Public Debt Management: Strategies for Pruning the Public Debt in India

*1Dr. Rajeev Kumar

*1 Associate Professor, Department of Economics, Shri Ram College of Commerce, University of Delhi, Delhi, India.

Abstract

Sustainable levels of fiscal deficit and debt are crucial for the economic stability and predictable economic environment in a country. Excessive government debt and persistent fiscal deficits can have adverse effects such as higher interest payments, crowding out private investment, inflationary pressures, and reduced fiscal flexibility in times of economic downturns. Governments must strive to maintain fiscal sustainability through prudent fiscal policies, such as controlling spending, increasing revenues, promoting economic growth, and implementing structural reforms to improve fiscal efficiency. Indian government has taken a number of measures to lower the fiscal deficit and public debt. In order to lower the fiscal deficit, the government has prioritized fiscal consolidation. By limiting government spending and boosting revenue generation, the government has set goals to gradually reduce the deficit. As required by the Fiscal Responsibility and Budget Management (FRBM) Act, both the central government and state governments have been putting into practice a fiscal consolidation plan to gradually reduce the fiscal deficit. Further, to improve debt management procedures also, the government has taken action. This paper analyses trends in the government debt and deficits, efforts of the government towards fiscal prudence and fiscal consolidation and to develop a suitable strategy to prune burgeoning size of the public debt to sustainable level.

Keywords: Public debt, fiscal deficit, debt sustainability, FRBM Act

Introduction

High public debt and fiscal deficit have emerged as serious economic threat to a large number of countries in the post COVID 19 pandemic year. Excessive government debt and persistent fiscal deficits can have adverse effects such as higher interest payments, crowding out private investment, inflationary pressures, and reduced fiscal flexibility in times of economic downturns. Governments strive to maintain fiscal sustainability through prudent fiscal policies, such as controlling spending, increasing revenues, promoting economic growth, and implementing structural reforms to improve fiscal efficiency.

In India, general government debt refers to the indebtedness of the Government sector which includes Central government, State Governments and UTs with legislature. This figure is arrived at by consolidating the liabilities of the Central Government, State Governments and UTs with legislature and netting out inter-governmental transactions viz.,

- i). Investment in T-Bills (14-day ITBs and Auction Treasury Bills (91/182/364-day T-Bills) by States/UTs with legislature which represents lending by States/UTs to the Centre; and
- ii). Centre's loans to States and UTs. Thus, public debt of India includes both central government debt and state government debt.

It is the cumulative amount of money borrowed by the government from various sources, including domestic and foreign creditors (Status paper on government debt, 2020-21).

A number of variables, including governmental spending, borrowing needs, current economic conditions, and governmental policies, have an impact on the stock of public debt. In 2021, India's public debt reached a high of 90% of GDP. The central government is responsible for the majority of the public debt, and the states are responsible for a smaller portion. The Indian government has put in place a number of measures to control its public debt, such as fiscal consolidation plans, tax reforms, and economic growth-promoting measures. The goal of this paper is to analyze trends in government debt and deficits, government efforts towards fiscal restraint and fiscal consolidation, and to develop a suitable plan to reduce the public debt's ballooning size to a manageable level.

Conceptual Framework

Fiscal space, fiscal deficit, public debt, and revenue deficit are commonly used concepts related to the financial management and fiscal health of a government. A government's capacity to increase revenue or borrow money without jeopardizing the ability to service its debt is known as its fiscal space. Studies highlight the significance of keeping enough fiscal room to deal with unforeseen circumstances, economic shocks, and long-term fiscal challenges. The ability to adapt to economic downturns is made possible by creating fiscal space during times of prosperity. The difference between a government's total expenditures and its total revenue during a particular fiscal year is referred to as the fiscal deficit. It serves as a gauge for how much borrowing a government will need to do in order to pay for its expenses. When the government spends

more than it receives in taxes, tariffs, and other sources of income, there is a fiscal deficit. Governments frequently incur debt in order to finance their fiscal deficits, adding to the total public debt. Public debt is the total sum of money that a government owes to domestic and international creditors. It is the gradual buildup of government debt that is used to pay for budget deficits or other government expenses. Bonds, treasury bills, and other financial instruments are issued by the governments to raise loans. Individuals, financial institutions and other governments buy these instruments and lend to government. Commonly, public debt is expressed as a percentage of GDP.

The difference between a government's total revenue receipts and its total revenue expenditures is known as the revenue deficit. It shows that the government is spending more money than it is bringing in from its usual sources of income on revenue items. Capital expenditures, which are used to fund investments in infrastructure and development projects, are not included in the revenue deficit. Fiscal deficits are a result of revenue shortfalls, which makes borrowing by the government more necessary.

Fiscal deficits that continue over time are frequently linked to high levels of public debt. Government borrowing to cover deficits can result in higher interest costs, lessened fiscal flexibility, and a potential for private investment to be stifled. The effect on macroeconomic factors depends on the size and sustainability of the debt as well as the capacity of the government to effectively manage it.

Review of Literature

In-depth study and analysis on the topic of government debt sustainability have been published in economic literature. However, due to variations in methodologies, data sources, and country-specific circumstances, findings and conclusions on the sustainability of government debt vary across studies. However, research consistently indicates that in order to maintain debt sustainability, fiscal consolidation, debt restructuring, expenditure reforms, and revenue-enhancing measures are frequently required. The key indicator of the sustainability of debt is frequently the debt-to-GDP ratio. According to research, the risk of fiscal sustainability is increased by a higher debt-to-GDP ratio. There is general agreement that economic growth and stability may be negatively impacted by a debt-to-GDP ratio that is higher than a predetermined level (typically between 60 and 90 percent depending on the country). Debt sustainability is greatly influenced by macroeconomic factors like inflation, interest rates, and economic growth. By raising tax revenues and lowering the debt-to-GDP ratio, higher economic growth can improve the dynamics of debt. On the other hand, slow growth and high interest rates can make it harder to pay off debt and thwart sustainability efforts.

Government debt typically consists of domestic and foreign debt. So, the literature on the sustainability of public debt suggests internal and external factors that are crucial for debt sustainability. Increased reliance on debt denominated in foreign currencies exposes governments to potential exchange rate risks. Sustainability requires careful debt management techniques and a diversified debt portfolio. The size of the public debt is significantly influenced by institutional factors like fiscal institutions and the effectiveness of governance. Better debt sustainability outcomes are related to strong fiscal institutions, transparency, accountability, and debt management practices. Maintaining low debt levels requires political commitment to sensible fiscal policies and long-term

planning. Literature also contends that, in the context of an open economy, external factors such as shocks from the outside and world economic conditions can have a significant impact on a nation's ability to service its debt. Debt dynamics and sustainability efforts may be impacted by exposure to risk factors such as price fluctuations, capital flows, and global financial crises.

Thus, we can see that research on the topic of debt sustainability has considered a variety of factors in order to highlight country-specific issues while reiterating a few common ones. According to the literature, the ideal policy mix varies depending on factors that are unique to each country.

Public Debt and Economic Growth

There is a great deal of discussion among economists about the connection between public debt and economic growth. The level and composition of debt, fiscal policy framework, and economic conditions of a nation are just a few of the variables that can affect how public debt affects economic growth. There may be a point at which public debt becomes harmful to economic growth. The empirical evidence generally shows that when the debt-to-GDP ratio exceeds a certain threshold, it tends to have a negative effect on longterm economic growth. High debt levels have been shown to reduce economic activity by reducing private investment, raising borrowing costs, and fostering uncertainty. Regarding its influence on economic growth, the composition of the public debt is also important. According to studies, nations with a higher proportion of external debt or debt denominated in foreign currencies may be more susceptible to risks like exchange rate fluctuations and global financial shocks. On the other hand, debt that is used to fund worthwhile investments, such as the expansion of infrastructure or human capital, can benefit long-term growth.

The fiscal policy framework in place determines how well public debt can affect economic growth. Sound fiscal practices, such as adhering to a strict budget, reducing fiscal deficits, and enacting structural reforms, can improve debt sustainability and foster economic expansion. On the other hand, unsustainable fiscal policies, wasteful resource allocation, and excessive government spending can impede economic growth. The general state of a nation's economy can have an impact on how public debt affects economic growth. High levels of public debt can limit fiscal flexibility and the ability to implement countercyclical policies during economic downturns or recessions. On the other hand, moderate debt levels may have less of an effect on growth during times of economic expansion.

It is difficult to determine the causal relationship between public debt and economic growth. Debt accumulation is a factor in both slow economic growth and high debt levels, which can both impede growth. Endogeneity problems also arise because economic growth itself can affect debt dynamics by boosting tax receipts and lowering borrowing requirements.

Public Debt and Inflation

There have been a lot of studies done on the connection between inflation and public debt. Inflation may result when governments monetize their debt by expanding the money supply. The size of the monetized debt, the credibility of the central bank, and the general macroeconomic environment are some of the variables that affect the timing and magnitude of the inflationary impact. There is conflicting evidence regarding the direct relationship between debt monetization and inflation, with some studies suggesting that it may, under certain conditions, contribute to inflationary pressures. High levels of public debt can raise questions about the future viability of the budget and raise inflation expectations. Investors may alter price-setting behavior and raise inflation if they believe that the government will eventually turn to inflationary measures to lessen the true burden of debt. Since debt levels and inflation expectations have a positive correlation in empirical studies, it is possible that public debt can indirectly affect inflation by affecting expectations.

The fiscal dominance is an important issue here. Fiscal dominance occurs when the central bank's monetary policy decisions are influenced by the government's fiscal policy choices, including the accumulation of debt. In these circumstances, the central bank might put the needs of the government for financing ahead of inflation control. As a result, monetary policy may be adjusted to accommodate an expansionary fiscal policy, which may result in inflationary pressures.

According to the Ricardian equivalence theory, people will alter their behavior as a result of anticipating future tax increases to pay off the national debt. This theory holds that if households save more to cover future tax obligations, rising public debt may not cause inflation. There is conflicting

empirical evidence regarding the relationship between public debt and inflation within the context of Ricardian equivalence, with some studies finding evidence that is consistent with the theory and others suggesting that it is not. Further, excessive public debt can have implications for exchange rates, as it can affect market perceptions, investor sentiment, and the overall economic stability of a country.

Global Public Debt Scenario

Post COVID19 pandemic, in the year 2021, the public debt levels increased sharply for most of the countries in the world. Public debt levels increased worldwide as governments implemented extensive fiscal stimulus measures to mitigate the economic impact of the pandemic. Governments incurred higher expenditures on healthcare, social safety nets, and economic support programs, while also experiencing a decline in tax revenues due to reduced economic activity. The debt-to-GDP ratios of many countries witnessed a substantial surge. In fact, several advanced economies and emerging market economies experienced a sharp increase in their debt ratios, some of them even surpassed their historically high levels. Table 1 and 2 show the most indebted Governments in the world (General Government Public Debt) in the year 2019 and 2021 respectively.

Table 1: Most Indebted Governments in the World (General Government Public Debt) in the Year 2019

S. No.	Country	Debt (% of GDP)	
1	Japan	236.3	
2	Venezuela	201.4	
3	Greece	185.6	
4	Italy	134.1	
5	Portugal	116.6	
6	United States	108.8	
7	Spain	98.3	
8	Belgium	97.7	
9	France	97.4	
10	Cyprus	91.1	
11	Canada	87.2	
12	Brazil	87.1	
13	United Kingdom	84.8	
14	Egypt	80.1	
15	Mongolia	79.2	
16	Montenegro	78.8	
17	Mauritius	77.7	
18	Yemen	76.5	
19	India	75.1	
20	El Salvador	71.3	

Source: IMF Statistics on Public Debt

Table 2: Most Indebted Governments in the World (General Government Public Debt) in the Year 2021

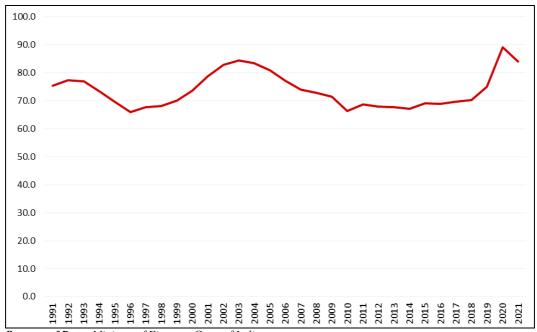
S. No.	Country	Debt (% of GDP)	
1	Japan	262.5	
2	Venezuela	240.5	
3	Greece	199.4	
4	Italy	150.8	
5	United States	128.1	
6	Portugal	127.4	
7	Spain	118.5	
8	Canada	112.9	
9	France	112.6	
10	Belgium	108.4	
11	United Kingdom	103.8	
12	Cyprus	103.6	
13	Mauritius	99.1	
14	Brazil	92.3	
15	Egypt	89.2	
16	Saint Vincent & the Grenadines	88.4	
17	Montenegro	86.6	
18	India	84.2	
19	Austria	82.9	
20	El Salvador	82.4	

Source: IMF Statistics on Public Debt

Comparative Public Debt Scenario for India and China

India's public debt to GDP ratio was around 90% in September 2021. This ratio (Figure 1) shows how large the debt is in comparison to the GDP of the nation. In 2021, it was predicted that China's public debt to GDP ratio would be around 65%. In comparison to India, China has maintained relatively lower levels of debt (Figure 2). India has been attempting to control its public debt and maintain fiscal viability. The government has put in place measures like fiscal consolidation initiatives, tax collection reforms, and economic growth-promoting policies. The government,

however, is committed to gradually lowering the debt-to-GDP ratio as the debt levels continue to be a serious concern. Over the past few decades, China's economy has grown quickly, which has aided in controlling its debt levels. To maintain debt sustainability, the government has put various reforms and measures in place. However, concerns over financial stability have been raised by China's overall debt levels, which include debt in both the public and private sectors. The public debt situation in China and India is impacted by a number of variables, including external conditions, economic growth, fiscal policies, and debt management plans.



Sources of Data: Ministry of Finance, Govt. of India

Fig 1: Trends in the Consolidated General Government Debt in India from 1991-2021 (Debt as a % of GDP)

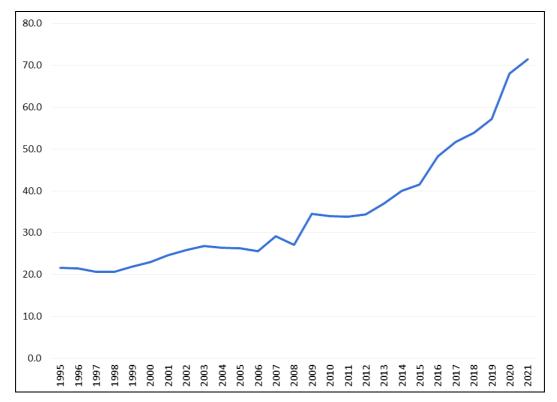
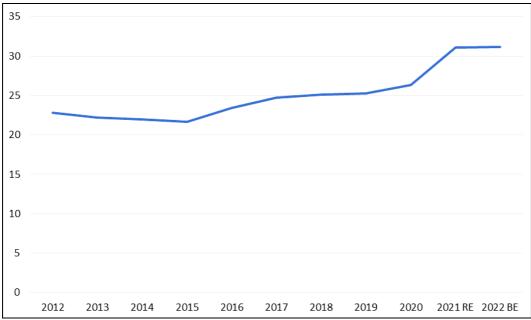


Fig 2: Trends in the General Government Debt in China from 1995-2021 (Debt as a % of GDP)



Source of Data: Ministry of Finance, Govt. of India

Fig 3: State/UTs Debt as a % of GSDP

State Wise Government Debt in India

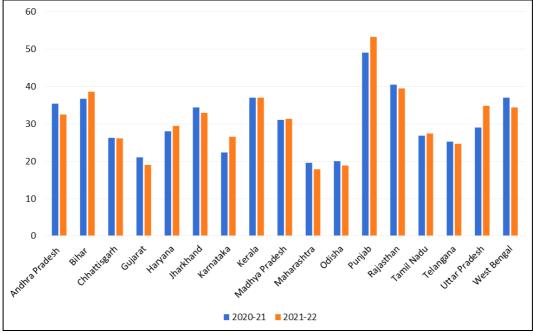
Relative to the central government, state governments are less indebted. This has happened after the implementation of the FRBM Act and incentivization for fiscal discipline in the Finance Commission formulae for horizontal devolution.

Table 3 and 4 presents the debt positions of major states for the year 2020-21 and 2021-22. In spite of the COVID 19 pandemic some states reduced their debt burden in terms of their respective Gross State Domestic Product.

Table 3: State Wise Liabilities (% of GSDP)

S. No.	State	2020-21	2021-22
1	Andhra Pradesh	35.5	32.5
2	Bihar	36.7	38.6
3	Chhattisgarh	26.3	26.2
4	Gujarat	21.0	19.0
5	Haryana	28.0	29.4
6	Jharkhand	34.4	33.0
7	Karnataka	22.4	26.6
8	Kerala	37.1	37.0
9	Madhya Pradesh	31.0	31.3
10	Maharashtra	19.6	17.9
11	Odisha	20.0	18.8
12	Punjab	49.1	53.3
13	Rajasthan	40.5	39.5
14	Tamil Nadu	26.9	27.4
15	Telangana	25.2	24.7
16	Uttar Pradesh	29.1	34.9
17	West Bengal	37.1	34.4

Source: State Finances: A Risk Analysis, RBI, 2022



Source of Data: State Finances: A Risk Analysis, RBI, 2022

Fig 4: State Wise Outstanding Liabilities (% of GSDP)

Impact of Public Debt on Indian Economy

It is necessary to conduct a thorough analysis of historical data and long-term trends in order to determine the effect of government debt on economic growth in India over the previous five decades. India experienced significant government economic intervention in the 1970s and 1980s, which was characterized by numerous public sector enterprises and tightly controlled industrial policies. The government heavily relied on borrowing to fund its social welfare and development plans. However, structural rigidities and high levels of government debt exacerbated macroeconomic imbalances, reduced private investment, and slowed economic growth.

India undertook significant economic reforms in the 1990s and early 2000s, including measures for fiscal consolidation, privatization, and liberalization. The fiscal reforms sought to

rationalize subsidies, lower government deficits, and boost private investment. Along with better fiscal management, these initiatives contributed to lower government debt-to-GDP ratios, higher investor confidence, and more robust economic growth. Given India's relatively closed capital account, the direct effects of the global financial crisis in 2008-2009 on its government debt were relatively limited. To counter this, the government adopted expansionary fiscal policies in the form of stimulus packages and higher borrowing levels. These actions, combined with consistent growth in public spending, caused a slow but steady rise in the amount owed by the government. Indian economy grew strongly following the Global Financial Crisis in the late 2000s, helped by factors like domestic consumption growth, demographic dividends, and the expansion of the services industry. India has struggled in recent years to control its level

of public debt. Government debt-to-GDP ratios have increased as a result of factors like slower GDP growth, higher spending, and revenue shortfalls. The COVID-19 pandemic placed an even greater strain on the economy, necessitating increased borrowing to pay for relief efforts and boost economic activity. The effect of these debt levels on economic growth will, however, depend on the success of structural reforms, the efficiency of fiscal management, and the capacity to produce long-term revenue sources.

A thorough evaluation of historical data and macroeconomic trends is necessary to analyze the effect of government debt on inflation in India over the past five decades. Due to a number of factors, including expansionary fiscal policies, public sector deficits, and supply-side restrictions, India experienced high levels of inflation during the 1970s and 1980s. To pay for its expenses, the government relied on deficit financing, which included borrowing from the central bank. The expansion of the money supply too quickly and the monetization of debt both increased inflationary pressures. The economic reforms of the 1990s sought to address macroeconomic imbalances, including inflation, in the 1990s and the early 2000s. Inflationary pressures were reduced by fiscal reforms such as lowering government deficits, regulating the expansion of the money supply, and pursuing a market-oriented strategy. Lower inflation rates were experienced during this time due to the emphasis on fiscal restraint and prudent monetary policies. India implemented expansive fiscal policies in the wake of the Global Financial Crisis to support economic expansion. These actions, which include increased borrowing and spending by the government, may have an inflationary impact. Food prices, energy prices, monetary policy decisions, and other domestic and international factors all had an impact on inflation levels during this time. India has recently experienced varying levels of inflation, which has been influenced by elements other than government debt. The dynamics of inflation have been significantly shaped by variables including changes in food prices, oil prices, monetary policy decisions, and structural limitations.

India experienced significant external imbalances and a managed exchange rate regime in the 1970s and 1980s, which has implications for the impact of public debt on the country's exchange rate. Limited foreign exchange reserves and high levels of government borrowing to pay for fiscal deficits put pressure on the exchange rate. Due to the significant amount of public debt, the government implemented a number of measures, such as import limitations and foreign exchange controls, to manage the exchange rate. Early 1990s economic reforms aimed to liberalize the Indian economy and transition it to a market-oriented exchange rate regime. The government concentrated on strengthening foreign exchange reserves, reducing external imbalances, and consolidating the budget during this time. These initiatives, combined with increased exchange rate flexibility, assisted in stabilizing the exchange rate and lowering the Indian economy's susceptibility to outside shocks. India went through a period of economic growth following the global financial crisis, but it also faced difficulties like increasing levels of public debt. Several variables, including capital flows, investor sentiment, and general economic conditions, had an impact on how government debt affected the exchange rate during this time. The exchange rate may be under pressure if the government borrows more money, particularly if this raises questions about the fiscal sustainability of the government. India has experienced exchange rate fluctuations recently that have

been influenced by factors other than government debt. Exchange rate movements have been significantly influenced by a variety of factors, including capital flows, macroeconomic conditions at home, investor sentiment abroad, and global economic trends.

Efforts undertaken by the Governments in India toward Fiscal Sustainability

The Indian government has taken a number of measures to lower the fiscal deficit and public debt. In order to lower the fiscal deficit, the government has prioritized fiscal consolidation. By limiting government spending and boosting revenue generation, the government has set goals to gradually reduce the deficit. The Goods and Services Tax (GST) was implemented with the intention of streamlining the tax code and improving tax collection. This reform has contributed to a larger tax base, a decrease in tax evasion, and an overall improvement in tax compliance. To raise money and close the budget gap, the government has disinvested in public-sector businesses and strategically sold off government holdings. In order to raise money, it has also started planning to monetize some infrastructure assets, including roads, railroads, and airports.

The government has been attempting to rationalize subsidies to better target the recipients and ease the burden on the public purse. To ensure effective subvention delivery, this includes implementing Direct Benefit Transfer (DBT) schemes. The government has concentrated on increasing the effectiveness of government spending by getting rid of wasteful spending, cutting non-productive spending, and giving spending priority to important areas like infrastructure, health, and education. To boost performance and lessen reliance on government assistance, the government has started reforming public sector organizations. To increase productivity and profitability, this includes strategic deinvestment, privatization, and corporate restructuring.

To improve debt management procedures, the government has taken action. This includes managing the maturity profile of public debt to lower refinancing risks, diversifying the investor base, and issuing government securities through market-based auctions. The government has put in place a number of initiatives to encourage economic expansion, draw in investment, and generate job opportunities. These include programs that seek to increase domestic production, innovation, and entrepreneurship, such as Make in India, Digital India, and the Atmanirbhar Bharat (Self-Reliant India) campaign. To ensure accountability, transparency, and efficient implementation of fiscal policies, the government has concentrated on strengthening institutional frameworks and governance. This includes strengthening financial institutions and making changes to the way taxes are administered.

Conclusion and A Roadmap for Fiscal Sustainability in the Medium term

As required by the Fiscal Responsibility and Budget Management (FRBM) Act, both the central government and state governments have been putting into practice a fiscal consolidation plan to gradually reduce the fiscal deficit. This fiscal consolidation strategy must be all-inclusive. Setting achievable and realistic deficit reduction goals over the medium term while concentrating on both revenue growth and expenditure reduction is required. Both the Center and the States must put plans in place to increase revenue. More rigorous action must be taken to implement policies like

expanding the tax base, enhancing tax compliance, and lowering tax evasion. To ensure efficient and effective revenue collection, tax procedures need to be made simpler, additional tax reforms need to be implemented, and the tax administration needs to be strengthened. Direct tax reforms are much required to broaden the tax base and reduce tax avoidance and tax evasion. Apart from that, asset monetization can be used to generate additional revenue and reduce the fiscal deficit. This may require strategic sale or leasing out government-owned assets such as land, infrastructure, and public enterprises.

To identify areas of inefficiency, prioritize spending on essential sectors, reduce wasteful spending, and eliminate non-essential subsidies, the center and states must conduct an extensive review of government spending on the expenditure side. Priority areas like infrastructure, health, education, and social welfare programs need to be given more funding. Additionally, government must implement reforms in public sector organizations to boost their productivity and lessen their reliance on funding from the government. To improve operational performance and financial viability, this also includes corporate restructuring, privatization, and strategic disinvestment. Make a strong effort to optimize the cost and maturity profile of public debt as part of your debt management strategy. This entails expanding the pool of investors, controlling the risks associated with refinancing, and investigating novel debt instruments to lower the cost of

In areas like infrastructure development, where private investment can help meet funding requirements, promote private sector participation through PPPs. For PPP projects, create an open and effective framework to draw in private funding and expertise. Create a framework for medium-term spending that ties government spending to long-term fiscal sustainability objectives and revenue projections. Budget planning can be made more transparent and stable with the help of this framework, which also ensures a more methodical approach to expense control. To ensure accountability, transparency, and efficient implementation of fiscal policies, strengthen governance and fiscal institutions. This entails enhancing monitoring and evaluation systems, strengthening budgetary processes, and encouraging better coordination between various government agencies. Implement measures and changes that encourage investment and economic growth to increase revenue and lower the debt-to-GDP ratio. Focus on sectors with high growth potential, encourage entrepreneurship, and foster a conducive business environment. Create backup plans for potential risks and outside shocks that could affect fiscal sustainability. Maintain a sufficient financial cushion to lessen the effects of economic downturns or unforeseen circumstances.

Reference

- 1. Ahlborn M, Schweickert R. *Public debt and economic growth economic systems matter*. Int Econ Policy. 2018; 15:373-403
- 2. Barro R. *On the determinants of the public debt*, Journal of Political Economy. 1979; 85(5):940-71.
- 3. Bi H, Leeper E. *Analyzing fiscal sustainability*, Bank of Canada, Staff Working Papers, 2013, 13-27.
- 4. Ghosh A. *India's Public Debt: A Partial Analysis*, Economic and Political Weekly, 1988, 23(44)
- 5. IMF. *Public Debt and Real GDP: Revisiting the Impact*, WP/22/76, 2022.
- 6. Kannan R, Singh B. Debt-deficit dynamics in India and macroeconomic effects: A structural approach. MPRA, 2007, 16480
- 7. Kaur B, Mukherjee A, Kumar N, Ekka AP. *Debt Sustainability at the State Level in India*. RBI Working Paper Series No. 07. Reserve Bank of India, 2014.
- 8. Ministry of Finance, Govt. of India. Status Paper on Government Debt 2020-21(Released in April), 2022.
- 9. Mohanty RK, Panda S. How Does Public Debt Affect the Indian Macroeconomy? A Structural VAR Approach, Margin: The Journal of Applied Economic Research. 2020; 14(3):253-284.
- 10. Rakshit, Mihir. 'Budget Deficit: Sustainability, Solvency, and Optimality' in A Bagchi (ed), Readings in Public Finance, OUP, 2005.
- 11. Rangarajan C, Srivastava DK. Fiscal Deficits and Government Debt: Implications for Growth and Stabilisation, Economic and Political Weekly, Jul. 2-8, 2005, 40.
- 12. Rangarajan C, Srivastava DK. 'Dynamics of Debt Accumulation in India: Impact of Primary Deficit, Growth and Interest Rate', Economic and Political Weekly, 2003, 38(46).
- 13. Stiglitz JE. *Economics of the Public Sector*, 3rd Edition. W.W. Norton & Company, 2000.
- 14. Woo J, Kumar MS: *Public Debt and Growth*, Economica. 2015; 82:705-739.