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US government bonds: The pressure is increasing

by CHRISTOF SCHÜRMANN

Abstract

The high level of US debt is challenging the dominance of the dollar, as can be seen from the record prices of gold. The US Treasury market is central to this. Who finances and how does the USA finance itself?

Zusammenfassung

Die hohe Verschuldung der USA stellt die Dominanz des Dollar infrage, abzulesen an Rekordpreisen für Gold. Zentral ist dabei der US-Treasury-Markt. Wer finanziert und wie finanzieren sich die USA?

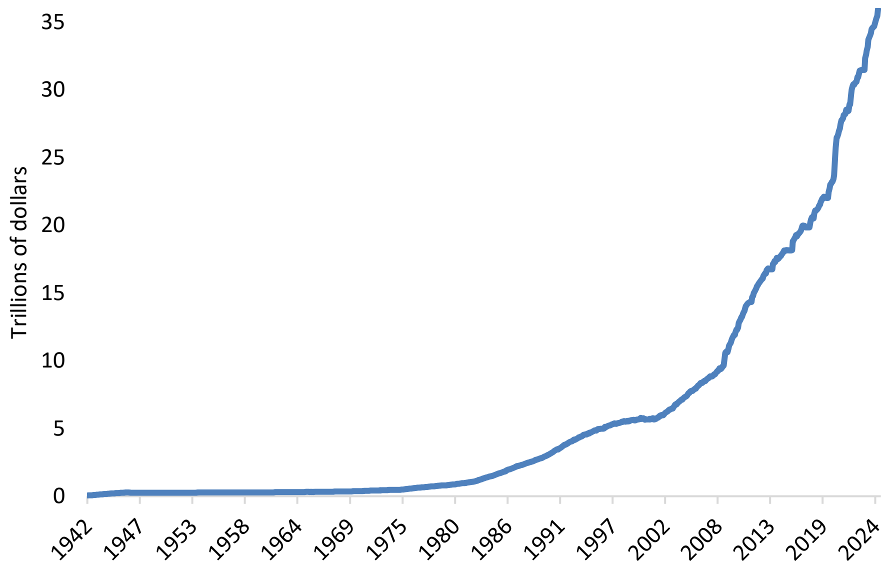
*The Congressional Budget Office (CBO) assumes that the **US budget deficit** in relation to gross domestic product in the will increase significantly over the next 30 years: to 8.5 per cent in 2054*

MAGA - Make America Great Again. It remains to be seen whether US President-elect Donald Trump's campaign slogan will have anything to do with reality, or whether the benefits will go to a clientele close to him.

1. rising US national debt

There is little doubt about only one thing: the US national debt will continue to rise, as it has in recent years and decades. Projections assume that a President Trump could increase the public debt mountain by 7.75 trillion dollars by 2035. In the worst-case scenario, the fiscal increase would even amount to 15.55 trillion dollars. Even in the base scenario, the US debt would rise to 43.6 trillion dollars, which would correspond to a sevenfold increase since 2002 or a hundredfold increase since the summer of 1969 (Figure 1).

Figure 1: Debt of the USA



as at the end of September 2024, source: US Treasury, Flossbach von Storch Research Institute, as at November 2024.

There is now plenty of room for debate about how much debt a country can shoulder, especially in comparison to its economic output. At the end of the year, the USA is likely to end up with a ratio of debt to gross domestic product (GDP) of around 125 per cent. At the end of the second quarter of 2024, taking into account all government payment obligations, it was around 125 per cent, according to the Federal Reserve of St. Louis at 120 per cent. [1]

With an annual average GDP growth rate of just under two per cent, this ratio would not increase until 2035, even if the additional debt under Trump increased as expected in the base scenario. The prerequisite: the budget would be balanced. Viewed in isolation, this would also speak against the feared rise in

[1] Excluding domestic loans, debt is estimated at around 100 per cent of GDP

inflation. However, the US debt would still be twice as high compared to ratios that were considered solid not so long ago: The Maastricht Treaty stipulated a maximum debt-to-GDP ratio of 60 per cent for euro countries. According to an overview by the German Federal Ministry of Finance, the USA currently lies between heavily indebted France and countries with high levels of debt such as Italy and Greece.

The all-clear is therefore not given. There is also the threat of large gaps in the US budget. The Congressional Budget Office (CBO) assumes that the US budget deficit in relation to GDP will increase significantly over the next 30 years: to 8.5 per cent in 2054. This increase will be due to rising interest costs and high, persistent primary deficits (equal to budget deficits excluding interest payments). For the current fiscal year, estimates assume a budget deficit of around six per cent of expected GDP or 1.9 to 2.0 trillion dollars. In the past fiscal year (as at 30 September 2024), the deficit was USD 1.83 trillion.

For this reason, but also independently of debt and growth scenarios, investors should pay increased attention to the financing situation in the USA. This is because there are underlying trends that could cause difficulties for Washington if they become entrenched. These include the development of interest rates, the increasingly tense geopolitical situation, and the departure of important creditors from the dollar. This can be seen above all in the rapid depreciation of the dollar against gold.

2. interest payments are rising rapidly

Interest rates, which are now significantly higher than their lows, are already causing problems for the USA. The US government's net interest payments rose to 882 billion dollars in the 2024 fiscal year (30 September) (previous year: 659 billion). This is four times as much as in 2015 and now slightly more than spending on defence or healthcare, for example. Net interest payments accounted for 14 per cent of the total budget, which the US Treasury Authority puts at 6.75 trillion dollars. Just under half of the budget consisted of transfers (Social and Income Security, Health, Veteran Services).

In June, the CBO forecast that annual net interest costs would almost double in the coming decade - from 882 billion dollars to 1.7 trillion dollars in 2034. Over ten fiscal years from 2025, the deficit would total 12.9 trillion dollars by then. This sum would be on top of the assumed "Trump effect" of 7.75 trillion dollars in the base scenario. Even with annual economic growth of two per cent, the debt-to-GDP ratio would not remain anywhere near constant. Plus the budget deficits, it would then jump to 159 per cent. With annual growth of three per cent until 2034, it would still be 145 per cent.

3. various sources of financing

This raises questions about medium to long-term financing. The United States' main source of financing is government bonds (US Treasuries) with maturities of between 2 and 30 years. 20- and 30-year securities fall under US Treasury bonds (T-bonds), 2 to 10-year bonds under T-notes. The majority of these have fixed interest coupons. Bonds with variable interest rates and a two-year term (floating rate notes) still play a minor role. Securities whose yields are linked to inflation (Treasury Inflation-Protected Securities, TIPS for short) are more popular. Short-term bonds (T-bills), which mature after 4 to a maximum of 52 weeks, play a second key role in financing (Table 1).

Table 1: Structure of US government bonds

Bond type	**Terms**
T-Bills	4, 8, 13, 26, 52 weeks
Floating rate notes	2 years
T-Notes	2, 3, 5, 7, 10 years
T-Bonds	20, 30 years
TIPS	5, 10, 30 years

Market-listed securities, source: Flossbach von Storch Research Institute, as at November 2024.

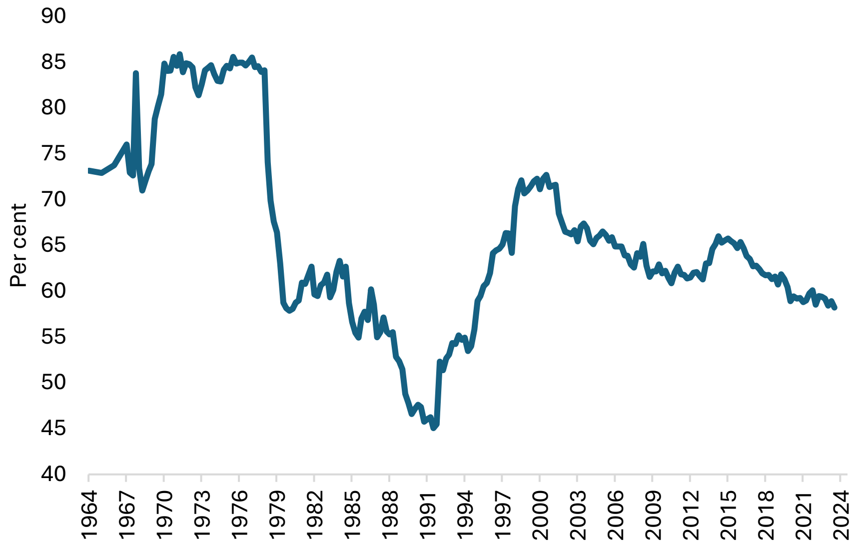
The third pillar consists of securities that are not listed on the markets, i.e. are not subject to ongoing trading.

At the end of September 2024, a good USD 27.7 trillion in marketable US Treasuries were outstanding. Of these, 33 per cent (9.1 trillion) had a remaining term of less than one year, a further 35 per cent had remaining terms of one year to five years (9.8 trillion), 14 per cent had five to ten years to maturity (4.0 trillion), eight per cent (2.3 trillion) had 10 to 20 years to maturity and a further ten per cent (2.6 trillion) had up to 30 years to maturity.

4. exorbitant privilege slowly disappears

For decades, the US Treasury market has been regarded as a safe haven for investors worldwide and government institutions. According to surveys by the Bank for International Settlements, the US currency is involved in 88 per cent of all foreign exchange transactions. The dollar with its "exorbitant privilege" plays out its advantages here. The privilege of being the world's most important currency undoubtedly applies. However, measured in terms of its share of global currency reserves, the importance of the dollar has been dwindling since the turn of the millennium (Figure 2).

Figure 2: Share of the dollar in global currency reserves



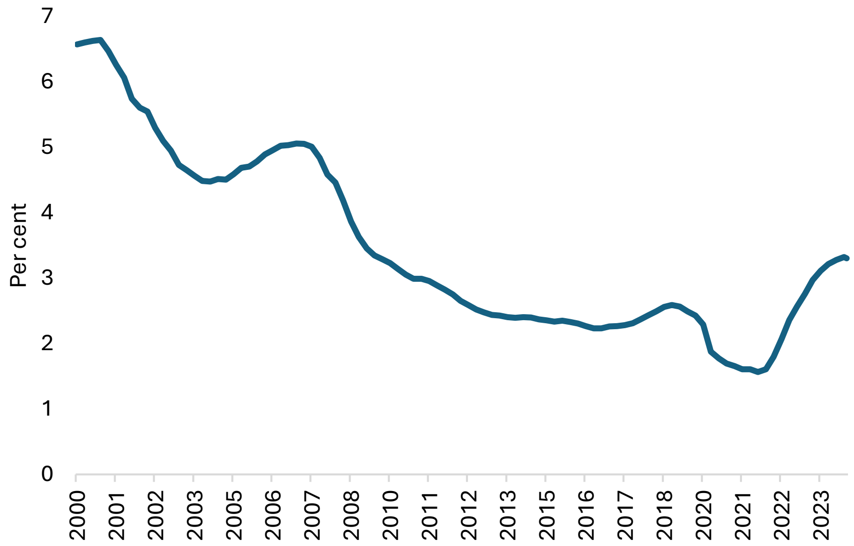
as at 30 June 2024, source: IMF, Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

At a time of high budget deficits, which could remain at around six per cent of GDP in 2026 and 2027 according to previous estimates, the US is dependent on demand for dollars.

No wonder Trump threatened the so-called BRICS countries with tariffs "of 100 per cent" at the end of November if they turned their backs on the dollar. The US President-elect thus confirmed the assessment that the US will not stand idly by and watch an attack on the exorbitant privilege of the dollar.

The dollar is also more vulnerable because the budget deficits are now more problematic than they appeared to be just a few months ago. This is because financing new debt and refinancing old debt is now significantly more expensive than it was in late summer. With yields of 4.21 per cent (3 December), ten-year US Treasuries are already noticeably higher than before the Federal Reserve cut interest rates in September (then 3.65 per cent). The easing of key interest rates - there was another one in November - is therefore no longer reaching the "long end". In any case, the average interest rate on US debt is on the rise, as some debt that was financed very favourably in the past now has to be rolled over at a higher interest rate (Figure 3).

Figure 3: Average interest rate on US debt



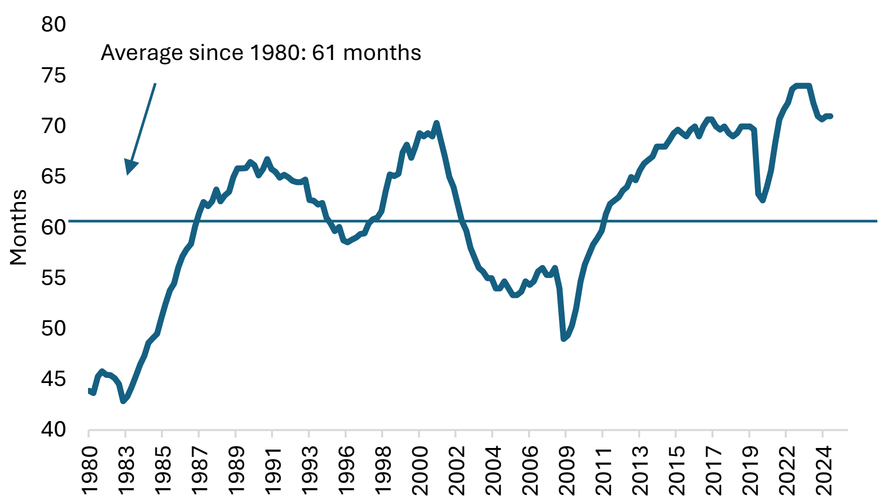
as at 31 October 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

In its assumptions based on yields currently implied on the market, the [US Treasury Department] itself assumes that interest rates for ten-year US Treasuries will rise steadily over the years and reach more than five per cent by the early 2030s.

5. quite long remaining term is deceptive

At 71 months, i.e. almost six years, the average residual maturity of US debt looks comfortable at first glance, even by historical standards (Figure 4).

Figure 4: Remaining term to maturity of US government debt



as at 30 September 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

However, including the expected budget deficit, the USA will probably have to refinance and refinance more than eleven trillion dollars in the current fiscal year if the new Trump administration does not immediately discover and realise potential savings.

Measured in terms of demand, the USA still has no problems bringing new paper to the market. According to the US Treasury Department, smoothed *bid-to-cover ratios* for short-dated T-bills have been fairly constant for years at between 2.5 and more than 3.0. One of the most important buyers is Warren Buffett, who most recently held over 288 billion dollars of such securities via his Berkshire Hathaway Holding - just under five per cent of all T-bills.

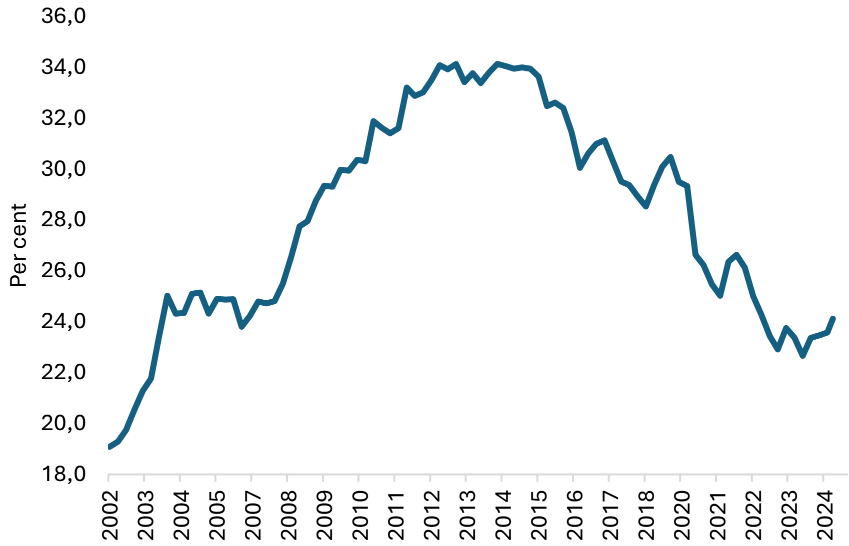
For longer-dated bonds, the smoothed bid-to-cover ratios have also been fairly constant in recent years at around 2.3 to 2.8. These are solid values. Ratios that fall below 2.0 over a longer period of time are considered an indication of low demand.

6. foreign demand weakened

Interest from foreign creditors is declining, with foreign investors recently only buying around 12 per cent of the volume of newly issued two- to five-year bonds - a five-year low. In the twelve months to the end of September, the level for 7 to 30-year securities fluctuated at around 13 to 14 per cent. The strongest demand from foreigners (private investors and official institutions) was for T-bills in 2024. From January to September, foreign investors purchased a good USD 80 billion to a maximum of just over USD 100 billion in US debt securities per month, of which T-bills accounted for just under half to just over half.

Foreigners most recently held 19 per cent of all T-bills and 34 per cent of all other Treasuries, both of which are low levels in a historical context. Measured in terms of total US debt, the share of foreign financing has been declining significantly for ten years and most recently stood at just over 24 per cent. However, the share is still higher than at the beginning of the century (Figure 5).

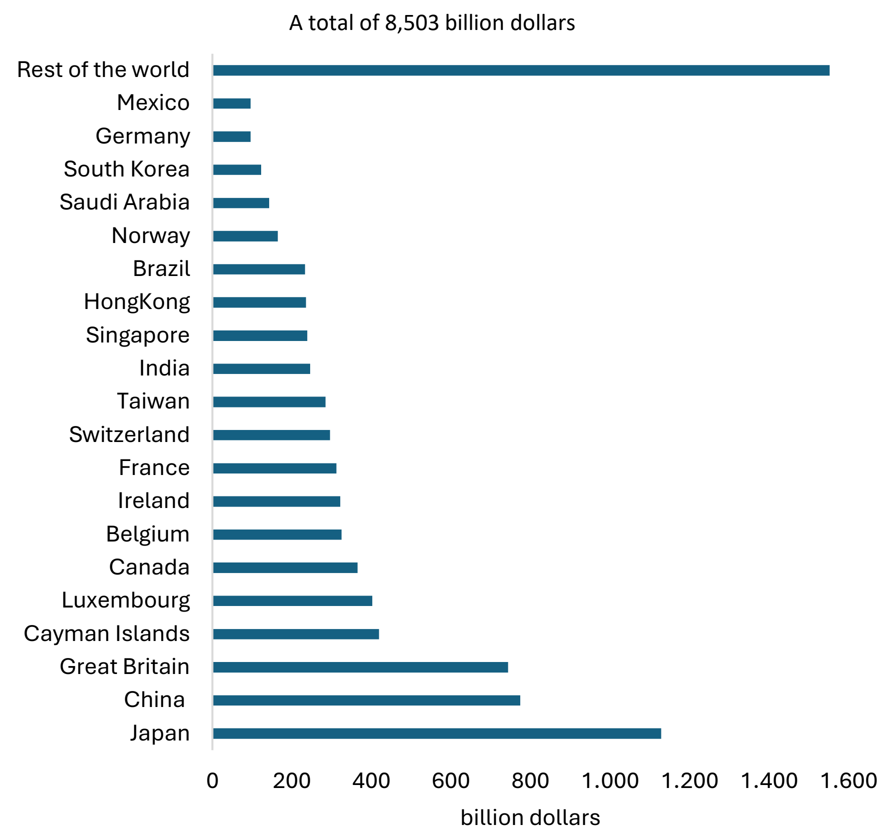
Figure 5: Foreign financing share of US debt



as at 31 August 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

The largest single creditor of US debt securities is the Federal Reserve with just under USD 4.4 trillion (as at 31 August). The USA is indebted abroad to the tune of USD 8.5 trillion, with Japan in first place (Figure 6).

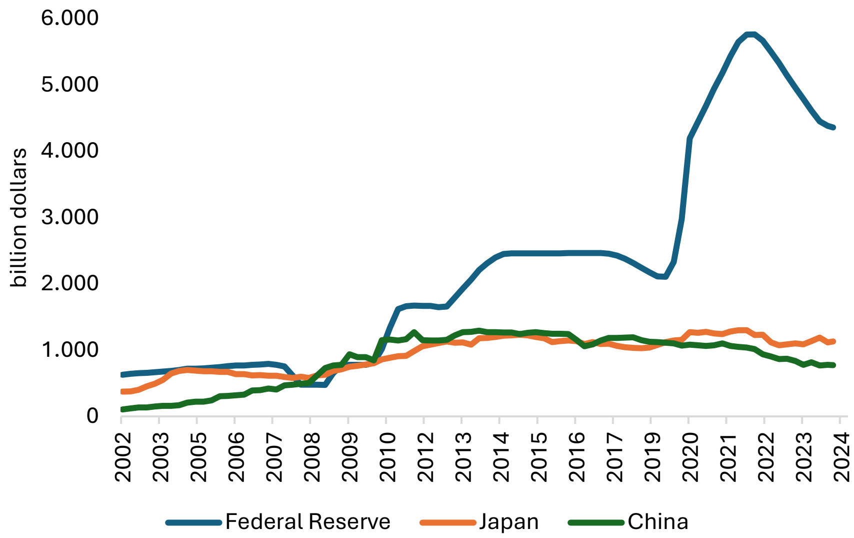
Figure 6: Foreign creditors of the USA



as at 31 August 2024, source: US Treasury, Flossbach von Storch Research Institute, as at November 2024.

The most important buyers of US government bonds are reducing their holdings. First is the Federal Reserve, which has reduced its holdings of Treasuries by a good USD 1.4 trillion or almost a quarter as part of its quantitative tightening programme. China is holding as much as 40 per cent less than at peak times, while Japan's holdings remain virtually unchanged with slight fluctuations (Figure 7).

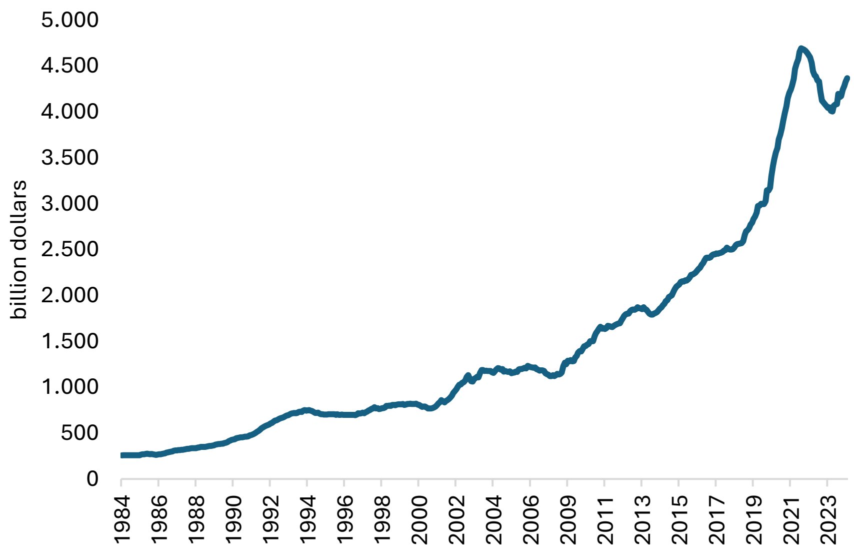
Figure 7: Holdings of US government bonds Federal Reserve, Japan and China



as at 31 August 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

The US banking sector plays a key role, with a recent portfolio of US securities totalling almost USD 4.4 trillion. This portfolio has roughly quadrupled since the financial crisis (Figure 8).

Figure 8: Portfolio of US securities in the US banking sector



as at 1 September 2024, Treasury and Agency Securities, All Commercial Banks, Monthly, Seasonally Adjusted, Source: Federal Reserve of St. Louis, Flossbach von Storch Research Institute, as at November 2024.

The largest US bank JP Morgan Chase alone held US government securities worth around 220 billion dollars at the end of 2023. (US) government bonds are considered so safe in terms of regulation that banks do not have to back them with equity.

US money market funds most recently (as at 30 June 2024) held a good USD 2.4 trillion in US Treasuries, investment funds just under USD 1.4 trillion and ETFs USD 523 billion. As interest rates have risen, US government securities have also become much more popular with the general public again: at USD 2.75 trillion, US households (including non-profit organisations) were recently invested with 5.5 times the amount at the end of 2021. They are thus closing the gap that the Federal Reserve is opening up with its reduction.

7. Dollar depreciates against gold

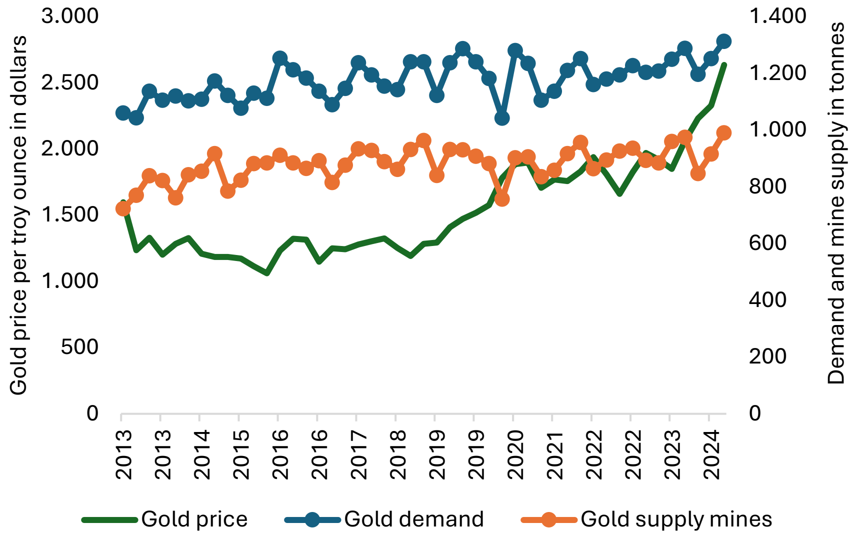
Despite the sharp rise in US debt, the price of the dollar is relatively constant when the US currency is measured against the most important freely convertible currencies. The benchmark for this is the US dollar index. According to data provider Bloomberg, the index is currently virtually unchanged compared to its value 20 or 50 years ago. The index reached its highest value at the end of 1984 at just over 151 and its lowest at just under 72 (end of March 2008). This year, the value has fluctuated between 100 and 107.

The shortcoming of the index is that it compares currencies with each other. In the event of a synchronised devaluation, the index would therefore remain constant, despite losses in purchasing power. The index is therefore of little use in assessing the intrinsic strength of the dollar. Gold is traditionally the best measure of confidence in the dollar.

The price of gold per troy ounce (31.1 grams) reached almost USD 2,800 this year. At its peak, this represented an increase of 35 per cent compared to the beginning of the year.

The drivers for such a strong increase cannot be directly identified. Although demand increased, the mines, the most important source of gold, also expanded their supply at the same time (Figure 9).

Figure 9: Gold demand, mine supply and gold price



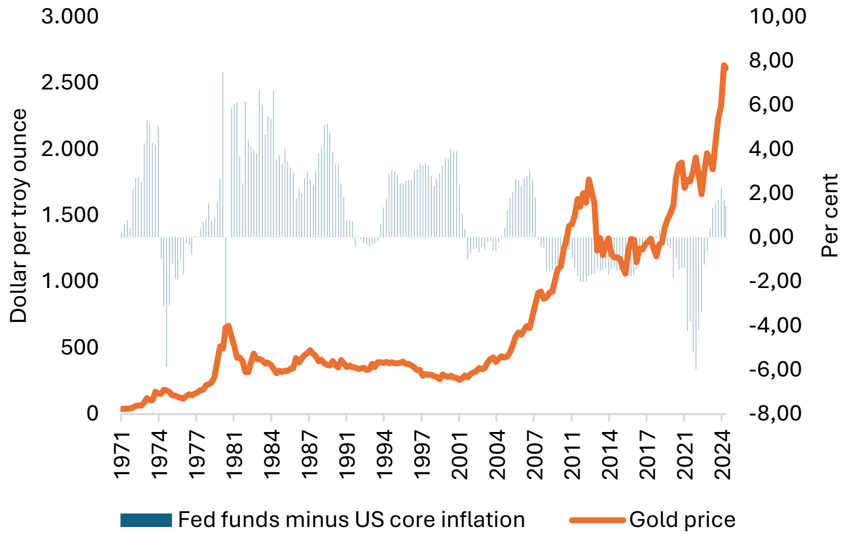
as at 30 September 2024, quarterly, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024**. Historical performance is not a reliable indicator of future performance.**

The difference between mine supply and (higher) demand is covered by recycled gold. [2]

Surprisingly, the price of gold has risen sharply, although in real terms, after deducting inflation, positive interest income has been generated again in the US over the past two years, which historically should speak against gold. However, recent history does not confirm this: measured by the key interest rates of the US Federal Reserve minus the US consumer price trend (core inflation, excluding food and energy), the real interest rate was almost continuously in negative territory for 15 years. During the same period, the price of gold plummeted. The expectation would have been an increase because the holding costs for gold are no longer significant with a negative real interest rate (Figure 10).

[2] The price balances supply and demand. If demand increases and supply increases less strongly, the price rises. The demand of less willing buyers decreases and/or their supply increases.

Figure 10: Short-term US real interest rate and gold price



as at 18 November 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.
Historical performance is not a reliable indicator of future performance.

In contrast to the previous three decades, short-term real interest rates have no longer had a direct impact on gold for around 20 years. Rather, it is shocks such as the financial and euro crisis or coronavirus that have had a positive impact on gold in retrospect. Only in recent phases with deeply negative real interest rates has gold also recovered from its interim lows.

Given that real interest rates are now clearly positive again, which traditionally should be negative for gold, the current acceleration in the gold bull market must have other causes: in addition to the debt problems in the USA and numerous other countries, the massive geopolitical stress (Ukraine, Middle East, Taiwan) is a possibility.

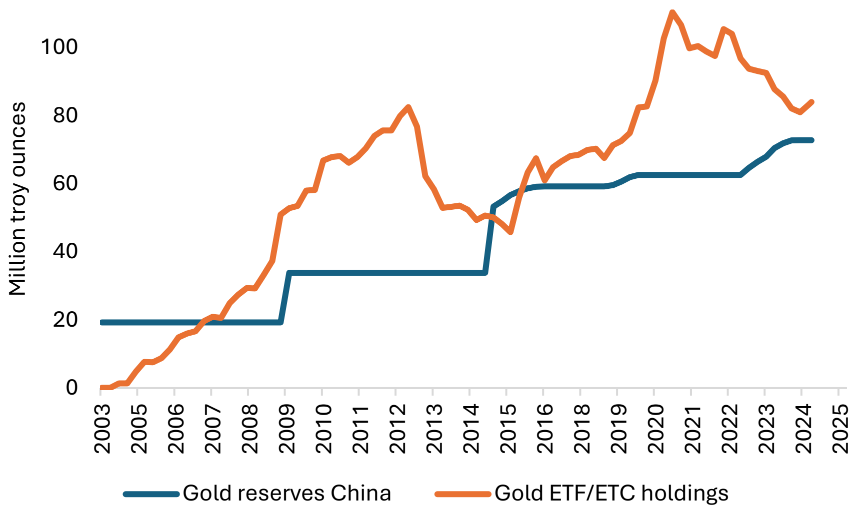
8. Who drives gold?

China can be identified as the driver at the beginning of the current gold boom. Over five quarters - from the fourth quarter of 2022 to the fourth quarter of 2023 - Beijing increased its reserves from 62.64 to 71.87 million troy ounces. This happened during a moderate rise in the gold price.

According to official figures, a further 870,000 troy ounces were added by the end of March 2024 and another 60,000 by the end of June. China's purchases have since dried up. These officially reported low purchases in 2024 cannot explain the sharp rise in the gold price.

Investment demand for gold-backed listed index products (ETFs and ETCs) did pick up somewhat after years of decline. However, the increase is far too small to justify the massive rise in the price of gold (Figure 11).

Figure 11: China's gold reserves and stocks of covered gold index products



China reserves as at 30 September 2024, ETF/ETC holdings as at 31 October 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

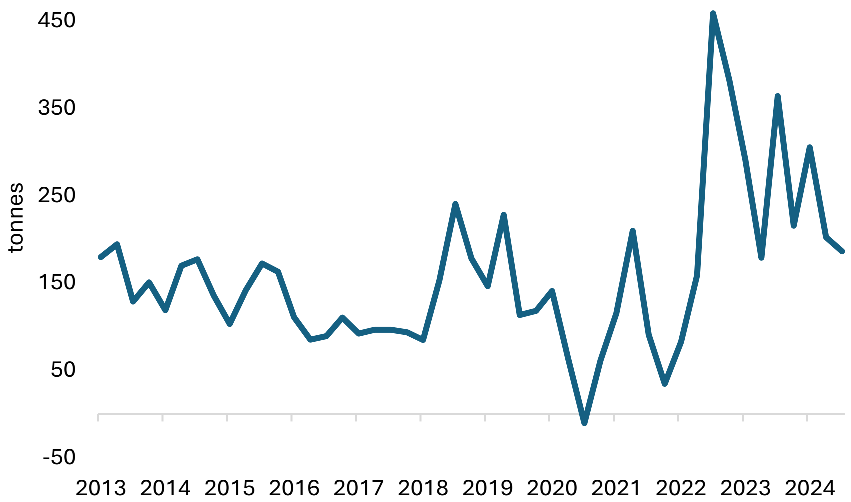
If official figures are to be believed, Russia is also out of the question as a price driver: at the end of June 2024, official reserves were only a good six tonnes higher than a year earlier.

Demand for jewellery was rather weak throughout 2024. Direct purchases of coins and bars are also declining. Both therefore tend to slow down the price trend.

According to the World Gold Council, *over-the-counter* (OTC) investments were very high at 329 tonnes and could at least partially explain the rise in the gold price. Although OTC purchases were only 137 tonnes in the third quarter, this was twice as much as in the same quarter of the previous year.

The central banks remained net buyers. However, demand here has weakened significantly recently (Figure 12).

Figure 12: Net gold purchases by central banks



as at 30 September 2024, source: Bloomberg, Flossbach von Storch Research Institute, as at November 2024.

This means that the official total of central bank purchases reported can no longer be used as a reason for a sharp rise in prices.

Overall, although there has been a steady increase in demand for gold, this is by no means sufficient to explain such a massive upward movement as this year. This is because the value of all mined gold has risen by around 4.4 trillion dollars this year alone. By the end of the third quarter of 2024, gold miners had extracted around 216,300 tonnes of the precious metal from mines and rivers over the millennia. Current equivalent value: 18.4 trillion dollars.

According to the gold specialist Incrementum, the share of the so-called emerging markets in the annual physical demand for gold has risen to 70 per cent over the past five years. More than half of this is accounted for by China and India. Unofficially, the share of emerging markets could be even higher. In any case, the gold boom in 2024 suggests the suspicion of covert buying. China, which is clearly abandoning US Treasuries and inevitably has to look for alternatives, could be at the forefront here. Incrementum supports this hypothesis: the enormous Chinese appetite for gold can be seen, for example, in the premium for Chinese gold at official prices. The premium would be higher than the official prices on the London Bullion Market, the most important over-the-counter trading centre for gold and silver.

Russia is also likely to have tried to unofficially acquire gold after other assets were frozen in the course of the war of aggression against Ukraine. According to Incrementum, the confiscation of Russian reserves and oligarchs' assets in 2022 was a "wake-up call" for numerous states and also for wealthy private individuals from the Gulf States, for example. Instead of acquiring more property in London or New York, savings could now be channelled into the more fungible gold.

This has long been easier to trade than before, as there are numerous products backed by gold: ETFs or ETCs, for example, where providers physically store gold, in some cases with a delivery claim for investors.

However, a further step is still needed to break the dominance of the dollar as the leading international currency - a system that makes shares transferable between individuals without brokers.

Conclusion

The USA is under pressure. Long-term interest rates have already risen again, although the Federal Reserve is currently in a cycle of lowering interest rates. As US debt has increased enormously in recent years, both in absolute terms and relative to GDP, interest payments are a noticeable burden on the budget.

Excessive spending (or too little revenue) in the US pushes the costs onto younger generations, undermines economic growth and could lead to a debt and financial crisis in the longer term.

If the deficits are not reduced, President Trump piles up additional debt as expected and interest rates remain at current levels, the budget problem could escalate. Then only sustained very strong growth or inflation could help to devalue the debt in real terms.

In addition, debtors are turning away from the dollar for geopolitical reasons, first China. The dominance of the dollar could continue to crumble. A greater crisis of confidence due to the geopolitical upheavals cannot be ruled out either.

However, there will not be an abrupt end to the dollar's dominance. The US economy and the appeal of dollar investments, including US equities in particular, are too strong for that. Moreover, it is not impossible that a combination of extensive savings and the associated growth will put the US debt level into perspective, which would support the dollar or could even make it more attractive.

Gold, with its long tradition as a store of value, primarily fulfils a diversification effect. It is no longer. However, with every increase in value and every further rise in US government debt to GDP, it becomes a little more likely that gold could challenge the dollar's privilege as a new reserve currency.

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