GLOBAL MARKETS REPORT
"US Debt Crisis"

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UNDERSTANDING GOVERNMENT DEBT CRISES

A government debt crisis occurs when a country is unable to meet its debt obligations or is facing serious difficulty in doing so. In any nation, the government funds its expenditure fundamentally by raising cash through taxation. When tax revenues are deemed to be insufficient, governments may decide to issue debt which is primarily done through open market operations by the sale of government treasury bills.

Governments with an established track record of re-paying back their debt, healthy financial markets and a small debt exposure do not face difficulties in finding investors willing to lend; this is however not the case for governments which are exposed to a large amount of debt. In this instance, investors begin demanding a higher interest rate on the treasury bill, acting as a risk-premium to compensate for the higher level of default risk beard. This subsequently increases the cost of borrowing for the government and as investor confidence deteriorates the government may experience difficulties in rolling over its existing debt and may eventually lead to default and the start of a debt crisis.

The debt limit is defined by the US Department of the Treasury as the "the total amount of money that the United States government is authorized to borrow to meet its existing legal obligations".

Theoretically, a government debt crisis can be analyzed or predicted through the lenses of sovereign default models, which assess the risk and likelihood of a government failing to repay its debt. A fundamental concept in this literature is the debt-to-GDP ratio, which is set to measure a country's debt level relative to its output. A higher ratio can indicate a higher risk of a debt crisis occurring as it signals a greater burden of debt relative to the economy's size. Similarly, the primary balance is deemed to be another critical concept in debt crises and is measured as the government's fiscal balance excluding interest payments on its debt. This is utilized to identify whether a nation is running a surplus or deficit before accounting for interest expenses. A prolonged primary deficit can contribute to the accumulation of debt and increase the risk of a future debt crisis.

The concept of debt sustainability builds upon the debt-to-GDP ratio. It involves assessing whether a government can continue servicing its debt without an unsustainable increase in debt-to-GDP ratio. Debt sustainability can be mathematically expressed as the following equation:

$$\frac{Debt}{GDP} = \frac{(r - g) \times Debt}{GDP} + \frac{Primary\ Balance}{GDP}$$

The sustainability of government debt may also be evaluated using the concept of solvency. Solvency refers to the government's ability to meet long-term obligations and is assessed by comparing the present value of future primary surpluses. If a government can generate enough surpluses to cover its debt over time it is considered to be solvent.

On the other hand, liquidity refers to the government's ability to secure financing to meet short-term obligations. A lack of liquidity may signify a government's inability to roll-over debt or finance deficits and may lead to a crisis even if the government is solvent.

The dynamic interaction between liquidity and solvency forms the basis of many theoretical frameworks for understanding government debt crises. Empirically, the 2008 financial crisis appears to have been a liquidity crisis, and not just a solvency crisis.

The history of us debt - 20th & 21th century

In the 1920s the federal budget surplus reached over $650 million and total debt amounted to approximately $17 billion. As activity began to decline in the Q2 of 1929 and the stock market crashed in October, the beginning of a period of great depression was evident. As a result of the public work efforts made to offset financial hardship, the budget deficit reached nearly $3 billion in 1933, despite the efforts made by President Hoover to try and balance the deficit budget. Economists at the time drew on the research of Keynes where a fiscal depression was as great of a national emergency as a war and thus the government should borrow money, through deficits, to stimulate the economy.

The sharp rise of petroleum prices due to the OPEC-engineered shortage of 1973 saw an increase in inflation and found an annual deficit of $14.3 billion. By the end of the decade the total federal debt stood at $914 billion, with also a drastic increase in the amount of public debt securities owned by foreign governments.

Between the 1980s and 1990s, the US debt more than tripled, at approximately $3.3 trillion, as the government borrowed money to fund military expenses and neoliberalist policies. Throughout this period Americans saw being "in debt" as a new way of life as they began relying on jumbo mortgages and credit cards.

As the new millennium knocked on the door the president of the United States at the time, George W. Bush, instituted tax cuts and refunds to counter the effects of economic shocks. Consequently, the national deficit grew and with it the level of debt.

The US experienced another debt crisis in 2008, during the great recession, this time created by the Democrats and Republicans fighting over ways to curb the debt. While Democrats blamed the bush tax cuts and the 2008 financial crisis and took a Keynesian economic theory approach, where they advocated increased stimulus spending to get the United States to outgrow its way out of the debt crisis like post World War II, the Republicans advocated for further tax cuts, supporting a supply-side economic theory. As both sides lost focus and began debating on how much to cut spending, instead of taking aggressive action to restore consumer and business confidence, the debt crisis compounded.

In 2011 the Congress delayed the approval of the fiscal budget almost causing a government shutdown. This crisis then escalated as the S&P lowered its outlook to "negative" on whether the US would pay back its debt. The US was then forced to raise its debt ceiling to over $6 trillion when the S&P effectively lowered the U.S. credit rating from AAA to AA+. This debt crisis moved into 2012 and as uncertainty about the fiscal cliff prevailed the economy suffered. Finally, the approval of the Senate Bill allowed for the avoidance of the 2013 fiscal cliff and stabilization of debt.

The pandemic saw another evident impact on the level of US debt. During 2020, the US saw expenditure levels being 91% over the collected tax revenue which subsequently created a $3.1 trillion deficit for the fiscal year with the federal debt growing to $26.9 trillion.

The post-pandemic years saw a soar in national debt as a result of the government having to borrow more money to pay for additional government spending. In 2023, the debt limit was once again reached, at $31.4 trillion, and brought the country to the brink of default. After months of countless debates, lawmakers have voted for the suspension of the US debt ceiling until January 2025.

The repercussions of reaching the debt ceiling are severe and include a downgrade by rating agencies, drop in consumer confidence and increased borrowing costs which could tip the economy into an immediate recession. Since the 1960s, the Congress has increased the debt ceiling 78 times with the most recent being, in fact, the 2023 debt ceiling suspension.

The role of us debt in global modern finance

As evidenced, the history of the U.S. national debt, which is characterized by policy changes and economic crises, has necessitated large borrowing, and this has been done mostly through the U.S. Treasuries. US Treasuries are the most traded securities in the world. They are the most liquid and widely accepted securities, both for short-term Treasury notes and for medium and long-term Treasury bonds. Being so liquid and instantly exchangeable, they are considered as a cash equivalent for their characteristic of being immediately convertible into currency.

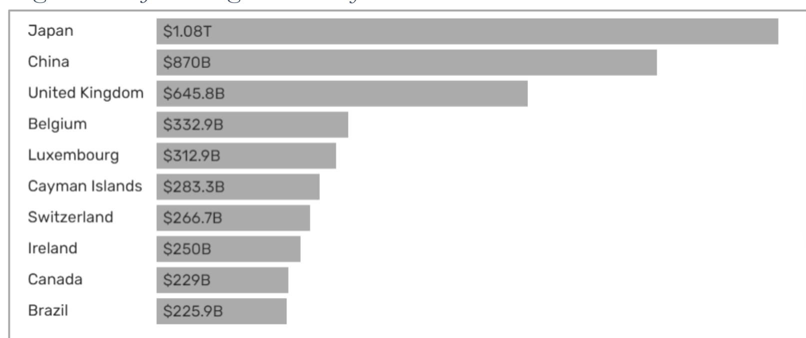
They are the benchmark for all other issuances of debt, because they are AA-rated (the highest grade possible, for which default probability is the lowest: they are considered to be "risk free"), so it's possible to compare how the market feels about other investments by comparing their yield to the yield of US bonds (the difference in risk yield of US Treasuries perceived between risk-free US debt, and another security, is called *spread*); because they're issued so frequently, they provide an accurate tracking of the evolution of interest rates and the general sentiment of the market even over very short periods.

Not only the US debt serves its main role of providing financing to the US government and providing a liquid, safe and interest-yielding security to investors, but it also acts as thermometer for the rest of the money and capital market: we can say that it has both a practical role and an instrumental role. It is, indeed, the cornerstone upon which the rest of the trades and evaluations revolve around, the foundation from which modern finance rises and articulates in all sorts of entanglements and operations.

Traditionally, US debt served as a safe haven in times of economic uncertainty and recessions: turbulent periods still saw unwavering investors' confidence in the reliability of the United States and its ability to honor its obligations, its Treasuries a "beacon in the dark" where to seek repair from other unforeseeable risks. Its possession and acquisition is widespread across the world, and in fact, a growing portion of this debt is owned by foreign entities such as banks, governments and central banks; reliance on foreigners is a possible source of concern for Americans. Around a quarter of the total of US public debt is held by foreigners: in the first place we have long-time US' ally Japan, holding

around $1.1 trillion, and following the second largest foreign owner of US debt is China, in an amount near $900 billion; the third spot is taken by the UK at $650 bn, and other nations follow with amounts ranging from $300 bn downwards. In particular, China's position could be considered worrisome: the second-largest economic power of the world has hoarded US securities in the last 20 years thanks to its rich trade surplus, and now that it rivals the US for its dominant position in the world economy, its portion of US debt could represent leverage over the American solvency.

Figure 1: Major Foreign Holders of US Public Debt



Source: Treasure Department

The US has the power to freeze assets of a hostile nation denomination. With US government set to run persistent deficits in the following years combined with interest rates supposedly staying at highest levels in the last 15 years (as of Nov 27th, 10-year yields are at 4.39%, after having hit a peak of 4.98% in October), foreign investors may begin to worry about the sustainability of these assets they hold; it a riskier situation is indubitably building up for the stability of US debt at an international level.

Still, the Federal Reserve has the ability to meet any rising any unexpected debt obligations by increasing the money supply, however this would be considered a last resort option because it would diminish American purchasing power as a result of currency devaluation, and it would hurt the Government's credibility.

Recently, the rapid rise in interest rates from record-low levels has left many holders of long-term obligations in trouble. Not only foreign investors have been discontented with the loss of value of their bonds, but especially some domestic banks have felt the hit, as witnessed first-hand by the collapse of the VC-specialized Silicon Valley Bank and the following failure of Signature and First Republic, the second largest bank failure in history.

The brief but intense turmoil experienced in those days, caused by the devaluation of long-term, low-interest rate carrying bonds by these banks was followed after a few months by the US debt ceiling stalemate, brought to the attention of investors the potential instability of what once used to be the safest asset by definition, backed by the world's reserve currency.

The dollar: the world's reserve currency

The dollar is the world's reserve currency since it became the predominant powerhouse and main trading partner for the rest of the world after WWII. This role was formalized at the Bretton Woods conference in 1944 with the establishment of a system centered around the dollar, and it remained dollar-dominated even after President Nixon recused the fixed convertibility of the currency with gold in 1971. This prominent status of the dollar on the global financial system means that nowadays, 90% of international transactions are settled in USD (Bank for International Settlements); and 60% of central bank reserves around the world are made up of it, followed by gold and other currencies (Euro, Yen, Pound, etc.).

Since WWII, most countries have demanded large quantities of dollar-denominated assets, with once again US bonds being the most requested holding because of their availability, stability from extreme fluctuations in value and the perceived strength of the American government. Very often, Central Banks and other institutions don't keep all of their reserves in cash, but they buy cash equivalents that earn some positive return. Constant demand for these types of assets meant that interest rates on these securities have remained low, and especially since the 2000s, US debt has ballooned, reaching an all-time high in 2022 of 129% of GDP.

As we progress into a future where US global supremacy begins to be challenged by China and by the increasing misalignment of regional powers from American interests/by growing resentment of nations across the globe towards America, alternative currencies may chip away substantial shares of global dollar-denominated trade. China and its BRICS group are leaders of the de-dollarization movement, replacing (or at least, countering it) with alternatives such as the Renminbi; of particular significance are the recent deals signed by China with Saudi Arabia and Brazil that allow settlement of trade payments in RMB.

Finally, foreign nations have been scared by Western retaliation against Russia following its invasion of Ukraine, when the USA and the EU have reacted by freezing Russian dollar-denominated assets, and have started to worry if they might receive the same treatment, were they to oppose Western policies, although American and European officials have mildly admitted how they understood the repercussions of that operation and signaled a lower probability of it happening again.

As of today, the supremacy of the currency doesn't appear to be threatened, and demand for US bonds shouldn't wane suddenly, but it must be a concern going into the future: if the position of the dollar in global finance changes, important repercussions will hit bonds.

Macroeconomic outlook of us debt

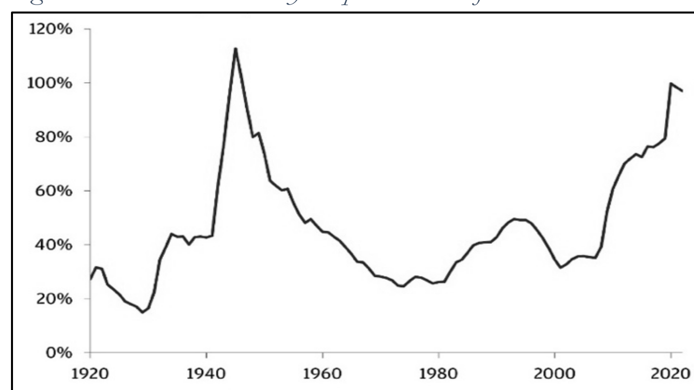
To start our analysis on the macro-outlook of the US debt, it is fundamental to delve into its trend over recent years and into the actual macroeconomic and financial situation.

As of today, the public debt outstanding amounts at about $33 trillion, among which $6.8 trillion are held by the government internally (i.e., intragovernmental), while the remaining $26.3 trillion is the

quantity held by the public, which represents nearly the 100% of the total GDP. Since the debt held by the public is considered the most consistent and impactful measure, our primary focus will be on this portion.

Figure 2 shows the trend so far, where the national debt (over GDP)[1] has increased consistently starting from the 2000s, having many spikes attributed to crucial events, with the Great Financial Crisis or the COVID-19 pandemic being notable examples. Specifically, from 2019 to 2021, the public spending surged by 50% in response to the substantial demand for services and welfare programs arising from the latter event. As illustrated in the graph, the ratio has now approached levels reminiscent of the post-war period when the debt stood at approximately 120% of the GDP.

Figure 2: Federal debt held by the public as % of GDP



Source: CBO, J.P. Morgan Asset Management (June 2023)

During the pandemic, the emergency was the primary focus and as many economists asserted, 2020 was not the appropriate time to be concerned about the debt. But even before that, the prevailing perception was that this heightened spending was sustainable, primarily owing to the prolonged period of low interest rates. The low-interest environment translated to a diminished risk of default for the US government.

However, the current scenario has changed, with the rising federal funds rates to fight historically high inflation, intensifying the existing pressure on the affordability of US debt.

Indeed, as of October 2023, the 10-year Treasury yields reached 5%, but this is not the only force that has pushed the yield curve upward.

According to Andrew Hunter, the deputy chief U.S. economist at Capital Economics, investors are seeking higher returns when lending to the U.S. government due to an increased perception of risk. This deterioration in the investors' expectations is given also by the fact that Moody's is the sole major

[1] Note that the ratio Debt/GDP is a good indicator as it points out the capacity of the country to repay its debt

rating agency maintaining a triple-A credit rating for the United States. In contrast, Fitch, in August, declared a downgrade for the US, shifting its rating from AAA to AA+.

The downgrade of the United States' credit rating indicates an expected deterioration in its fiscal health over the next three years. This expectation is rooted in various factors, including a significant and growing burden of general government debt. Additionally, there is a diminished confidence in fiscal management due to weakened governance, characterized by a lack of effectiveness and stability in decision-making processes and an inability to effectively address economic challenges.

The future of us debt: a forecast

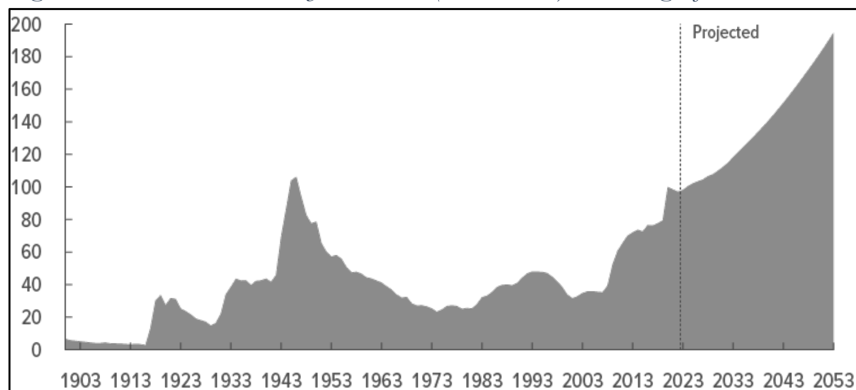
The future trajectory of U.S. debt involves the consideration of various factors. Projections indicate that the nation's debt is poised to continue its upward trend in the coming years. This pattern is primarily driven by a persistent gap between government expenditures and revenues, leading to ongoing budget deficits. Furthermore, the escalating portion of the federal budget dedicated to interest payments on the existing debt exacerbates fiscal challenges.

The complexity of this outlook is heightened by international factors, including the global economic environment and the role of the U.S. dollar as the world's primary reserve currency. These external dynamics contribute to the intricate landscape of U.S. debt dynamics.

Regarding the short run outlook, the Financial Times says that in 2024, the United States will likely go through a recession. Experts believe the economic slowdown will be more moderate than severe, and the central bank's efforts to control interest rates are starting to affect the economy, making people more interested in safe investments like government bonds, also confirmed by Fitch in its Rating action commentary.

In the long run, according to the Congressional Budget Office (CBO) projection, the portion of national debt over the total GDP will increase from 98% registered in 2023 to 118% in 2033, with an average annual increase of 2%. CBO adds that this trend will persist even beyond 2033, bringing the debt to reach a level of 195% of the GDP by the 2053 (Figure 3).

Figure 3: Federal Debt Held by the Public (1900-2053). Percentage of Gross Domestic Product



Source: CBO projections

In conclusion, the analysis of the macro-outlook of the U.S. debt reveals a significant and growing concern on the trajectory of the US debt and it highlight the complex and challenging landscape ahead, emphasizing the importance of strategic fiscal policies, economic management, and global economic factors in shaping the trajectory of U.S. debt in the years to come.

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