous times we republished them, however, were prospective, showing our readers where the Keynesian project must end. Today they are our present. The Fed is temporarily following the second course. The total quantity of banknotes and credit is shrinking. The BBB corporate bond yield has jumped from 2.2% to 6.4%. Total business inventory has surged from \$2 trillion in 2019 to \$2.4 trillion currently. Prices of goods, durable goods, cars, and houses are falling, in some markets dramatically. Production levels are flat despite 8% price inflation. Initial job claims are rising. The markets are unraveling, especially esoteric markets like private equity and LDIs.

Defenders of LDIs claim that the current crisis is one of liquidity, not solvency. The banks argue that as current workers pay into the system, this additional capital will earn interest at the new, higher rates, and thus make the funds even more healthy.

¹ <https://mises.org/library/economic-consequences-cheap-money>

Never mind multi-decade transfer payments of retirement contributions to the banks to settle underwater swaps or capital losses so large that the central bank is forced to debase the currency to cover them.

The argument may work in Excel, but it does not encompass Mises's point that high rates end the bubble at large, liquidating all business dependent on low rates, nor that population decline, overregulation, and the high taxes necessary to pay government debt make the rate of additional contributions highly questionable, especially in real terms. But even currency devaluation no longer offers a way out: The advanced economies have offshored both their manufacturing (with the exception of Germany) and raw material production (with the exception of the U.S., though Biden is trying). A falling currency therefore causes the cost of living to explode forthwith, without supporting local industry in any meaningful way.

One might ask: if much of the U.K. pension money was about to vanish, where was it going? Partly to the bankers, of course, but mostly, as with any bubble, the value was simply illusory. In 2001, Argentina forced private pension funds to purchase \$2.3 billion in government bonds so that the government could meet external debt Payments. The following day, the funds listed the bonds as an asset, but the value was already gone (Argentina would later confiscate the whole pension system officially).¹ Western countries have done effectively the same thing, only with much more subtlety, without even the players knowing. The pension capital is gone, spent, consumed by the state, all that remains is the realization that it is gone.

Japan and the U.K. have flipped from the deflationary orientation to the inflationary, printing money to keep bond yields low and maintain asset prices. They are not insane; they do not want to print; they will try again to stop printing, but the consequences on asset prices and the economy will demand more, and they will surrender.

Understanding this dynamic, that hyperinflation occurs on the cusp of hyperdeflation, provides a glimpse into the disastrous performance of the gold miners over the past several months. The term *inflation* has come to refer to the increase in the prices of consumer goods and *deflation* the decrease in the prices of assets, both bad. Their precise meanings, however, as they were used pre-Keynes, were in reference to the change in the quantity of money and credit; asset and retail prices changes were merely an effect of inflation or deflation.

In precise language, then, regardless of recent price movements of eggs or a gallon of gas, the U.S. has been in a period of deflation for the past several months, and gold responds to monetary conditions, not retail prices (which is why gold was able to surge in 2009 and 2020 despite little movement in consumer prices). Since gold is falling, it is a good bet that other prices will follow. Gold priced in yen and European currencies, however, is near all-time highs and looks ready to break out. So the question remains: when will the Fed pivot to join the other central banks.

Pivot is perhaps the wrong word. It implies that as economic data becomes more grim, the Fed will gradually retreat and begin to ease in Keynesian fashion. Fed governors have been consistent in saying that they interpret their mandate as requiring a return to 2% inflation, damn the consequences—Chicago Fed President Charles Evans, echoing the 1929 Fed, said last week: “If unemployment goes up, that’s unfortunate. If it goes up a lot, that’s really very difficult. But price stability makes the future better.” We are actually not far from the Fed’s 2% CPI target, with the 5-year

¹ <https://www.latimes.com/archives/la-xpm-2001-dec-07-fi-12290-story.html> and

breakeven inflation rate printing at 2.5%.¹ Nevertheless, hitting 2.0% on a current basis will take time, as lagged CPI measurements catch up to the year-over-year declines in commodity prices and the collapse in real estate values (shelter comprises 33% of CPI, with home furnishing another 5%). It is the U.K. that likely shows the way. There will be some accident, whether with U.S. pension funds, or in the repo market as on September 15, 2019, or when Japan starts to dump its hoard and others try to front run it. The U.S. Treasury complex will collapse. We know this for the same reason that Mises knew that credit bubbles cannot last forever.

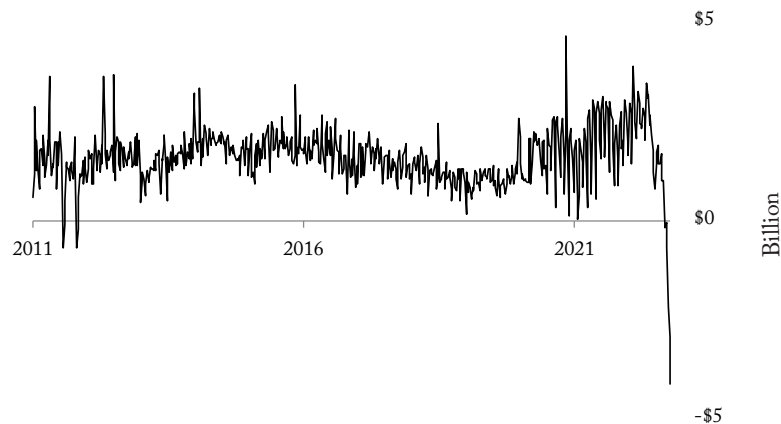
Bubbles need credit and the promise of assured gains. The sudden notoriety of LDI schemes reveals to the public why the sovereign debt of wildly insolvent and profligate countries such as the U.S. was trading at absurd prices with near zero yield: the banks were financing the levered positions of institutional investors. But the bubble dynamic is now in reverse: as bond prices go lower and yields higher, margin calls will beget more selling of both bonds and equities.

The Fed will, of course, resist the demise of the dollar system. One way to forestall Japan from dumping its Treasuries is for the Fed to open up huge swap lines—as it did in 2008—providing dollars to the Bank of Japan in exchange for yen. It has already started, in fact, with the Swiss National Bank drawing \$3.1 billion on its Fed swap line two weeks ago and \$6.3 billion last week. This is not QE—don't call it QE—but it is money printing all the same.

The U.S. Treasury bubble is the final bubble. It is final because U.S. Treasuries are the backbone asset of all important central banks. The Fed had already suffered \$720 billion in losses on its \$8.7 trillion portfolio as of June.² As rates increase, the asset losses will also increase. The Fed now has operating losses as well: Its assets are mostly long-term bonds with a low, fixed rate of interest. Its liabilities include \$2.2 trillion in reverse repo deposits and \$3.3 trillion of bank reserves, \$5.5 trillion on which it pays floating rate interest.

In other words, the Fed is just like the pension schemes, having swapped a low, fixed rate of income for a floating and rising rate of expense. This is a problem because by statute the Fed must remit its income (minus its expenses) to Congress. Note that the negative area on the chart below reflects only four weeks of data.

FEDERAL RESERVE EARNINGS REMITTANCES DUE TO THE U.S. TREASURY



1 <https://fred.stlouisfed.org/series/T5YIE>

2 <https://www.federalreserve.gov/aboutthefed/2022-june-federal-reserve-banks-combined-quarterly-financial-report-unaudited.htm>

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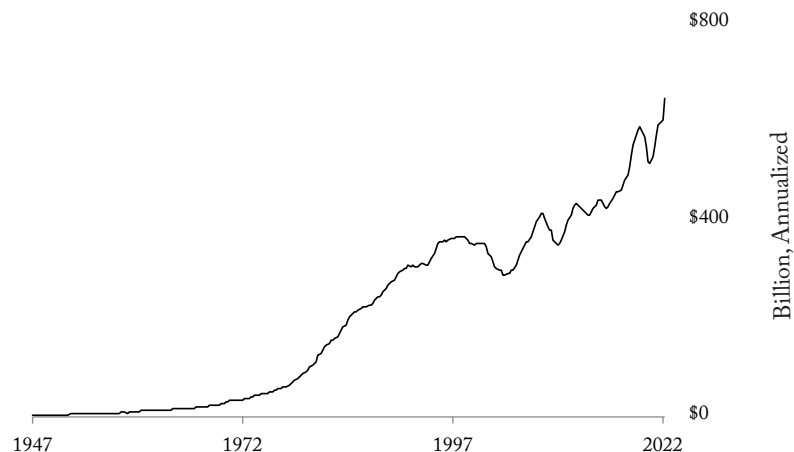
Not to worry, argue the Keynesians and monetarists. The Fed is a central bank! It does not matter if its balance sheet is in tatters and it has large and rising operating losses. Myrmikan disagrees. Political power may for a time maintain false values, but if there is one iron law of history it is that markets triumph over politics; balance sheets will balance; the Fed's unit of liability, the dollar, will one day reflect accurately the value of the Fed's assets, with profound implications for the value of the dollar.

The Biden administration has been able to engage in wild spending partially because the U.S. Treasury has been shielded from having to suffer interest payments on the Fed's \$5.6 trillion in Treasury bonds (and also received the benefit of interest on the Fed's \$2.7 trillion in mortgage-backed securities). Since the Fed will no longer be making payments to the Treasury (until it (theoretically) recoups all of its losses, likely years in the future if ever), Treasury bond issuance will have to increase noticeably to cover those interest payments.

The chart below shows that despite a parabolic increase in debt, falling interest rates had kept interest payments relatively benign. Even though the federal government yet pays only 2.1% interest on its total stock of debt, however, the level of payments is breaking out to upside. As the Treasury rolls its growing amount of existing debt at the significantly higher current rates, the interest payment burden will explode, requiring even more borrowing.

And who will buy these bonds even at current yields? Foreign governments have to sell dollars to support their currencies and buy natural resources. The pension fund bubble is unwinding. The Fed says it will continue Quantitative Tightening, adding more bonds to the supply. In other words, those buying for political or regulatory reasons are out of the game. There is no prospect of real returns over time to attract private investment, and doing so would starve capital from private investments. Worse, falling asset markets and a slowing economy will decrease tax revenues, which will then necessitate even more Treasury issuances.

FEDERAL GOVERNMENT CURRENT EXPENDITURES: INTEREST PAYMENTS



Meanwhile, consider the optics the Fed faces as it receives growing interest payments from the Treasury and then hands over all of it, and more, in excess of \$500 million every day, to the banks on their reserves and to funds and foreign countries housing cash at the Fed's reverse repo facility. At least with QE, the Fed's newly printed

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money entering the market was somewhat balanced by the assets it purchased being removed from the market and housed at the Fed. But now the Fed's operating losses are raw money printing: free and clear cash injected into the most levered of operators.

Just as the volatility of the precious metals space suggests we are completing the bear market, so does volatility in the bond markets suggest the multi-decade bubble is ending. On October 11, Treasury Secretary Yellen said: "We really haven't seen signs of financial instability in the United States and our financial markets.... I don't think we've seen anything that rises to the level of a serious concern." Yet the very next day she said: "We are worried about a loss of adequate liquidity in the [Treasury] market." She should be worried. Bloomberg reported on Friday:

A Bloomberg index shows liquidity in the Treasury market is worse now than during the early days of the pandemic and the lockdowns, when no one knew what to expect. Similarly, implied volatility as measured by the ICE BofA MOVE Index is near its highest since 2009. And in an unusual development that shows just how dysfunctional the Treasury market has become, the newest, most liquid securities, known as on-the-run notes, trade at a discount to older, tougher-to-trade off-the-run securities, according to data compiled by Bloomberg. Daily swings in interest-rate swaps have become extreme, proving further evidence of disappearing liquidity.

What should be most concerning to the Fed and the Treasury Department is deteriorating demand at US debt auctions. A key measure called the bid-to-cover ratio at the government's offering Wednesday of \$32 billion in benchmark 10-year notes was more than one standard deviation below the average for the last year¹

Once the Treasury market breaks, the market will abandon the dollar for other stores of value, as Mises described: "People resort to barter or to the use of another type of foreign or domestic money." As with any bubble, the trip down accelerates quickly as cross defaults spread and happens much faster than the ride up.

Like the water draining ahead of the tsunami, gold has been crushed by the U.S. dollar margin call along with every other asset class. It has been a tough for the past two years, but the final bubble is under stress, and once something big breaks, the tide will turn dramatically.

¹ <https://www.bloomberg.com/opinion/articles/2022-10-14/fed-s-next-crisis-is-brewing-in-us-treasuries?sref=lsNUbNMA>



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