

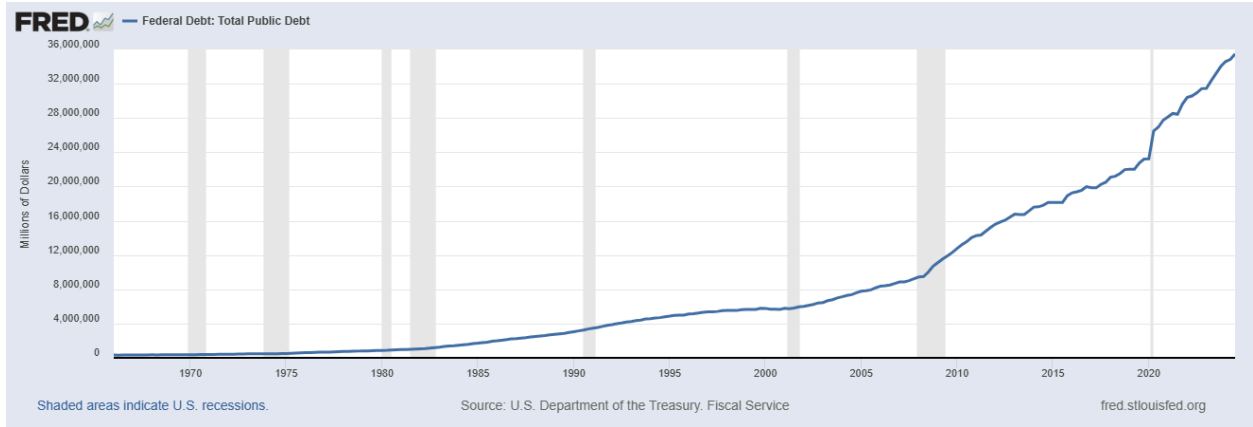
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Implications of The United States National Debt Crisis

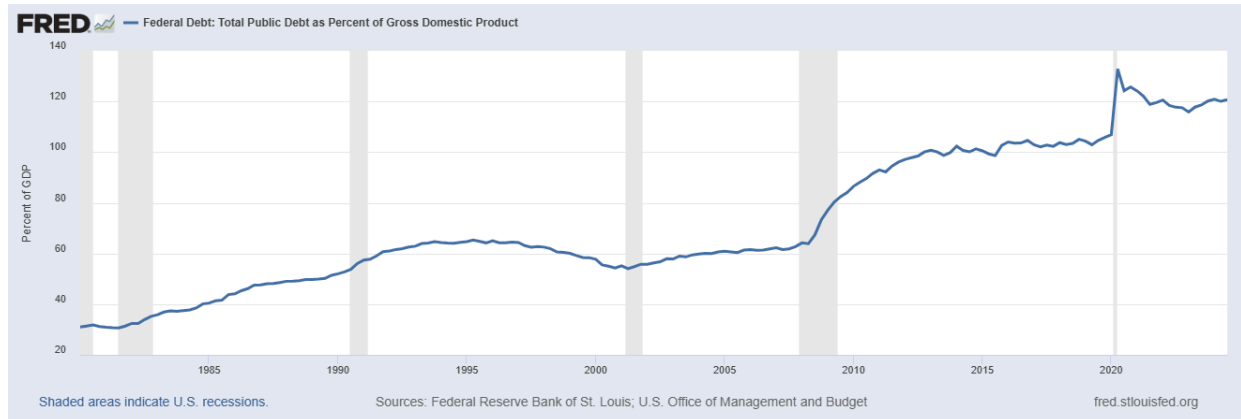
Over the past few decades, U.S. government spending has steadily increased, while revenue growth has lagged. To sustain its expenditures, the U.S. has relied on borrowing, leading to persistent budget deficits and unprecedented levels of national debt. These record debt levels require increasingly large interest payments, accelerating the pace of debt accumulation. This paper will argue that the United States is caught in a debt spiral that the federal government must ultimately address through debt monetization. This, in turn, will trigger inflation that the Federal Reserve will be unable to control, ultimately destroying the U.S. dollar's status as the world's reserve currency.

To better understand the situation, it's useful to first examine the total amount of debt. In 2024, the federal debt reached a record \$35 trillion (FRED), an unprecedented figure in global economic history and it continues to rise. However, looking at this number in isolation doesn't necessarily make it clear why it poses a significant problem.



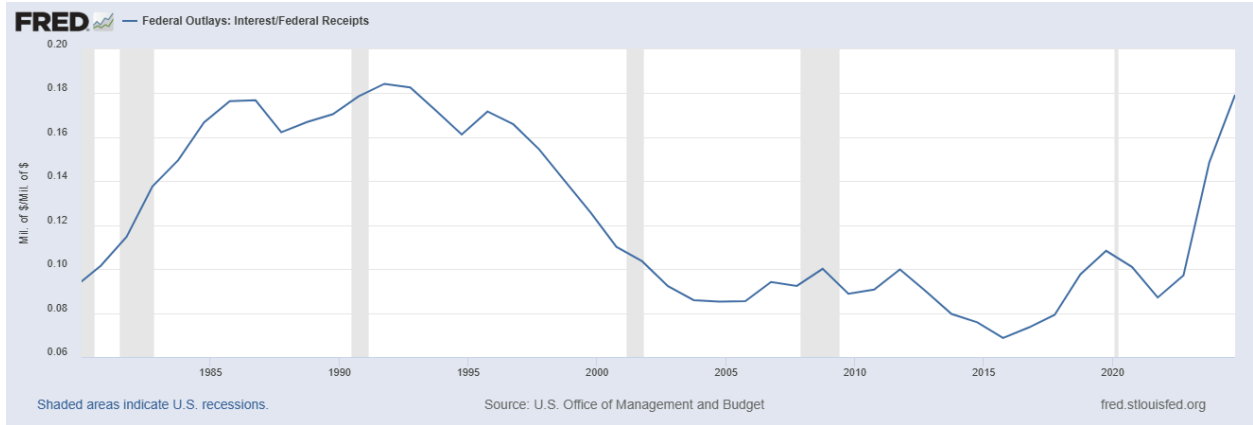
Another way to gauge the scale of the debt is by examining the debt-to-GDP ratio. This metric compares the nation's debt to the size of its economy, which is essential for sustaining that debt. As of Q3 2024, the United States had a debt-to-GDP ratio of 121% (FRED), and this

figure continues to rise.

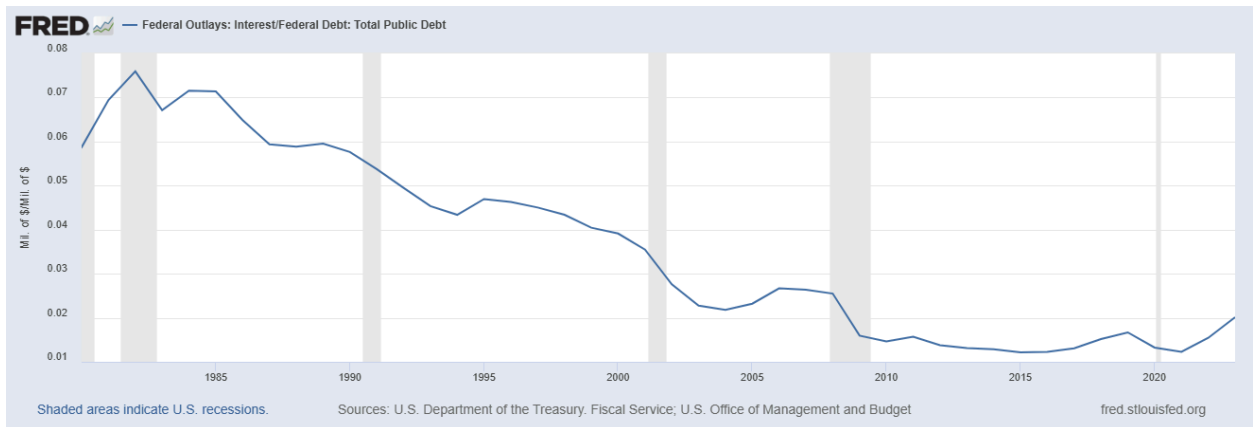


It may be tempting to compare the current debt-to-GDP ratio to that of 1946 when it reached a similar level of 106% (Acalin and Ball). However, the two situations are fundamentally different for several reasons. During World War II, the U.S. borrowed at low interest rates, often yielding negative real returns for investors (Vasquez). Additionally, the purpose of the debt played a crucial role in its short-lived impact. In the 1940s, borrowing was primarily used to fund the war effort. Once the war ended, the U.S. was able to halt additional borrowing and leverage a booming postwar economy to pay down its debt. In contrast, the current trajectory of government spending shows no signs of slowing, making a similar resolution unlikely.

Another common argument used to downplay the severity of the U.S. debt situation is Japan's staggering debt-to-GDP ratio, which reached 217.4% in September 2024 (CEIC Data). Despite this extreme level of debt, Japan continues to function, but its situation differs significantly from that of the United States. One key distinction is that Japan's central bank holds a majority of its government debt (Statista, 2024), which effectively reduces its true debt burden. Additionally, Japan's economy has been largely stagnant since the mid-1990s (World Bank), experiencing what could be described as a 30-year recession. These factors make Japan's debt situation distinct from the challenges currently facing the United States.

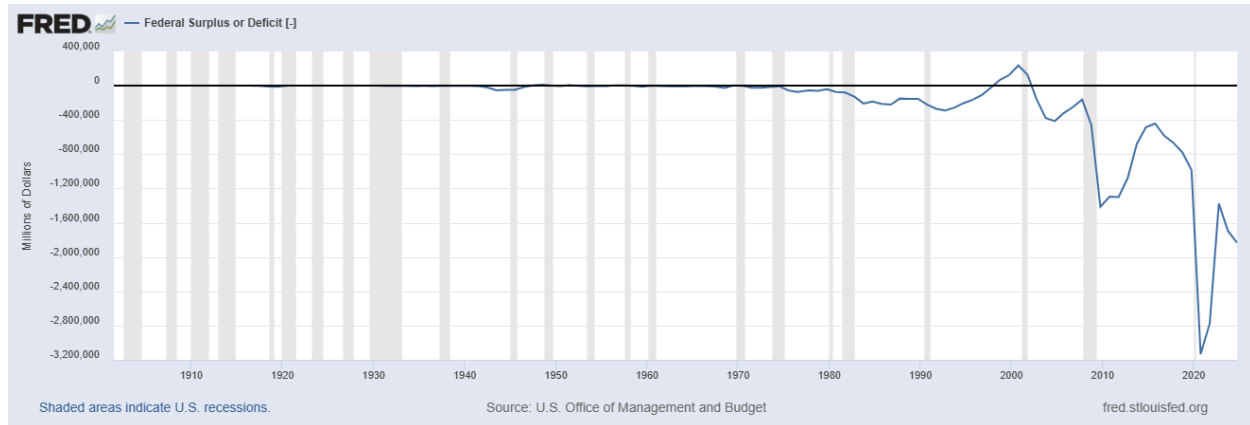


A more troubling aspect of the U.S. debt is the growing cost of servicing it. In 2024, 18% of government revenue was spent on interest payments alone (FRED), matching levels last seen in the 1990s, when high interest rates from the previous stagflation crisis drove up borrowing costs. However, we are now on track to exceed that ratio. What makes the current situation even more concerning is that today's interest rates on federal debt are significantly lower than they were in the 1980s and 1990s (FRED).



This means that if rates were to rise, the cost of servicing the debt would also rise, causing the debt and deficits to expand dramatically. The data also highlights a worrisome trend: as interest payments consume an increasingly larger share of the budget, less funding is available for existing government programs. Despite this, the government has not significantly reduced spending in these areas. Instead, it has continued to borrow more, further increasing

both the deficit and future interest costs.



A debt spiral occurs when an entity must continuously borrow additional funds to meet its existing debt obligations, making it unable to repay old debt without taking on new debt. This constant accumulation leads to an exponentially growing debt burden. When evaluating whether the United States is in this situation, it is essential to determine whether the government can financially function without requiring a continual increase in the real value of its debt. If it is unable to service its existing debt obligations without further expanding its debt, then it would be in a debt spiral.

It is important to note that the government does not need to completely eliminate deficit spending to prevent an increase in the real value of its debt. This is because inflation erodes the real value of debt over time. When assessing how much debt is reduced by inflation, it is crucial to recognize that not all of the reported federal deficit is of significance. 13% of the debt as of Q3 2024 (FRED), is owned by the Federal Reserve and is effectively already settled. When the Federal Reserve receives payments on its securities, it gives that income to the U.S. Treasury through remittances. As a result, when the Treasury pays interest on loans held by the Federal Reserve, the Fed returns those payments, meaning the Treasury effectively incurs no net cost. Therefore, the portion of federal debt owned by the Federal Reserve can be considered settled. Out of the total \$35 trillion in reported federal debt, approximately \$30.45 trillion remains

relevant to the deficit. Though it is a possibility that the Fed will sell these securities before they mature, this is an unlikely scenario that will be explained later in more depth.

The rate of inflation determines the extent to which the real value of debt depreciates. The higher the inflation rate, the more debt is eroded in real terms. If inflation were to rise to 3%, a rate currently higher than the projected figure for 2025 (“The Budget and Economic Outlook: 2025 to 2035”), approximately \$914 billion in real value would be eliminated from the government’s \$30.45 trillion debt held by the public. This suggests that the government could theoretically prevent an increase in the real value of its debt if the 2025 deficit were reduced by \$914 billion. It is important to note that the 3% inflation rate used in this scenario is an optimistic assumption for debt reduction, as actual projections suggest a lower rate. A lower inflation rate would result in a smaller erosion of the debt’s real value, reducing its effectiveness in alleviating the debt burden.

The government’s current budget projection for 2025 estimates a deficit of \$1.865 trillion (“The Budget and Economic Outlook: 2025 to 2035”). To take meaningful steps toward preventing increasingly large debt payments and avoiding a debt spiral, the government would need to reduce the projected deficit by at least \$951 billion. This could be achieved through increased revenues, reduced spending, or a combination of both strategies.

In the proposed 2025 budget, \$1.8 trillion is classified as discretionary spending, while the remainder is designated as mandatory. Of this discretionary budget, \$859 billion is allocated to national defense, leaving only \$989 billion for non-defense discretionary programs (“The Budget and Economic Outlook: 2025 to 2035”). This funding covers a wide range of government functions, including education, healthcare, transportation, and the administration of justice. Significant cuts to either mandatory or discretionary spending are currently unfeasible. Given the political landscape, any attempt to reduce spending by a meaningful amount would face rejection, as it would affect programs widely considered essential.

The alternative solution to reducing the projected deficit is to generate additional revenue to offset spending. To raise an extra \$876 billion, the government would need to increase its projected revenue by 17%. However, simply raising tax rates by this amount would not generate the necessary revenue, as higher taxes suppress economic activity, ultimately reducing the taxable base, a concept explained by the Laffer Curve. Compounding this challenge, the political and economic consequences of such a significant tax increase would be severe. A hike of this magnitude could push the economy into a downturn, further diminishing revenue and exacerbating the problem. Given these factors, increasing taxation is not a viable solution.

The only way that remains for the government to generate enough additional revenue would be through an economic boom. If the United States were to experience an unprecedented surge in economic growth, the resulting increase in taxable income could potentially provide the necessary revenue. However, the scale of growth required to meet this target is beyond possible. Historical data illustrates this challenge. The highest average annual GDP growth rate recorded by a U.S. president in the last 70 years, was 5.2% under Lyndon B. Johnson (Srinivasan). Even if the U.S. sustained this remarkable level for four consecutive years, it would still be an insufficient amount of growth. As current government income projections already factor in a projected GDP growth of 2% annually ("The Budget and Economic Outlook: 2025 to 2035"), an additional 3.2% per year over four years would only result in a 13% increase above the expected trajectory, well below the required level of 17%. Moreover, by the end of those four years, the necessary growth target would have risen even further, due to the rising interest payments making the goal even more unattainable.

As every possible strategy to lower the deficit is so unlikely to be enacted as well as being so far off from lowering the deficit by the necessary amount, a combination of these methods will also not provide a possible solution. The only feasible path forward is continued borrowing to sustain the resulting government spending and ever-growing debt payments. As

the government remains on its current trajectory, escaping this cycle becomes increasingly difficult, requiring even deeper deficit reductions. Eventually, managing the situation will become impossible, as the rising cost of servicing the debt will inevitably drive the deficit even higher. Since the United States will not be able to make significant enough reductions in its spending, it is unable to service its existing debt obligations without further expanding its debt, which is by definition, a debt spiral.

A crucial question to consider is how the U.S. government has been able to sustain such a high level of debt for such an extended period. A major contributing factor is the status of the U.S. dollar as the world's reserve currency. U.S. bonds and currency account for approximately 59% of global foreign exchange reserves (Siripurapu and Berman). Additionally, a significant portion of international trade is conducted in U.S. dollars. This provides the United States with several key advantages. One of the most significant is the high demand for U.S. Treasuries, which helps keep their yields relatively low compared to bonds issued by other nations. The lower interest rates on these bonds reduce the overall cost of servicing the debt, enabling the government to sustain and accumulate even higher levels of borrowing.

The Federal Reserve can inject currency into the economy through mechanisms such as quantitative easing, as seen in 2020, or through open market operations. In doing so, the Fed effectively "prints money" out of thin air to purchase securities, often U.S. Treasury bonds, to increase liquidity. This process not only stimulates the American economy but also has the added effect of boosting demand for U.S. debt. As a result, it drives down the cost of servicing the debt, enabling the government to borrow even more—on top of the fact that the Fed itself is purchasing government debt.

As previously discussed, when the Federal Reserve acquires and holds U.S. government debt, it effectively removes that debt from circulation, granting the government greater capacity to sustain even higher levels of borrowing. However, this complex and advantageous process comes at a significant cost: inflation. The creation of new money used to

purchase securities expands the money supply, driving up inflationary pressures. This is where the U.S. dollar's status as the world's reserve currency provides another key advantage. Because much of the world holds U.S. dollars in addition to the domestic economy, the inflationary burden is distributed globally. This, in turn, mitigates the full impact of inflation within the United States, allowing for the benefit of economic stimulus while tempering domestic price inflation.

To better understand this effect, imagine a hypothetical scenario involving two nations. In this example, Mexico holds 100% of its currency, the Peso, domestically. If Mexico were to expand its domestic money supply by 20% to stimulate its economy, the total supply of Pesos would inflate by 20%. In contrast, in this scenario, the United States is the world's reserve currency, with only 50% of U.S. dollars held domestically and the other half held internationally. If the United States were to expand its domestic money supply by 20% to stimulate the American economy, the total supply of U.S. dollars would inflate by only 10%, as the inflationary effects would be absorbed not only by domestic holders of U.S. dollars but also by international holders. As demonstrated, having international holders provides the United States, as the issuer of the U.S. dollar, a unique advantage. It allows the country to reap the economic benefits of expanding its money supply while mitigating the impact of inflation, as the effects are distributed across both domestic and international holders. It is essential to emphasize that this example is intended to illustrate the advantage of having international holders of a nation's currency, rather than to represent actual global statistics.

Some may argue that because the United States holds the status of the world's reserve currency, it can indefinitely issue new debt at a low cost and that the current debt level is not a concern. However, this is not the case. As explained, even with relatively low borrowing costs, the expense of servicing the debt continues to grow at an exponential rate. Eventually, the supply of new bonds required to finance the expanding deficit will outpace market demand for

American debt, creating an unsustainable imbalance. As a result, borrowing costs will rise, further compounding the debt problem.

At this stage, the government will face two options: defaulting on its debt or allowing the Federal Reserve to monetize it. It will inevitably choose the latter. The U.S. would not choose to default on its debts as doing so would immediately destroy the market's trust in U.S. treasuries, removing its status as the world reserve currency. Monetizing the debt involves the Federal Reserve purchasing government-issued debt from lenders using newly created money. This process is similar to the process previously discussed, but instead of the purpose being to stimulate the economy, the aim would be to eliminate the exponential escalation of the debt to make the debt manageable again. This will cause extreme inflation. While the United States has historically managed to prevent runaway inflation, this time will be different.

The challenge the government will face is that monetizing the debt to a meaningful level involves inflating the money supply at a rate that is much too high to control. To illustrate this situation, consider if the government attempts to monetize the real federal deficit by the \$951 billion figure discussed earlier. This amount is far too small to resolve the actual issue, and would only postpone the exponential debt. If the government were to monetize this amount of debt alone, at least a slight rise in price inflation would be inevitable. Central banks respond to rising inflation by increasing interest rates. However, in this scenario, a rise in interest rates would make the financial problems of the United States worse instead of better. If rates were to rise, then the interest on the debt in the coming years would rise to even greater levels. This would mean that if the United States were to continue to monetize the debt the next year, the amount it would need to monetize would be even greater than the 2025 level. This again would cause even more inflation, removing the reduction in the rise of interest rates. Because of this, the United States government will not be able to fight inflation. This outcome will inevitably lead to runaway inflation. Rather than combating inflation, the Fed will have no choice but to accept it as a consequence of debt monetization as this has become the only viable option available to

the government. Such a situation has significant repercussions, particularly concerning the U.S. dollar's status as the world's reserve currency. When inflation rises to a critical level, both individuals and nations will be compelled to seek alternatives to the U.S. dollar. This occurs because, once it becomes clear that investing in U.S. Treasuries yield negative real returns, investors will no longer be willing to buy them.

In conclusion, the United States' debt is spiraling out of control. As the United States government is unable to prevent the real deficit from expanding, it has become reliant on borrowing to cover its ever expanding interest expense. As it is unable to escape this cycle, it is in a debt spiral. This will force the United States to monetize the debt, producing runaway inflation that will destroy the United States status as the issuer of the world's reserve currency.

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