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The Relationship Between Continued Fed Rate Hikes and the Risk of US Government Debt

Anjie Liu[1,a,*]

[1]*Shandong University of Finance and Economics, Shungeng Lu, Shizhong District, Jinan, China*
a. 1621544043@qq.com
**corresponding author*

Abstract: The management of interest rates by central banks is a critical aspect of economic policy, and the Federal Reserve (the Fed) holds a central role in guiding the monetary course of the United States. Over the years, the Fed has utilized interest rate adjustments to achieve diverse objectives, from controlling inflation to promoting economic growth. However, the ongoing debate surrounding the Fed's persistent interest rate hikes centers on the potential risks that may arise in relation to the US government debt. This essay delves into the implications of these interest rate hikes on the risk associated with the US government's debt. By examining the impact of increased interest rates on the cost of borrowing, market dynamics, and the challenges of debt refinancing, we can gain insights into the potential ramifications on the fiscal health of the nation. In addition, we will explore counterarguments and potential mitigating measures put forth by policymakers to balance the objectives of economic stability and debt sustainability.

Keywords: fed rate, interest rate, government debt

1. Introduction

The Federal Reserve is the nation's central banking institution. It was founded in 1913 with the intention of giving the country a stable monetary and financial system. Conducting monetary policy, overseeing and controlling banks, and providing financial services to banks and the US government are all duties of the Federal Reserve [1]. Setting the federal funds rate, a benchmark interest rate, is one of its main instruments. The Federal Reserve's Federal Open Market Committee (FOMC) is in charge of choosing the federal funds rate. The Federal Reserve (Fed) controls short-term interest rates through the federal funds rate [2], which has an impact on the cost of borrowing for individuals, companies, and the government [3].

In July 2023, the Federal Open Market Committee (FOMC) hiked interest rates by a quarter-point, raising the new target range for their main benchmark interest rate to 5.25-5.50 percent. It is the 11th overall hike since the start of its new higher-rate period in March 2022, and it comes after a hiatus in June [4]. The analysis in this essay indicates that the Fed's ongoing interest rate rises with such ferocity and speed would greatly increase the risk of US government debt while also making coordination of US monetary and fiscal policy more difficult.

There is no such thing as a free lunch in the world, and each policy option involves costs and trade-offs, including rising interest rates. The Fed's ongoing interest rate rises at such a dramatic and highly rapid pace would not only increase the danger of US government debt, but will also make

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coordination of US monetary and fiscal policy more difficult. Rates are already far into the region that US central bankers believe is squeezing the economy. Prices rose three times quicker last summer, indicating that inflation is slowing and that part of the Fed's antidote to increased prices is working. However, certain indices of inflation are far more tenacious, notably in the services and housing sectors. This is primarily due to the employment market's resilience, which has only moderately slowed since the Fed began hiking interest rates.

2. U.S. Government Debt Risk Profile Before Interest Rate Hike

The federal government of the United States' total public debt has been increasing in recent years (Graph 1). The federal government of the United States owed 28.4 trillion dollars as of the end of the 2021 fiscal year, much more than the 22.7 trillion at the end of the previous fiscal year, according to data from the U.S. Department of the Treasury (the U.S. fiscal year runs from October 1 of the previous year to September 30 of the current year), increasing of $5.7 trillion over the two-year period of fiscal 2020 and fiscal 2021. The public debt to gross domestic product (GDP) ratio for the federal government of the United States increased from 107.8% at the end of 2019 to 126.1% at the end of 2020. They were all far higher above the 60% warning line, despite a minor decline to 122.9% by the end of 2021 [5].

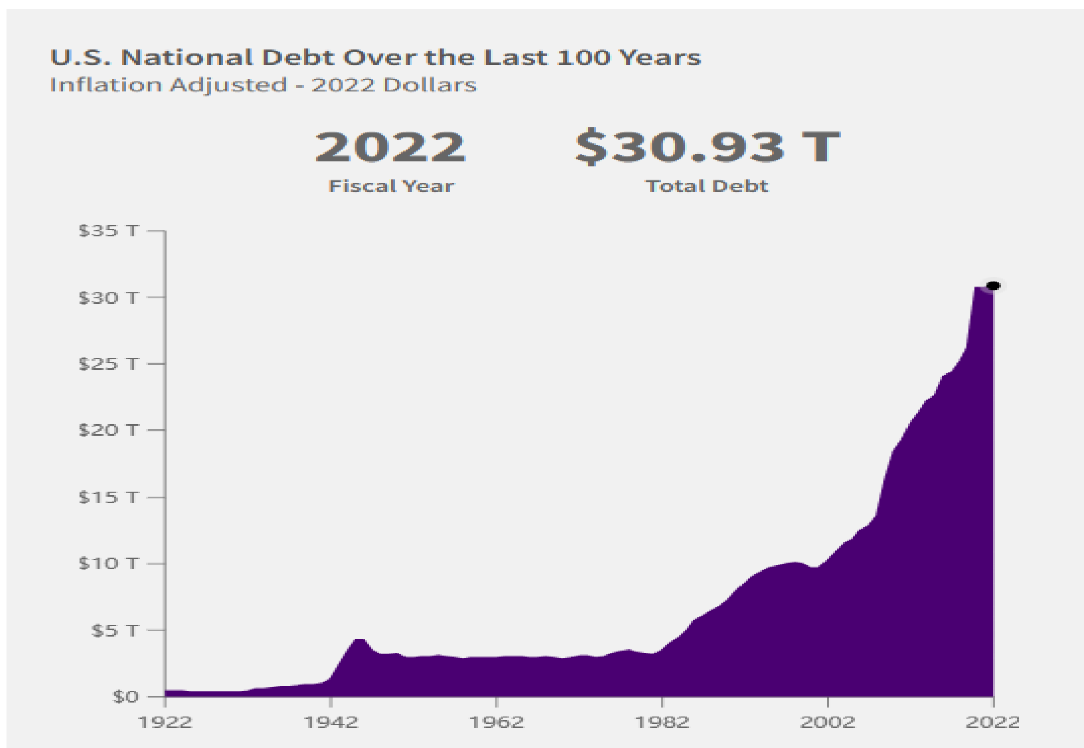

Figure 1: Graph 1: Retrieved from: https://fiscaldata.treasury.gov/americas-finance-guide/national-debt/.

According to the structure of the outstanding balance of federal government debt, U.S. medium-term treasury bonds, long-term treasury bonds, inflation-protected securities (Treasury Inflation-Protected Securities, or TIPS), and floating rate notes (Floating Rate Notes, or FRN) have all increased significantly in value in fiscal years 2020 and 2021, while the short-term U.S. national debt has increased significantly in fiscal year 2020, from $2.4 trillion 1.3 trillion US dollars, to be exact [6].

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The US federal government's balance of public debt and the ratio of the balance of public debt to GDP have increased significantly from their initial high levels since the start of the new crown pneumonia pandemic. plan. Total federal spending in the United States increased significantly from $4.5 trillion in fiscal year 2019 to $6.6 trillion in fiscal year 2020. The entire amount spent by the federal government will reach a new high in fiscal year 2021, reaching $6.8 trillion [6]. With the substantial increase in fiscal expenditures of the US federal government, the scale of issuance of US treasury bonds has also increased significantly, especially short-term treasury bonds. The issuance of short-term U.S. Treasury bonds in fiscal year 2020 increased by as much as $6.5 trillion compared to the previous fiscal year, and decreased slightly in fiscal year 2021, but still exceeded $15 trillion. Negotiable coupon-bearing treasury bonds such as intermediate-term treasury bonds and long-term U.S. Treasury bonds increased by only about $500 billion year-on-year in fiscal year 2020, but increased by a substantial $1.6 trillion in fiscal year 2021 [7].

3. Impacts of Interest Rates Hike on US Government Debt

The management of the US government's debt is significantly impacted by interest rate choices made by the Federal Reserve [8]. The cost of borrowing for the US government is directly impacted by changes in the central bank's interest rates. This section examines the numerous ways that the US government's debt can be impacted by the Federal Reserve's interest rate increases and gives research and examples to highlight these effects.

The most direct impact is that the US government pays more interest on its outstanding debt as a direct result of the Federal Reserve's interest rate increases, which raise the cost of borrowing for the US government. Interest rates on government debt instruments grow as a result of rising yields on newly issued Treasury securities and the federal funds rate. The average interest rate on the outstanding marketable public debt, as of September 2021, was roughly 1.76%, according to information from the US Treasury Department. The interest rate on freshly issued Treasury notes may rise to around 2.76% if the Federal Reserve increased interest rates by one percentage point [9]. The government's financial burden would increase as a result of the drastically increased interest payments on its debt.

The second impact is about market volatility. The Federal Reserve may raise interest rates, which might cause market turbulence and uncertainty. Investors reevaluate their investment strategy and reallocate their portfolios when the central bank raises interest rates, which might affect the market for US government debt. The prices and yields of Treasury securities may fluctuate as a result of this change in investor behavior. Interest rates spiked when the Federal Reserve suggested ending its bond-buying program during the 2013 "taper tantrum" [10]. Investors sold off Treasury securities as a result of the abrupt rate increase's impact on the market, which caused severe market volatility. In just a few months, 10-year Treasury note yields increased by more than 1%, showing both increased apprehension on the part of investors and a change in their attitude towards government debt. A study conducted by the Federal Reserve Bank of New York examined the impact of monetary policy surprises on financial markets. The researchers found that unexpected changes in interest rates, such as those during the taper tantrum, can lead to significant volatility in Treasury yields, affecting the government's borrowing costs [11].

Regularly, the US government restructures its debt by issuing new bonds as the old ones come to maturity. Refinancing becomes more expensive with higher interest rates, thus increasing the cost of debt service for the government. According to the Federal Reserve Bank of St. Louis [9], the Federal Reserve started raising interest rates repeatedly in 2018. As a consequence, from around 1.88% in 2017 to about 2.45% in 2018, the average interest rate on the outstanding marketable public debt increased. The US Treasury faced difficulties in refinancing maturing debt due to this increased trend in interest rates since it had to issue new bonds at higher rates. The effect of interest rate changes on

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the refinancing of US government debt was examined in a study that was published in the Journal of Finance. According to the research [12], increased interest rates might result in greater debt-servicing expenses throughout the refinancing process, thus putting a burden on the government's resources.

The federal budget and the nation's debt-to-GDP ratio may be impacted by interest rate increases by the Federal Reserve. The federal budget is increasingly committed to debt servicing as interest payments on the national debt rise, possibly displacing investment on other crucial sectors like infrastructure, education, and healthcare. A simulation analysis was performed by the Congressional Budget Office (CBO) to see how higher interest rates might affect the federal budget [13]. According to the report, increased interest rates might cause a considerable rise in the cost of servicing the federal debt, which would eventually result in larger budget deficits and a greater debt-to-GDP ratio (CBO).

Increases in interest rates by the Federal Reserve may lessen foreign investors' interest in US Treasury securities. Foreign investors may find US government debt less tempting if interest rates rise in comparison to alternative investment options in their home nations or overseas. Foreign investors' demand for US Treasury securities may decline as a result, which might push up yields and borrowing costs for the US government. The effect of US interest rates on capital flows to developing economies was investigated in a research by the International Monetary Fund (IMF) [14]. According to the study, shifts in US interest rates might have an impact on the flow of capital to developing economies and therefore, on the demand for US Treasury securities among international investors (IMF) [15].

The US government's ability to manage its debt is significantly impacted by interest rate increases by the Federal Reserve. Interest rate changes may have a negative influence on the federal budget, market volatility, increased interest payments on outstanding debt, debt refinancing difficulties, and foreign reactions to US Treasury securities. To maintain the sustainability of the national debt and general economic stability, policymakers must carefully take these issues into account when determining monetary policy.

4. Counterarguments and Mitigation

The Federal Reserve's interest rate hikes have been subject to counterarguments regarding their potential impact on US government debt [16]. Critics argue that these rate hikes can exacerbate the risks associated with the national debt. One concern is the increased interest payments resulting from higher interest rates. As the cost of servicing the debt rises, a larger share of the federal budget is allocated to interest payments, potentially crowding out funding for critical programs and public services.

Proponents of interest rate hikes respond to this counterargument by stating that the negative impact of increased interest payments can be offset by higher tax revenues generated from an expanding economy. Studies, such as one conducted by the IMF, have shown that a decrease in the debt-to-GDP ratio resulting from lower deficits and economic growth could more than compensate for the increase in interest payments, leading to improved fiscal sustainability [14].

Another counterargument revolves around market volatility and the potential reduced demand for US government debt [17]. As interest rates rise, investors may seek higher returns in alternative assets, which could diminish the demand for Treasury securities. In response, proponents of interest rate hikes point out that market volatility is often short-lived and that investor sentiment can stabilize as they adjust to changing economic conditions. The Federal Reserve's forward guidance and gradual rate hikes allow investors to anticipate policy changes, leading to more informed investment decisions.

To mitigate the potential negative impact of interest rate hikes, the Federal Reserve adopts a gradual and transparent approach. Policymakers communicate their intentions clearly to the public and financial markets, allowing them to anticipate and adjust to the changes in monetary policy. This

approach minimizes abrupt market reactions, helping to reduce market volatility and its potential consequences on the government's debt dynamics.

Furthermore, policymakers can implement measures to promote fiscal discipline and reduce the reliance on debt financing. By adopting responsible fiscal policies, such as controlling government spending and promoting economic growth, the US government can improve its debt-to-GDP ratio, making it more resilient to rising interest rates. Studies have shown that lower deficits and prudent fiscal management can have a positive impact on the government's long-term fiscal health.

To address concerns about market volatility and maintain demand for US government debt, the US Treasury has successfully managed a diversified investor base. By attracting a wide range of domestic and international investors, the demand for Treasury securities remains robust even during periods of interest rate adjustments. This diversification spreads risk across different investors, reducing the potential impact of any single group's shifting investment preferences.

Clear communication from the Federal Reserve regarding its policy decisions and economic outlook plays a crucial role in managing market expectations. The Federal Open Market Committee's statements, press conferences, and minutes provide valuable insights into the central bank's thinking, helping investors to gauge the future direction of interest rates and make informed investment choices.

Counterarguments and potential mitigation strategies are essential considerations in the formulation of monetary policy, particularly when it comes to the Federal Reserve's interest rate hikes and their impact on US government debt. While critics raise concerns about increased interest payments and market volatility, proponents offer counterarguments and propose measures to address these concerns effectively. Balancing the objectives of controlling inflation, promoting economic stability, and managing the national debt requires a careful and nuanced approach from policymakers. By leveraging counterarguments and employing appropriate mitigation strategies, the Federal Reserve can foster a resilient and sustainable economic environment, reducing the risk associated with interest rate hikes and US government debt.

5. Conclusion

In conclusion, the dynamics of the US government's debt are significantly impacted by the Federal Reserve's interest rate increases. The government budget is put under additional strain due to the rise in interest payments on existing debt, which may have an impact on how much money is allocated for important expenditures and programs. Additionally, market volatility brought on by interest rate changes can destabilize investor sentiment, causing changes in the demand for US government debt and having an effect on Treasury bond rates. Additionally, higher interest rates make it more difficult to refinance maturing debt, which raises the cost of debt payment for the government.

Policymakers must find a careful balance between managing the national debt load and controlling inflation in order to successfully traverse these problems. Effective communication and a careful, progressive approach to interest rate changes can lessen market shocks and provide investors and policymakers enough time to respond to shifting economic conditions. In addition, appropriate fiscal policies should be implemented by policymakers to improve debt sustainability and lessen reliance on debt financing.

A comprehensive approach that recognizes the interdependence of monetary policy, interest rates, and the management of the US government's debt is necessary to protect the country's fiscal health and economic stability. The Federal Reserve may aid in promoting a robust and sustainable economy, thereby lowering the risk associated with US government debt, by actively monitoring economic indicators and properly adjusting interest rate policy. Additionally, in order to preserve long-term economic sustainability and secure the country's financial destiny for future generations, officials must encourage fiscal responsibility and budgetary discipline.

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