# The Bird's Eye View On Trends And Patterns Of The Government Securities In India

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### Abstract

The aftermath of the international financial crisis, COVID-19, and the Russia-Ukraine war have brought several risks, making the global debt market very volatile and posing risks to both emerging and advanced economies. Government bonds are a debt that has to be paid in the future at a specific rate of interest. A crisis badly affects the macroeconomic fundamentals, which play a crucial role in determining government bond yields. The study has examined the trends and patterns of macroeconomic fundamentals and Indian government bond yields, revealing how a crisis can severely affect these fundamentals. Descriptive secondary data analysis is done to provide a clear picture of Indian sovereign debt.

Keywords: COVID-19, Macroeconomic fundamentals, Government Bond Yields, Government Securities.

Date of Submission: 12-05-2024 Date of acceptance: 22-05-2024

## I. Introduction

Government Security (G-Sec) is a financial asset issued by a country's central bank on the Central or State governments' behalf. Treasury bills, with original maturities of less than one year, are considered as short-term bonds. In comparison, government bonds or dated securities with an original maturity of one year or more are deemed long-term bonds. In India, the central government issues both treasury bills and bonds or dated securities, while the state government issues only bonds or dated securities, called state development loans (SDLs). G-Secs are backed by the government and are called risk-free gilt-edged instruments (RBI report, 1 April 2020).

As is frequently seen in developing nations, revenue receipts are typically low and developmental goals are naturally high. The sovereign bond market has previously been essential to achieving such objectives. According to Budget 2023, to resolve the revenue shortfall and fund its necessary expenditures to support the economy, the government aims to borrow 15.4 lakh crore from dated securities in FY24, up from 14.95 lakh crore in FY23.

The research aims to find whether Indian debt is sustainable or not. An in-depth analysis was also conducted by analysing trends and patterns of different macroeconomic fundamentals related to the government securities market.

#### **II.** Methodology

The Data required for the study has been collected from secondary sources to analyse the historical pattern in the government securities market and different macroeconomic fundamentals. The Data Collection includes data from (i) RBI DBIE, (ii) World Bank and IMF database, (iii) India's Economic Survey, (iv) RBI Annual Reports, and (v) Various Websites relevant to topics. A descriptive study has concluded that Indian debt is sustainable by keeping other macroeconomic variables under control. Policy implications have also been suggested for maintaining debt sustainability in India.

# **III. Government Securities Market**

Before the occurrence of COVID-19, the total amount of government securities, which was 44.87 lakh crore in December 2015 with various financial agents, including commercial banks, insurance companies, mutual funds, cooperative banks, non-bank PDs, financial institutions, state governments, etc., increased to 65.13 lakh crore in December 2019. After the outbreak of COVID-19, there has been a significant rise in the

government of India dated securities. The government of India dated securities were worth 93.73 lakh crore in December 2022, which is 144 per cent more than the pre-pandemic era, or December 2019, and 209 per cent more than December 2015 (figure 1). The massive increase in overall government securities illustrates the significance of these securities in the Indian market. A significant increase in total government securities has been observed following the COVID-19 outbreak, and this suggests that we should investigate the many macroeconomic aspects that may have contributed to it.

According to the maturity trend of the government of India rupee loans, there has been a noticeable increase in the maturity of these loans. Between 2009 and 2019, it rose by 287.32 per cent; between 2009 and 2022, it rose by 417.43 per cent. The government may have adopted various fiscal measures in response to the COVID-19 Pandemic because 2021 saw the most significant percentage change year-over-year at 19.04 per cent. This is not a good sign for the stability of our economy because the danger of default rises with maturation, which also causes the yields on government bonds to rise. Higher interest rates will increase the fiscal burden on the government because bond yields are a type of cost in terms of interest rate.





Recently, we have seen two cases—one each from Pakistan and Sri Lanka—in our neighbourhood. Sri Lanka's primary default cause was a lack of foreign reserves to cover its debt. Even by reducing other spending and raising taxes, the bond's maturity had grown to the point where it was impossible to prevent a default. Even in Pakistan, where the inflation rate in January 2023 was 27.5 per cent year-over-year, it was at a record high. According to the State Bank of Pakistan, Pakistan's foreign exchange reserves are at their lowest point in the last ten years and are barely enough to finance three weeks' worth of imports. The government cut imports to avoid an external payment crisis, reducing the current account deficit from \$1.9 billion in December 2021 to roughly \$400 million in December 2022 (Madhukalya, 2023).

# Figure 2: Ownership of Central Government Securities in India



#### Source: RBI DBIE

The Central Government Securities market is almost closed in nature. The primary stakeholders are the Scheduled Commercial Banks (SCB), Reserve Bank Of India (RBI), Insurance Companies (IC), Provident Funds (PF) and cooperative banks. These all constitute almost 85% of the share in 2022 (figure 2). The primary stakeholders in the government securities market are the Scheduled Commercial banks, as they have to maintain SLR. Since 2008, there has been a steady increase in the share of Insurance companies, Mutual funds and Provident funds but a decrease in the share of SCBs. The SLR, which used to be 24-25 per cent in 2008, has come down to 18 per cent since 2020 due to the outbreak of Covid-19. By adopting the expansionary monetary policy, the RBI has reduced all the significant policy rates, such as CRR, MSF, SLR, bank rate, repo, and reverse reportates, to boost liquidity in the Indian economy. The share of Insurance companies has increased from 19 per cent in 2008 to almost 26 per cent in 2022. The share of Mutual funds and Provident funds also increased from 0.34 per cent and 2.91 per cent in 2008 to 2.92 per cent and 4.6 per cent, respectively, in 2022. It has also been observed that after the global financial crisis, there has been an increase in FII share in Government securities. It might be due to the "zero bound interest" rate in almost all advanced economies, but India offers higher returns like other Asian countries (Naidu. A. et al., 2016). The share of FII increased to 4.35 per cent in 2018, but post-COVID-19, as the US Federal Bank increased its bond yield by moving away from the zero-bound interest rate, the FII share decreased to 1.56 per cent in 2022. Due to the volatile nature of foreign investors, the RBI has closed the capital market, with major stakeholders only being domestic financial institutions. This is also a primary reason why Indian debts are domestic. The RBI has also maintained liquidity in the market through open market operations as and when required (Goyal, 2019).

# IV. Analysing Macro-Economic Fundamentals Of India

#### **Fiscal Deficit**

India's government has put into effect the FRBM Act 2003 in order to ensure fiscal balance. It imposes economic discipline by creating goals like minimising budget deficits and eradicating revenue deficits. It was implemented to formalise fiscal stability, lower the fiscal deficit, and improve macroeconomic stability.

The economy was on track to reach the fiscal deficit's normal allowable target of 3% of GDP, per the economic survey 2022. Nonetheless, the fiscal deficit has increased significantly as a result of COVID-19. Following the COVID-19 epidemic, the fiscal deficit, which was 4.7% of GDP in 2019–20, increased to a record 9.2% of GDP in 2020–2 (figure 3). Even though several steps have been taken, the fiscal deficit is still expected to reach 6.4% of GDP in 2022–2023, higher than the FRBM Act of 2003's target.

# Figure 3: Trends and Patterns of Gross Fiscal Deficit in India



Source: India's Economic Survey 2022.

Macroeconomic fundamentals such as fiscal deficit, inflation, IIP, and interest rates are some of the internal macroeconomic fundamentals which affect sovereign bond yields in India (Poghosyan, 2014). The higher the fiscal deficit, the higher the yields of sovereign bonds. Strong growth in IIP can contribute to higher tax revenues for the government due to increased economic activity. This may provide more fiscal space for the government to undertake infrastructure projects or other spending initiatives. However, if the government finances its spending by borrowing from the bond market, an increased supply of government bonds could put upward pressure on bond yields.

### **GDP** growth rate

Advanced economies keep long-term rates low in order to encourage investment and spur economic expansion. Advanced economies turned to unorthodox measures, including lending to financial institutions, supplying liquidity to important credit markets, and implementing large-scale asset purchase programmes in order to sustain low long-term returns over time. A stable or growing GDP enhances investor confidence in the economy, which can stabilize or lower yields on government securities due to perceived lower risk.

Strong economic growth usually results in larger tax receipts for the government from both people and corporations. As a result, there may be less demand for government borrowing, which might result in fewer government securities being issued. On the other hand, during times of slow development or recession, government income may decrease and there might be a greater need to borrow money to cover budget deficits, which would increase the amount of government securities issued.

GDP is the aggregate value of goods and services produced within the economic territory of an economy during a given year. GDP can be compared to a piece of cake; the more significant the slice, the more there is to eat for everyone. An increase in GDP growth rate shows that different sectors of an economy are performing well. It is the most sought-after indicator by an investor. It also shows the strength of an economy in aggregate terms.

Figure 4 shows that while the rest of the globe saw a negative growth rate of -1.3% in 2009 and suffered a financial crisis, India experienced a positive growth rate of 7.9%. The COVID-19 pandemic, which hit all economic sectors in 2019, was experienced by the entire world in 2019. The pandemic's severity caused the global and Indian economies both to experience negative growth rates. India's growth rate in 2020 was - 6.6%, while the global economy only had a -3.3% increase in growth. However, India bravely handled COVID-19, and the monetary and fiscal stimulus has enabled India to experience a V-shaped recovery (Economic Survey of India 2022-23). India's GDP grew by 8.7% in 2021, compared to the global GDP growth rate of 5.9%. Also, from 2009 to 2020, India's growth rate has outpaced that of the global economy.

# Figure 4: Annual GDP Growth Rate of Indian and World Economy



#### Trends and Patterns of Sovereign Bond Yields in India

According to the term structure of interest rate, different shapes of bond yields predict the economic situations that prevail in an economy. The Normal Yield or upward-sloping Yield curve suggests that the economy is performing well and continuing the status quo. The Inverted yield curve shape suggests that recession is expected in the near future. The Flat curve suggests the static nature of an economy but with a considerable dose of uncertainty (Choudhry, 2002).

For simplicity, the study has observed the trends and patterns of 10-year Indian sovereign bond yield. The 10-year sovereign bond is the most traded in the Indian sovereign bond market. Figure 5 depicts that the 10-year government bond yield follows the 5-year bond yield, which also follows the 1-year Indian government bond yield. The resonation of long-term bond yields of short-term bond yields justifies the term structure of interest rate that the short-term interest rate determines the long-term interest rate (Akram & Das, 2019). It is found stable, and its value fluctuates between 6 per cent to 9 per cent. Despite having good macroeconomic fundamentals, the bond yields are still high. Also, according to the 2020-21 economic survey, sovereign credit ratings do not reflect the Indian economy's fundamentals.

The rise in government bond yields is due to inflation, hawkish statements by FOMC, RBI tightening measures, etc. The fall in bond yields is due to decreased inflation expectations, a favourable growth rate, government reform initiatives, etc (Goyal, 2019). The government initiatives after the COVID-19 outbreak have shown a reduction in government yield since 2019. However, as the inflation expectation rises in 2021 and the U.S. Federal Reserve leaves the Zero-Bound interest rate regime after the first quarter of 2022 to curtail inflation, the sovereign bond yield rises.





#### Source: RBI DBIE

#### **Debt Sustainability**

Analysis of India's government debt profile is essential in light of the current global situation following the COVID-19 epidemic. Former RBI Governor Dr Y V Reddy stated in a speech in Geneva in April 2018, "because the majority of India's governmental debt is held by the inhabitants and denominated in home currency. So, we would be more forceful about the context and less rigid about the budget deficit and public debt figures". Of the total net liabilities, 95.1 per cent were in domestic currency, while 4.9 per cent were sovereign external debt at the end of March 2021, indicating little currency risk. Furthermore, government external debt is protected from market instability because it is solely derived from official sources.



#### Growth-Interest Rate Differential and Government Debt Sustainability

The growth-interest rate differential (GIR) is a crucial concept in understanding government debt sustainability. It refers to the difference between the economic growth rate (g) and the interest rate on government debt (r). When the growth rate exceeds the interest rate (g > r), it indicates that the economy is growing faster than the cost of servicing its debt, potentially making debt more sustainable. Conversely, when the interest rate exceeds the growth rate (r > g), debt servicing becomes more expensive relative to economic growth, raising sustainability concerns. A debt can only help if it is a Capex-led growth due to its multiplier effect. It affects positively, directly or indirectly private consumer expenditure, private investment, as well as GDP growth. Higher GDP growth would make a more robust tax-collecting process possible, enabling a sustainable budgetary path.

By the end of the pandemic year FY21, the general government debt to GDP ratio climbed from 75.7% at the end of March 2020 to 89.6%. It is predicted to fall to 84.5% of GDP by the end of March 2022. India has historically benefited from this growth-interest rate differential. The higher the GDP growth rate, the higher the differential. It is pretty clear from Figure 6 that the differential is negative in a few circumstances. It is generally positive in India. The differential became negative in 2020-2021 because of the COVID-19 pandemic, as the growth rate became negative at -6.6%. The debt levels remain manageable when the growth and interest rate differential is positive. Sustained economic growth can hasten the economy's fiscal consolidation.

### Figure 7: Comparing General Government debt to GDP ratio



Source: World Economic Outlook, October 2022.

A comparison of the countries' general government debt to GDP ratios from 2005 to 2021 reveals that the majority of them have seen significant increases. This increase is modest for India, from 81 per cent of GDP in 2005 to around 84 per cent of GDP in 2021 (figure 7). It has been made possible by the steadfast economic development of the past 15 years, which has produced a favourable growth-interest rate differential and, in turn, led to manageable government debt-to-GDP ratios.

# V. Conclusion

Assessing the sustainability of India's debt involves analyzing various factors including the growthinterest rate differential (GIR), the fiscal deficit, debt-to-GDP ratio, and the overall economic environment. As of 2023, India's debt-to-GDP ratio stands at approximately 84%. Compared to advanced economies like the US, the UK, Japan and France, India's debt is not that high. This level is considered high for emerging markets, but it's not unprecedented or necessarily unsustainable if managed well as most of the debt are domestic in nature. The pandemic-induced slowdown in economic activity has led to increased spending, increasing India's debt and deficit ratios. The pandemic further worsened the situation in FY21 and led to a decline in nominal GDP. India's fiscal deficit has been a concern, consistently exceeding the government's targets. For instance, the fiscal deficit for the fiscal year 2023-24 is projected to be around 5.9% of GDP. A high fiscal deficit can lead to increased borrowing and higher debt levels but FRBM Act 2003 has been implemented to check the excess increase in fiscal deficit. Relaxation in the limit has been given to boost the economy and save the economy from the ill consequences of COVID-19.

In recent years, the Indian government has embraced a comprehensive approach to achieving economic stability. Throughout the previous few years, the administration implemented several policy changes, using the crisis as an opportunity to bring about reforms. These measures include budget transparency, cautious budget assumptions, technology, GST rationalisation, tax rate reduction, tax compliance simplification, and ending retrospective taxation ambiguity. These policies have formalised the economy, improved compliance and public income reporting, and given the government's fiscal management credibility.

India has historically experienced robust economic growth, often surpassing 6-7% annually. The IMF projects India's growth rate to remain strong in the near future, with growth rates around 6%. The interest rates on government securities have been relatively moderate. For instance, the yield on 10-year government bonds has been around 6-7%. When the economic growth rate (g) is higher than the interest rate (r) on government debt, it leads to a positive GIR. This implies that the economy is growing faster than the cost of servicing the debt, which generally supports debt sustainability. It has been found in the trend analysis that India's GIR has been mostly positive since the new economic reform which was introduced in 1991.

The Indian government has been implementing various reforms aimed at boosting economic growth, such as infrastructure development, digital economy initiatives, and improvements in ease of doing business. Efforts to enhance tax collection through GST and direct taxes are also key measures to improve the fiscal balance.

The fiscal glide path reveals the direction for fiscal policy as India's economic recovery progresses amid ongoing global risks and uncertainties. This will guarantee more considerable fiscal room for policy action in unpredictable times. Furthermore, maintaining a tight rein on spending results in lower interest rates, which act as a fiscal stimulant for the entire economy. Due to the declining risk premium, fiscal deficits have a more significant stimulative effect on emerging markets and developing economies (EMDE) than advanced economies. The central government should encourage states to implement fiscal reforms to ensure sustainable debt. The Capex-led growth strategy can be helpful in obtaining sustainable debt management.

While India's debt levels are high, the debt remains broadly sustainable given the current economic growth trajectory and interest rate environment. The key to maintaining debt sustainability lies in continuing economic reforms, maintaining robust growth rates, and prudent fiscal management to control deficits. Monitoring external risks and maintaining a positive growth-interest rate differential will be crucial for sustaining India's debt in the long term.

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