

## The Implosion of the Fiscal Bubble

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### Introduction

U.S. fiscal spending dragged the economy out of technical recession, but the cost of funding the unproductive spending is now weighing on the global economy.

U.S. base rates are at a record level relative to both potential growth and the natural rate. Whilst that gap is attracting capital out of the rest of the world, the cost is their own growth is slowing.

With interest rates so much above potential, as the stock of debt resets to those higher rates, debt to GDP will soar. We are at the point where the nominal GDP return on each additional dollar of debt is so low that the debt to GDP ratio will start to increase once again, requiring lower interest rates to carry it. By the end of the year, as the interest bill hits USD1.6trn, the debt will explode relative to the economy's ability to carry it.

The relative move between gold and the inverted real yield contains information. Gold is not just telling us this bubble is about to burst, but its price move will help make it burst. Through buying gold, the PBOC and other central banks are, at the margin, returning the global economy towards a sound money system, lifting the real cost of money and pricing out unproductive output.

Through the fiscal and monetary policies, the Western governments have created a chronic "intertemporal" misalignment between output today and what the economy can sustainably afford tomorrow. The problem is, without lower interest rates to bridge that gap, today is about to catch up with tomorrow.

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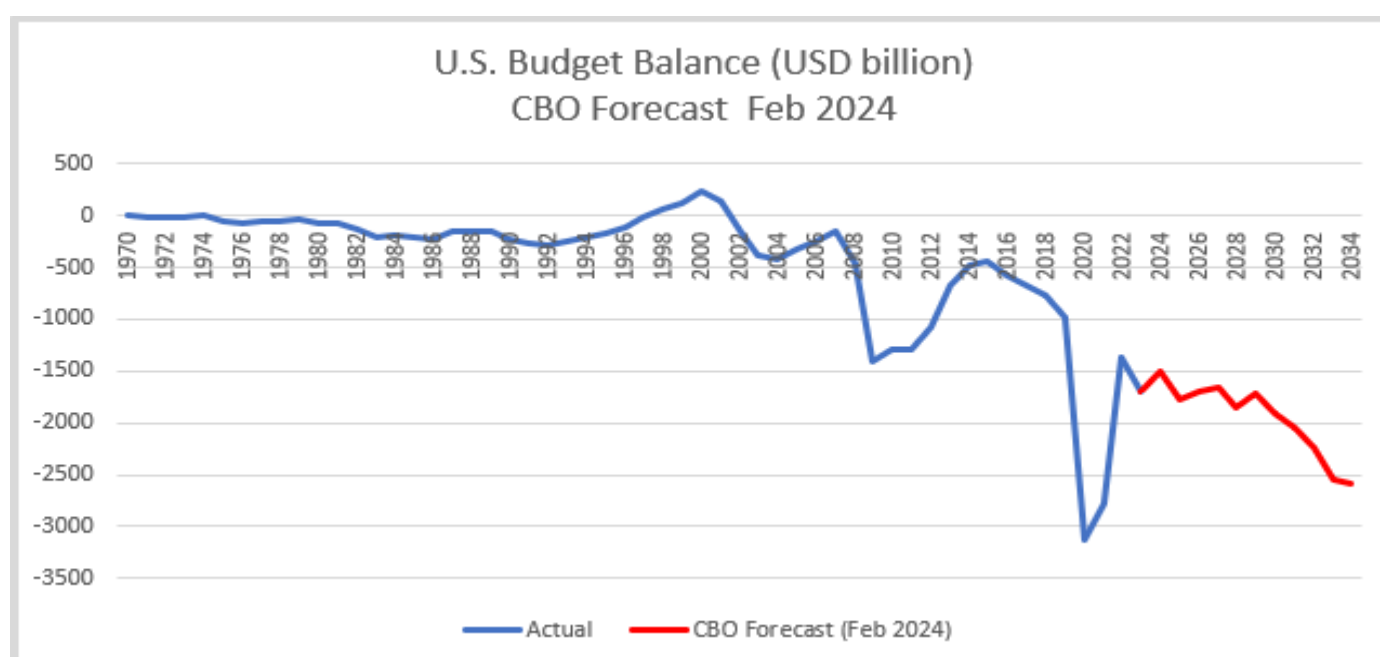
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**Recommendations**

U.S. President Joe Biden recently signed into law a USD1.2trn government spending package, and immediately afterwards called for a national security supplemental to also be passed to fund the war in Ukraine. He has since announced plans to cancel up to USD20,000 of accrued and capitalised student debt, which is expected to cost between USD250bn and USD750bn. The Ways and Means Committee said that hidden in President Biden's 2025 budget was the revelation that he will increase taxes by USD7trn over the next 10 years. Zero Hedge said that the annualised U.S. Federal government interest bill is now USD1.1trn and increasing by USD100bn every 4 months.

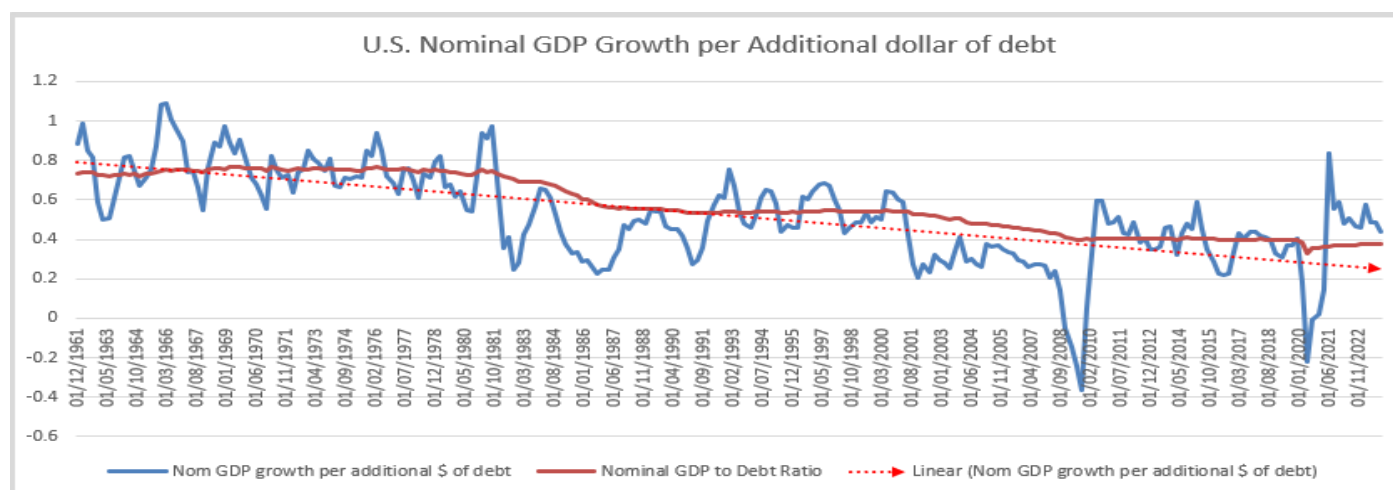


The debt figures, however, ignore off balance sheet commitments. Truth in Accounting issued a Financial State of the Union report for 2024 showing that the government's financial condition worsened by USD7.9 trillion in 2023. Most of the debt can be attributed to USD66.2trn in Medicare promises and USD50.3trn in Social Security which have not been funded. The Treasury Department only included USD247bn of the Social Security and Medicare liabilities on its balance sheet because recipients do not have the right to any benefits beyond those due to be paid next month, and laws can be passed to stop future benefits at any time. As the unproductive liabilities come due, however, unless defaulted on with inflation, they will further lift debt to GDP ratios, requiring lower interest rates to make good the liability.

Overall, U.S. non-financial sector debt jumped by USD785.5bn in Q4 last year and was up a stunning USD3.53trn in the full year to a record USD73.8trn. By comparison, Q4 nominal GDP was up USD334.5bn, with the full year up USD1.536trn. U.S. debt to GDP is 264.12%,

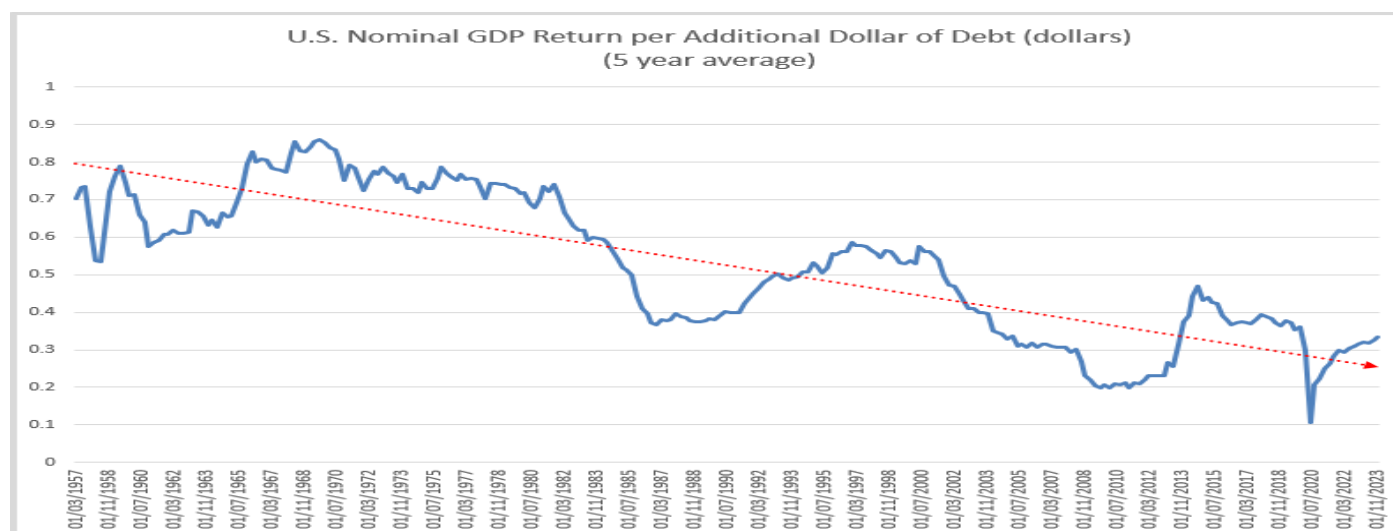
reflecting the unproductive allocation of capital. The ratio would have been worse had it not been for the recent default, through base monetary expansion and inflation, increasing the denominator. **Whilst the inflation initially eroded some debt, with the increased fiscal spending preventing the real economy clearing of the unproductive spending, the debt will soon start to explode higher again relative to GDP. This will happen as the government issues more debt, and the outstanding stock of debt, including corporate and household, matures and adjusts to the higher interest rates. The default from the inflation and the clearing of unproductive spending that it should have caused, but was largely prevented from happening by the deficit spending, will now happen through an economic decline as the unproductive spending squeezes out the private sector, and lower interest rates to compensate.**

In Q4, the nominal GDP return on each additional dollar of debt fell back to 42.6 cents, just above the 37.9% level - (reciprocal of 264.1% debt to GDP ratio) - that would have seen debt start to grow again relative to the economy. Over the next few quarters, as the fiscal and speculative spending is found wanting, not having created the return to pay for itself, the economy will slow rapidly. **The numerator in the debt to GDP calculation will go up, as debt is refinanced at the higher interest rates, whilst the denominator will fall as the economy slows or declines.** The nominal GDP return on each additional dollar of debt will decline, with the trend heading lower.

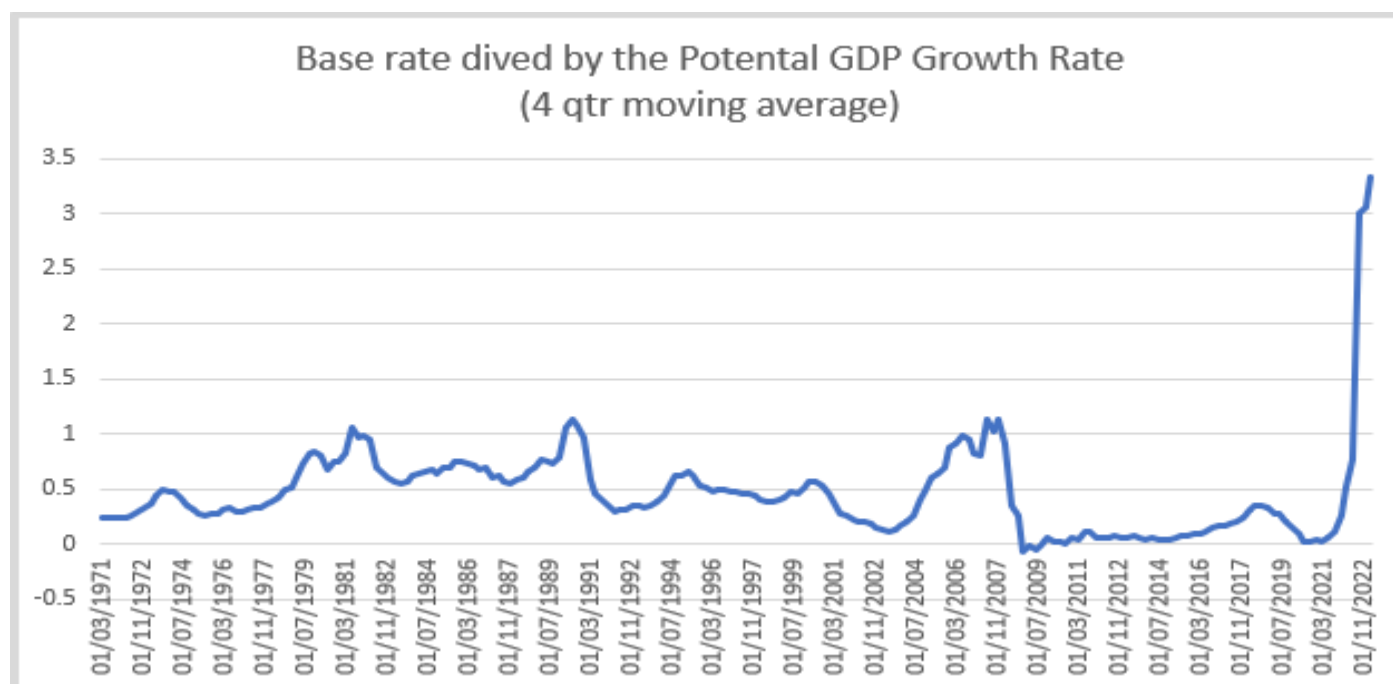
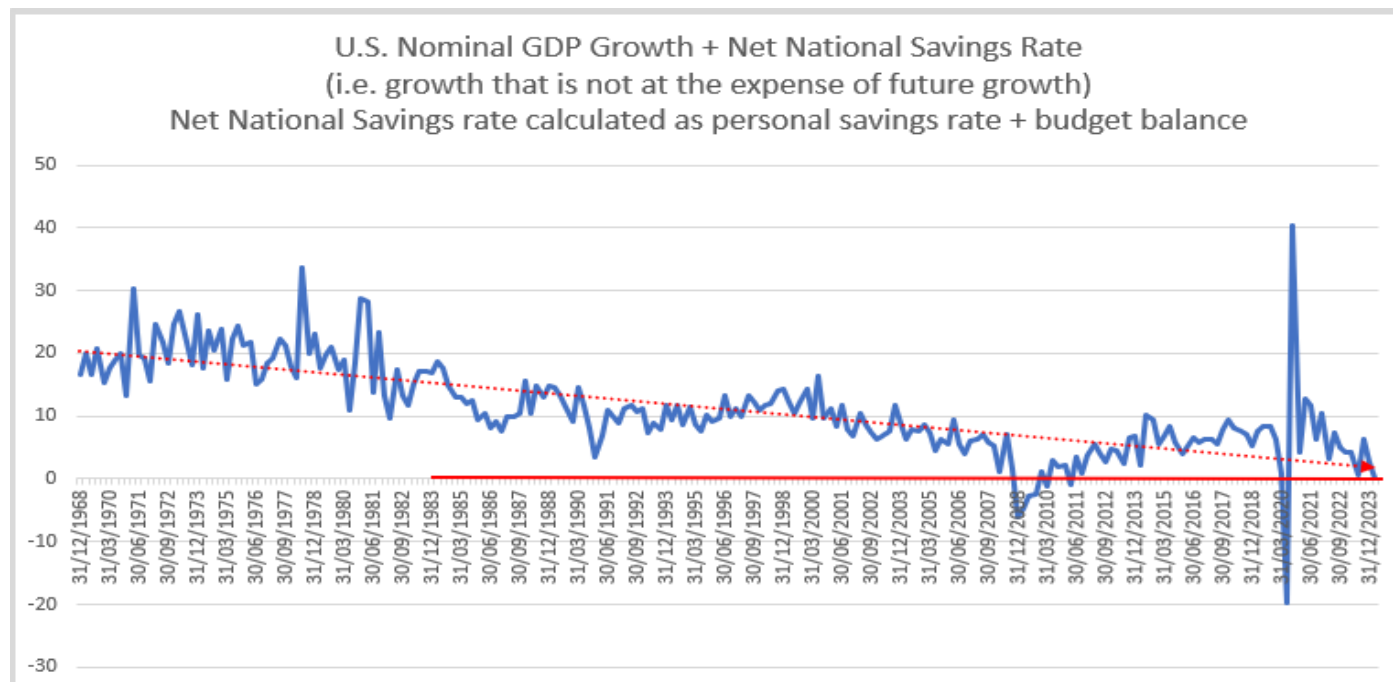


The only way debt can keep increasing relative to the real GDP supporting it is if that relationship is defaulted on by devaluing the money in which the GDP and the debt are denominated, either by increased base monetary expansion or by reducing the cost of base money, enabling broader monetary expansion. **Whilst this default on money will make good the debt, as it won't make good the unproductive allocation of capital behind it, it will be**

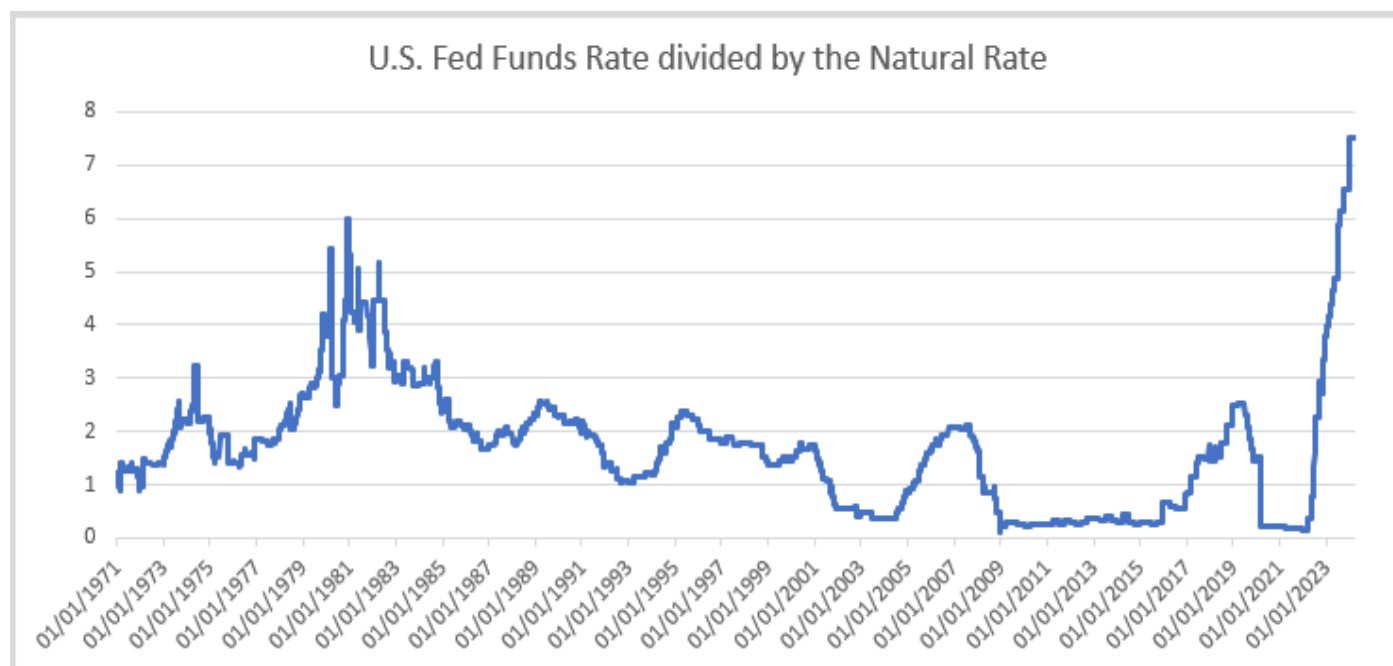
at the expense of a loss of capital and slower GDP growth, as we have seen for decades. As we move further through the cycle, and the debt that was borrowed at record low rates comes to maturity, and more debt is needed to compensate for the unproductive spending, the Fed is likely to find itself rapidly offside, having to cut interest rates aggressively to avoid a hard landing. The ratio between the nominal GDP and the surging debt will collapse until the Fed slashes interest rates to bring them back into balance.



The potential growth rate - the nominal GDP growth plus the net national savings balance - has, outside of the GFC and the COVID pandemic, fallen to a record low. As the debt increases further relative to GDP, or it is defaulted on through inflation or otherwise, the potential growth rate will continue to trend lower, soon turning negative. **Whilst increased fiscal spending or lower base rates may keep the absolute growth positive, as it is at the expense of a loss of productive capital, it is output borrowed from the future. The cost of carrying this imbalance - spending that does not create the utility to pay for itself - will be much lower interest rates and a lower return on capital more generally. The bigger the imbalance between absolute growth and the potential growth, i.e. the bigger the net national savings deficit funding it, and the longer it remains, the more capital will be lost, further reducing the potential growth rate.** Without lower interest rates to bridge the gap between the actual and potential growth, the debt will default, and the economy will slow heavily. As the second chart below shows, base rates are at a record level relative to the potential GDP growth, at least since 1971, and will have to fall by a similar record to avoid a hard landing. While the treasury can buy more growth in the short term, as it is unproductive spending, through the cycle it is at the expense of lower overall output, and therefore lower interest rates.



Unsurprisingly, the ratio of the Fed Funds Target Rate to the New York Fed's Natural interest rate is also by far the highest on record at 7.51 times. As we go through the cycle, we will find that, as the fiscal spending is unproductive, financed only by debt rising relative to GDP, without lower interest rates to carry it, the economy will collapse down to its potential growth rate. Unless base rates come down soon, as more of the outstanding stock of debt resets to the higher interest rates, the Fed will crash the economy.

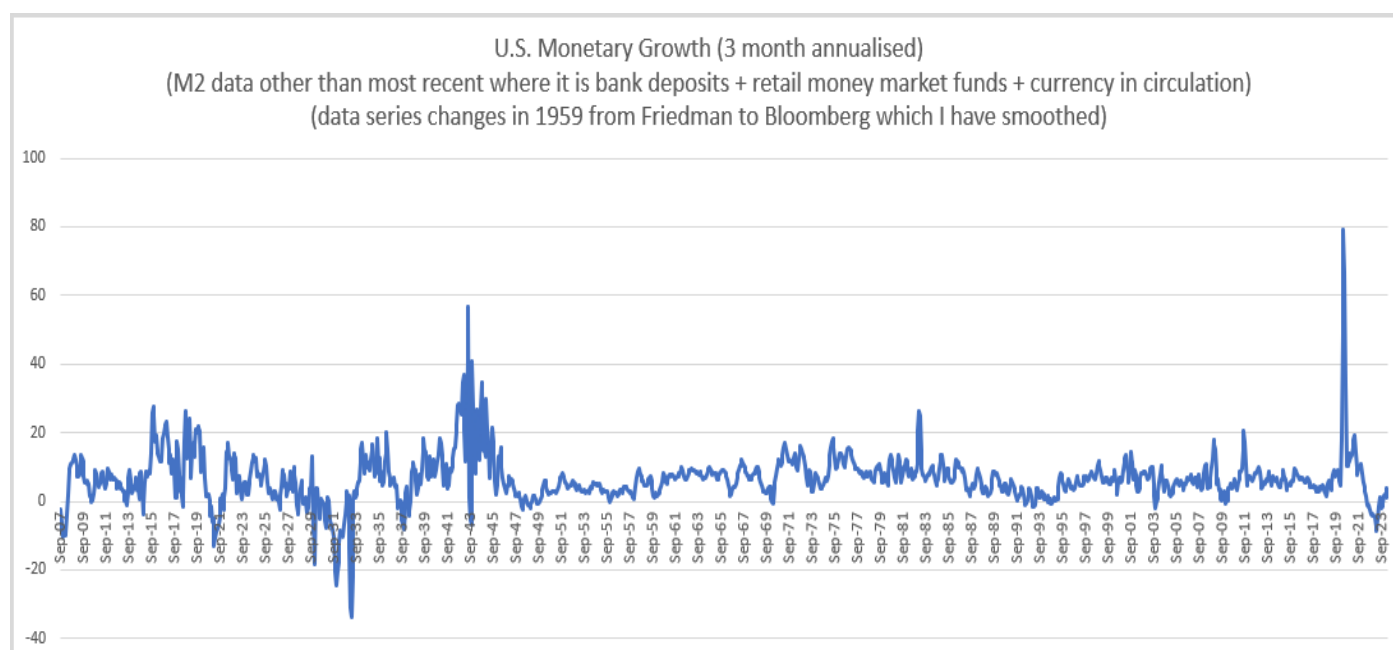


Whilst the record high rates are seen as the cost of bringing inflation under control, it can also be seen as the cost of funding the net national savings deficit. As the spending is unproductive, and therefore will ultimately be unable to service the interest rate needed for its finance, without lower interest rates to monetise the debt, it will default, and the spending collapse. Whilst the treasury could theoretically kick the can further down the road by borrowing more, paying a higher interest rate, we are already at the point where the stock of debt is so high, and the nominal GDP return on the additional debt is so low, that without lower interest rates monetising the debt, the economy will not be able to support it. We are very close to a point where rates must come down to avoid default and a hard landing.

Inflation and monetary growth, financing this unproductive spending and the speculative AI boom, have also been borrowed from the future. Once the reverse repo is exhausted, and it is realised that without a drawdown on more savings, neither the economic output can be sustained, nor the debt or money supply behind it be serviced, the economy will slow heavily, and money supply will fall. Even with the drawdown in the reverse repo funding the fiscal deficit, M2 monetary growth has remained relatively subdued because there is not the productive demand for money at 5.5% base rates. As James highlighted in his recent report, bank lending growth has never been this low outside of a recession since WWII because there is no productive demand at these interest rates. **Before the Biden administration pushed its "Inflation Reduction Act", the economy had fallen into technical recession and money supply was falling at the fastest pace since the Great Depression, starting to clear the**

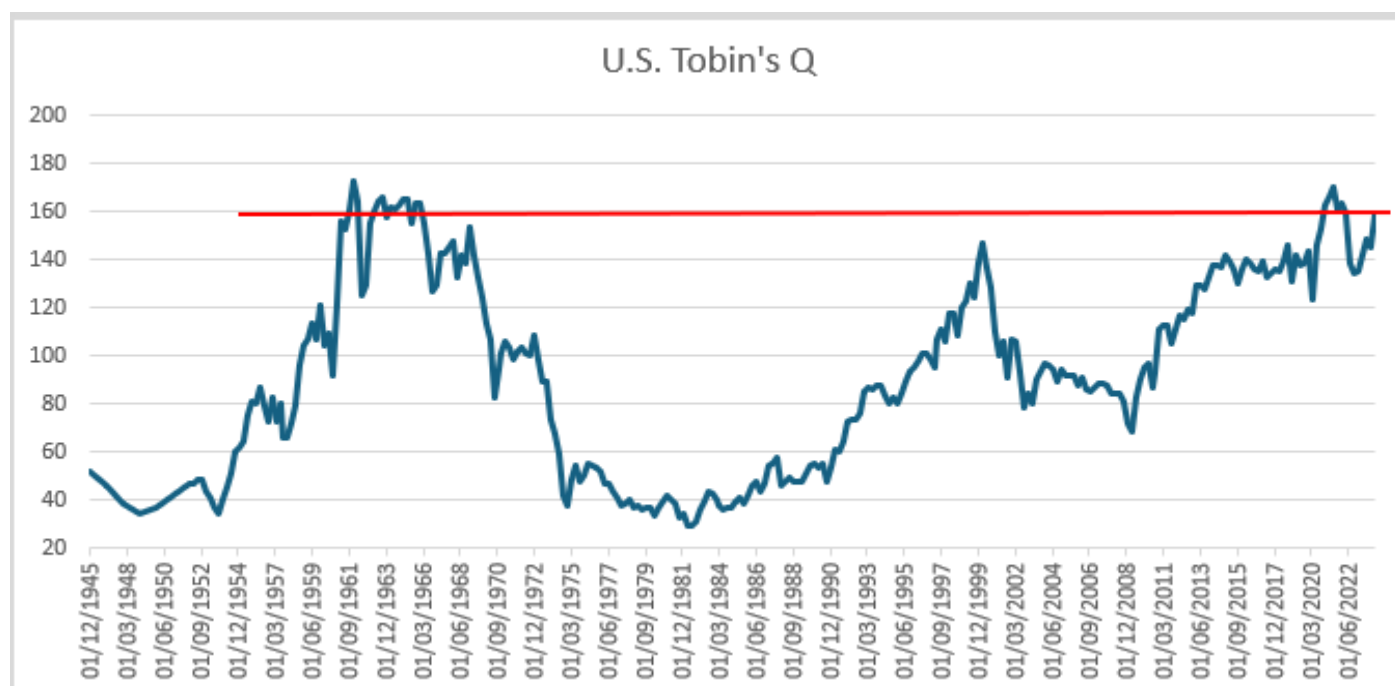
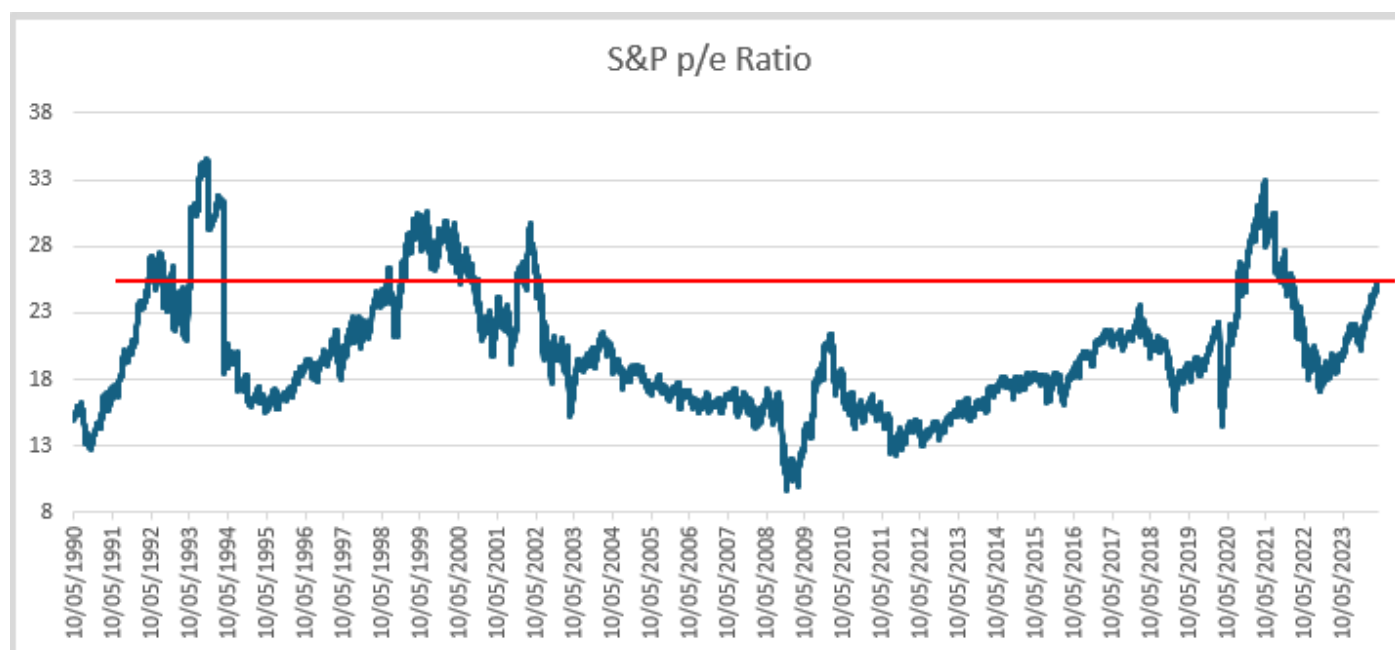


system of the unproductive spending. Whilst it has since been lifted by the government's spending, as this will not create the utility to pay for itself, it will be at the expense of even lower future monetary growth and economic output. Without the system first clearing of the unproductive spending, monetary growth will fall back to where it is supported by productive demand, which at the present interest rates would see money supply fall. Base rates must come down, lowering the cost of money to what the economy can productively afford, to avoid monetary contraction and a hard landing. Even well capitalised as they are, without lower rates, the scale of monetary decline we would face would likely result in another banking crisis, which based on commercial real estate exposure – CRE loans account for 17% all loans at mid-sized banks, 31% at small banks, and 28% for tiny banks, but just 6% for large banks - would likely start in the smaller and medium sized banks before spreading to the larger banks. Credit card delinquency rates at regional banks are already at near record levels.



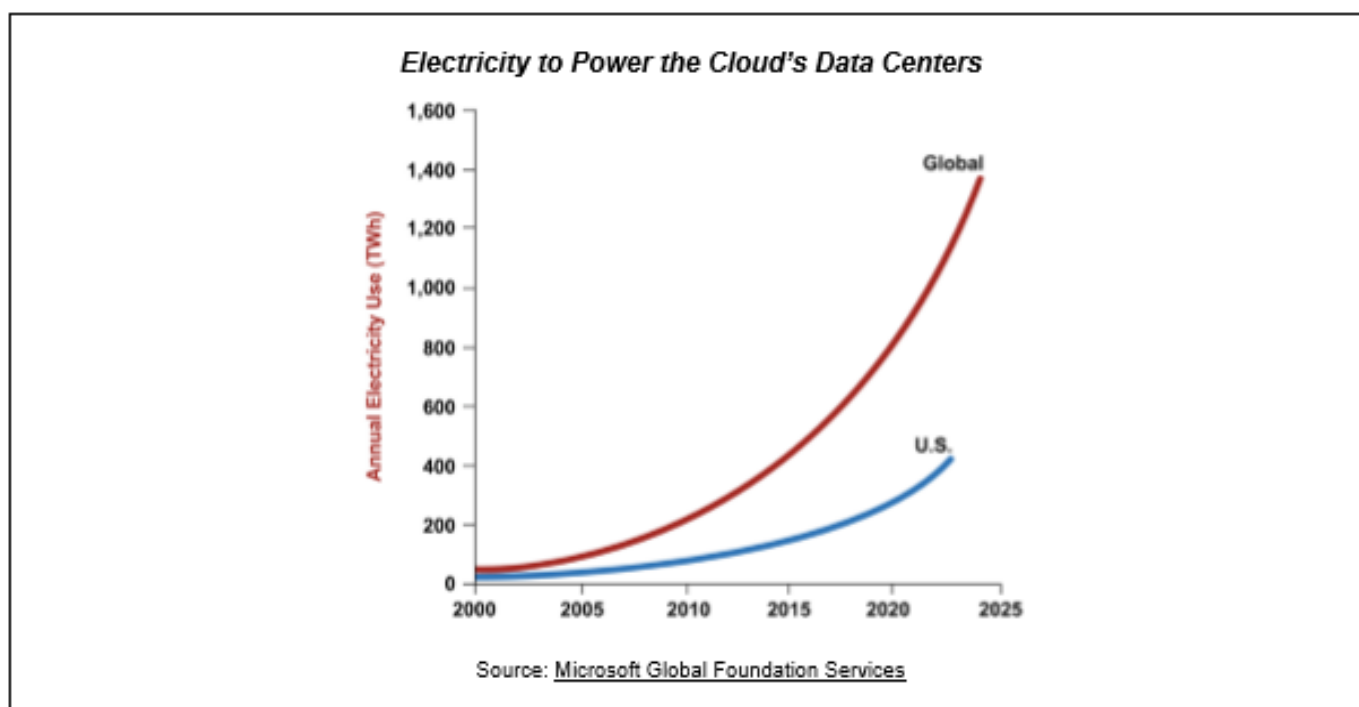
Even forgetting that earnings are being borrowed from the future, the S&P earnings multiple is elevated, at around 25 times. **Against the cost of replacing capital, however, the Tobin's Q valuation measure is at near record levels, above even those seen during the excesses of the dot.com bubble.** This premium, reducing the cost of capital below its productive value, is both a reflection and cause of the capital destruction. **Like during the dot.com bubble, people are dismissive of this measure, saying that it doesn't account for intangible capital, and is therefore failing to recognise the value of AI. This is incorrect.** Intangible capital simply reflects the knowledge gained from energy doing its work on tangible capital, and therefore

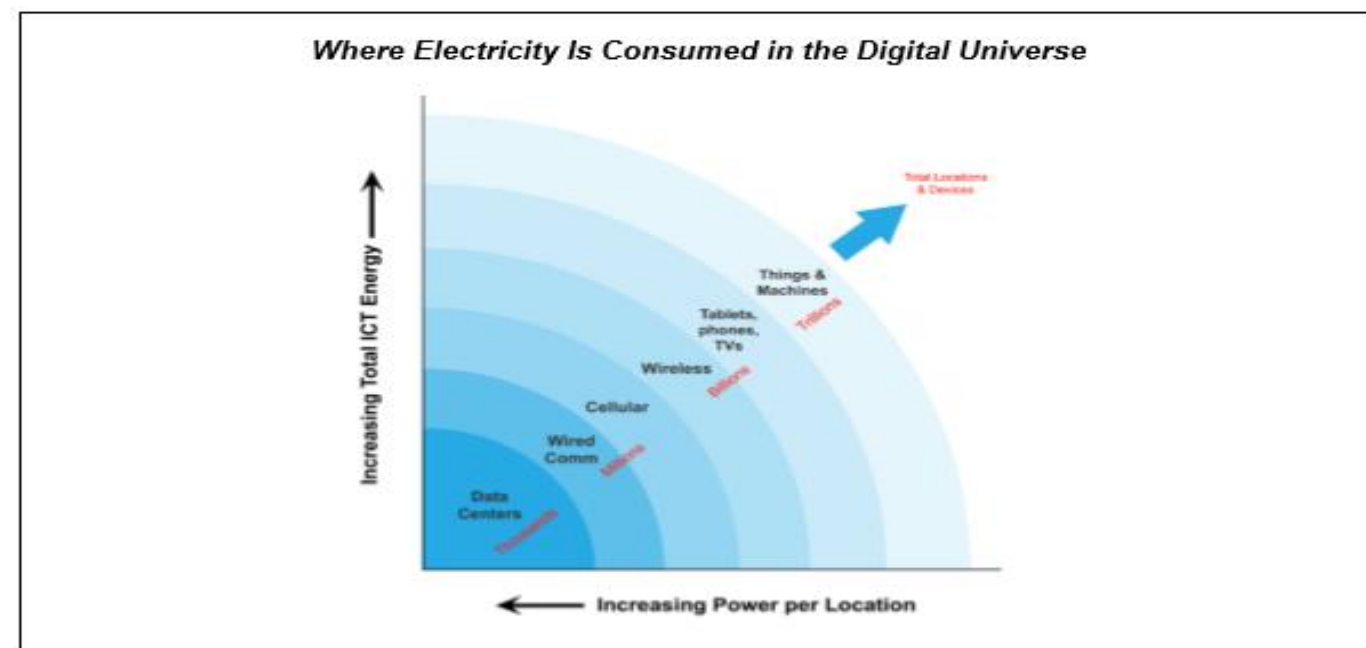
is just an identity to either the energy being converted, or the tangible capital being created by that conversion. We can also see this in the recent reports that Microsoft and OpenAI are working on plans for a data centre project that could cost as much as USD100 billion and include an artificial intelligence computer called “Stargate” set to launch in 2028, highlighting that the intangible capital is matched by the tangible capital behind it, and of course, the energy cost to produce and operate it.





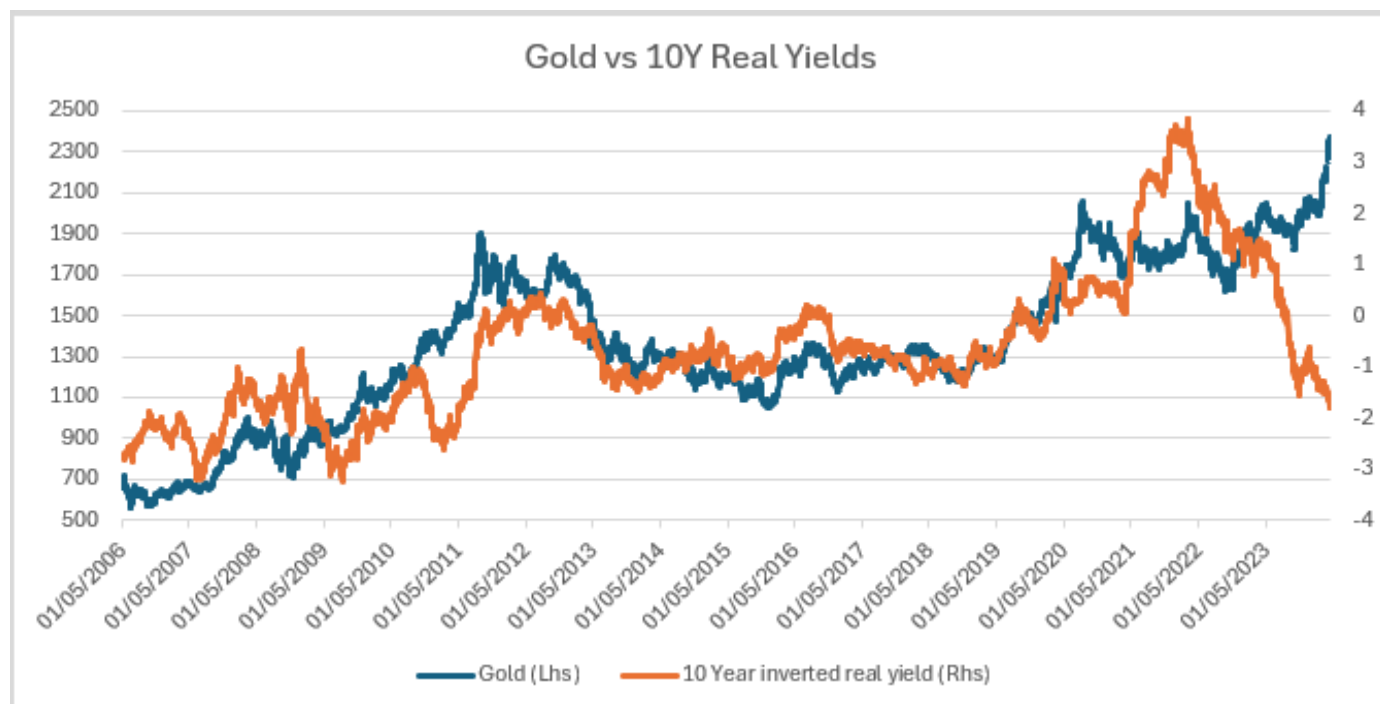
The Microsoft project is expected to be 100 times more costly than some of the biggest data centres in existence today. Back in 2019, it was estimated that by 2025 data centres would consume about 10% of world electricity demand, up from 3% back then. The amount of electricity used by data centres was doubling every 4 years. With the Denard Scaling breaking, the rate of energy consumption would increase faster. Data centres are just a fraction of the total electricity demand. Whilst their data and power density are far higher than the devices they are connected to, they are far less numerous. As far back as 2013, the information and technology ecosystem were consuming around 10% of world electricity generation. For AI to drive GDP growth, it must also drive increased energy production. **With the renewable energy policies raising the cost of energy, and therefore reducing the scale of capital the economy can afford, the Tobin's Q valuation would appear even more extreme. Raising the cost of energy, the renewable policies will further reduce the productive demand for energy, capital, and of course, for money. Without lower base rates to bridge the gap between the stock of capital and the share price it can productively support, and where it is trading, the stock market will crash until the two are back into balance.**



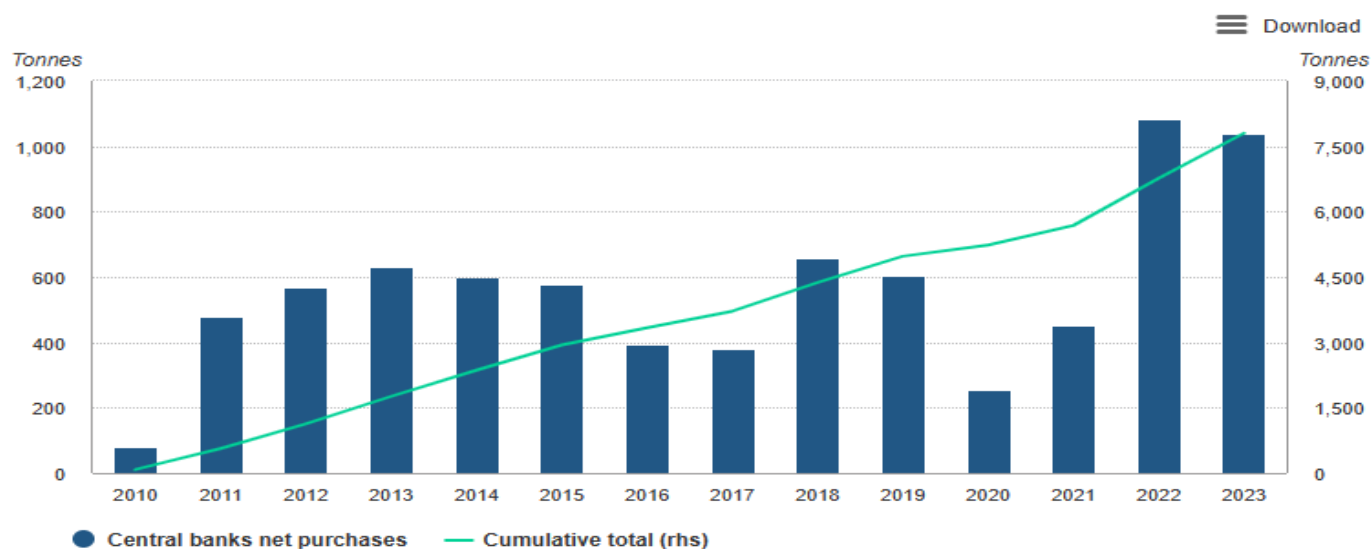


Can reference in TLT GLD Report

Gold is trading at an extreme divergence, at least since 2007, against the inverted 10-year real yield, raising questions about the sustainability of its move. "This fact suggests two possible outcomes: either the price of gold quickly reverses this year's astonishing rise, or risk assets collapse due to an economic or financial crisis", Zero Hedge recently said. **The move is partly a counterparty risk, being driven by central banks buying gold leaving the private sector to fund more of the deficit.** If the central banks continue accumulating gold, driving its price higher, the private sector will demand a higher rate of return to compensate, which the economy cannot afford, unless the Fed cuts interest rates. If the divergence represents this counterparty shift, and it continues to widen, it could cause the economy and asset prices to fall. **Although gold has traditionally been deliberately suppressed by commercial banks and central banks, if they are now seeing it as the safe asset because of economic and political risk, their purchases of gold will raise the cost of capital, and of the output that is being borrowed from the future. Assuming the central banks continue their buying of gold, the divergence will either be closed through "an economic or financial crisis", or the Fed cutting interest rates to fund the deficit and avoid that eventuality.** Not only are central banks buying gold in record quantities, but are apparently calling back reserves that, for the past 30 years had been lent to bullion banks to suppress the price of gold, with the proceeds invested in leveraged instruments.



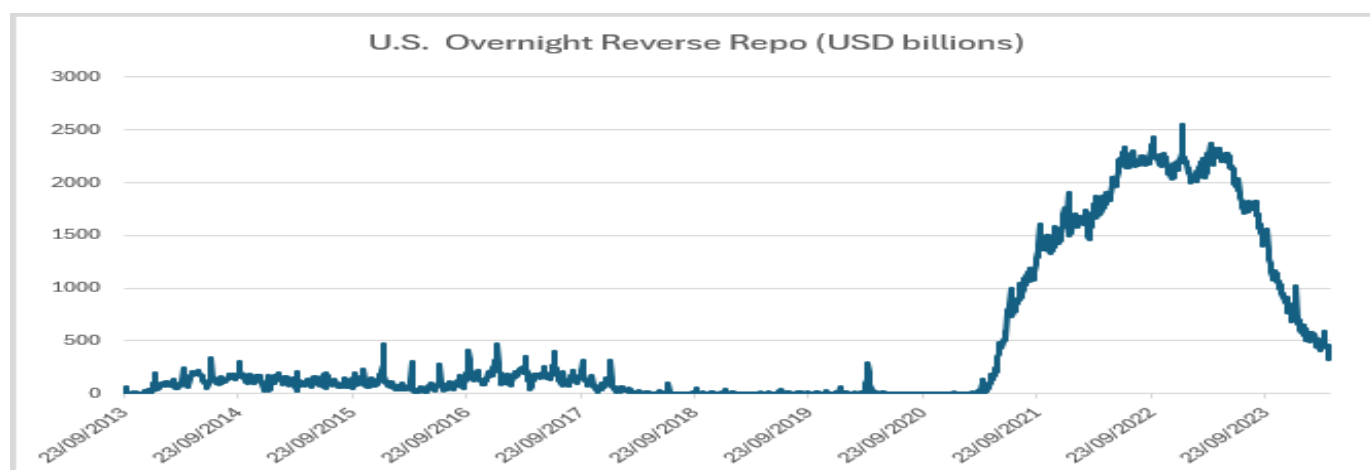
Annual and cumulative net gold demand from central banks, tonnes



This relative move between gold and the inverted real yield contains information. Gold is not just telling us this bubble is about to burst, but its price move will help make it burst. Through buying gold, the PBOC and other central banks are, at the margin, returning the global economy towards a sound money system, lifting the real cost of money and pricing out unproductive output. By buying gold rather than treasuries, they are imposing a relatively higher real cost of capital, pricing out unproductive spending and the debt that is

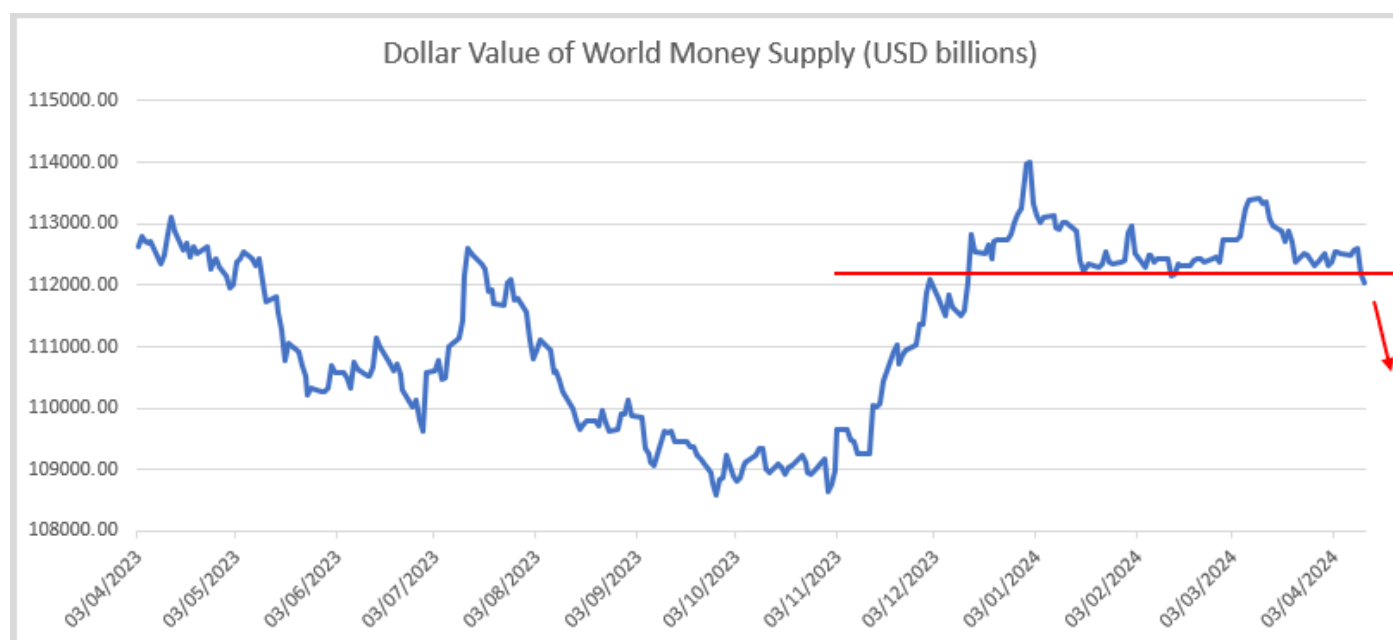
**carrying it.** If the Western and other governments resist, insisting on their continued unproductive spending, they must lower base rates to carry that spending, devaluing their currencies further relative to gold, and undoubtedly, to other commodities. While this will enable them to avoid hard default, the cost will be monetary default, and a continued decline in the potential GDP growth rate. It will see currencies continue to decline against hard assets. The central banks continued purchases will tighten the supply of gold by reducing its free float, pushing the price higher, until there is a market response. This revaluation of gold against fiat money will change relative purchasing powers and gradually price out unproductive spending.

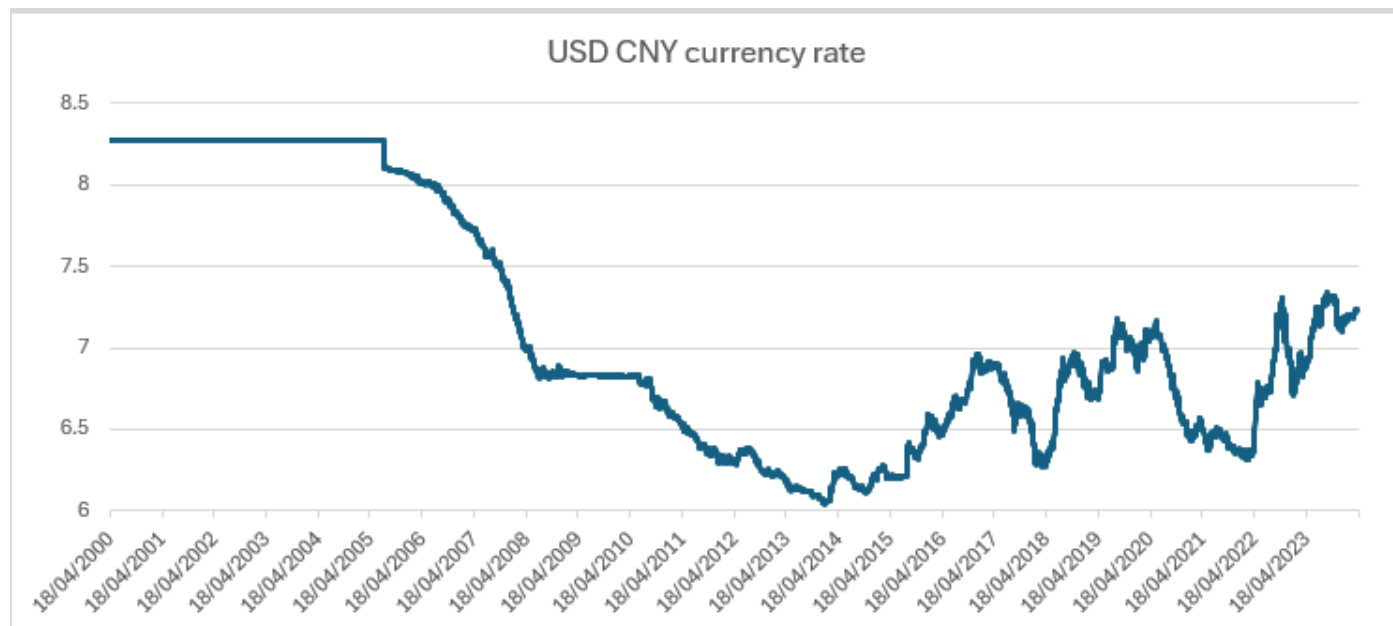
**These measures all point to the same thing, a massive economic and stock market bubble which, without lower interest rates, will soon be unable to sustain itself.** The overnight reverse repo has fallen by USD1.963trn over the past year, covering both the USD1.156trn quantitative tightening and 90.3% of the USD885bn monetary growth - (bank deposits + retail money market funds + currency in circulation) - over that period. The reverse repo is now down to USD327bn and will be exhausted within the next month or two. By comparison, U.S. commercial bank balance sheets have risen by just USD289bn over the past 12 months. Even if the Fed ends its quantitative tightening programme, without the drawdown of the reverse repo carrying the unproductive spending, the commercial bank monetary growth would likely be at risk. Whilst a drawdown of the USD725bn TGA balance could buy some support, without rate cuts, the economy and financial markets are increasingly on borrowed time.



Although the dollar is falling against gold, with it strengthening against most other currencies, the dollar value of world money supply is starting to break down. The low rates and base monetary expansion in 2020 and 2021 boosted the dollar value of world money supply by more than USD20trn or about 22%. As the central banks tightened policy, it gave back about USD6trn, pushing the U.S. into technical recession. The subsequent massive fiscal spending

created sufficient demand for money to reverse that, but even with the fiscal spending, because it is unproductive, not creating the utility to pay for itself, it appears to be starting to roll over again. **While the treasury has been willing to pay 5.5% base rates, sucking money out of the rest of the world to finance its deficit - (foreign holdings of treasuries grew 8.7% last year to a record USD7.965 trillion) - the flat lining and now declining dollar value of world money supply indicates that it has been unproductive, at the expense of growth elsewhere. With it not creating the utility to pay for itself, it is now destroying demand, and importantly, the money in which it is financed.** With the dollar value of world money supply falling, the deficit to the world economy, and the cost of financing it, is increasing, requiring higher U.S. relative rates, which is likely to come about by Europe, Britain, and Canada cutting rates before it, and possibly China letting its currency weaken further to create some demand for its excess capacity, and thereby service the debts behind it. The U.S. economy will not be able to withstand this relative tightening for long. Whilst the fall in this measure of money supply is marginal, there has been no growth for several months suggesting that the global economy is struggling to carry these high interest rates and finance the U.S deficit.





The U.S. government interest bill will soon become the single largest outlay passing social security by the end of 2024 when, according to Bank of America, it will hit USD1.6trn. Based on U.S. nominal GDP growth of 5%, the USD2.2trn deficit would equate to 7.7% of GDP. **Assuming the household savings rate remains at 3.6% that would mean a net national savings deficit of 4.1% of GDP, reducing potential GDP growth that much further, and, without rate cuts to compensate, widen the already record gap between base rates and either the potential GDP growth rate or the natural rate.** The scale of money needed to be sucked out of the rest of the world or drawn down against domestic capital to bridge this gap, and effectively finance this unproductive output, would just not be viable. The global economy simply couldn't afford it, which is what the dollar value of world money supply is starting to show. **Without lower interest rates monetising the unproductive output and debt, the Fed will suck ever more money out of the rest of the world, weakening their economies, and crush its own economy and debt.**

As Bernard Connolly said, such bubbles are not created by the markets but by politicians and central bankers misallocating, and therefore destroying capital. Through the fiscal and monetary policies, the Western governments have created a chronic "intertemporal" misalignment between output today and what the economy can sustainably afford tomorrow, which "ultimately threatens to destroy both capitalism and democracy". **The problem is the economies are running out of potential growth from which to borrow, and therefore must lower interest rates and devalue money to avoid a hard default on that output and debt.**



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