POLICY BRIEF

FINANCIAL AND FISCAL COMMISSION (2023)

The Effects of Inflation and Growth Shocks on Fiscal Sustainability in South Africa

EXECUTIVE SUMMARY

Many governments across the globe undertook large stimulus packages to support livelihoods and economic recovery during the COVID-19 crisis that caused a widespread increase in deficits and debt. High debt levels across countries will impact borrowing costs and increase debt servicing costs. Gross government debt as a percentage of gross domestic product (GDP) has reached levels that could negatively affect fiscal sustainability in many countries. Similarly, higher debt and deficits generate higher interest rates as the government must incentivise private lenders to accept government bonds in exchange for their savings or as a risk premium for possible risk default or, even worse, monetisation. Policy debates are now focusing on fiscal sustainability as public debt, and deficits have soared since the crisis began.

The debate on fiscal sustainability occurs within the context of rising inflation and subdued growth. Inflation has soared as many governments move away from stricter restrictions on a global scale. Around the world, the prices of fuel, electricity and food are increasing exponentially. The Russian-Ukraine conflict has compounded the inflation problem, dramatically causing food and energy prices to rise. Rising production costs have translated into higher prices for consumer goods and services. Using a Vector-Auto Regressive (VAR) model, we study how inflation and growth shocks affect South Africa's public debt dynamics.

Our findings suggest that an inflation shock would increase the debt ratio after only a few quarters (at least two quarters). Higher inflation rates will increase short-term and maturing long-term debt because they will be refinanced at higher interest rates. The floating rate debt will adjust automatically to higher rates hence the increase in debt-GDP. However, if inflation persists, it is expected to reduce debt primarily by eroding the real value of outstanding medium- and long-term debt hence the result shows that the debt-GDP ratio will decline before returning to its pre-shock path. The debt-to-GDP ratios could start increasing again, underscoring the temporary nature of the relief provided by inflation. Inflation could hardly solve the debt problem alone, as it would raise significant risks for the real sector by un-anchoring inflation expectations.

THE FINANCIAL AND FISCAL COMMISSION

The Financial and Fiscal Commission is a body that makes recommendations and gives advice to organs of state on financial and fiscal matters. As an institution created in the Constitution of the Republic of South Africa, it is an independent juristic person subject only to the Constitution itself, the Financial and Fiscal Commission Act, 1997 (Act No. 99 of 1997) (as amended) and relevant legislative prescripts. It may perform its functions on its own initiative or at the request of an organ of state.

The vision of the Commission is to provide influential advice for equitable, efficient and sustainable intergovernmental fiscal relations between national, provincial and local spheres of government. This relates to the equitable division of government revenue among three spheres of government and to the related service delivery of public services to South Africans.

Through focused research, the Commission aims to provide proactive, expert and independent advice on promoting the intergovernmental fiscal relations system using evidence-based policy analysis to ensure the realisation of constitutional values. The Commission reports directly to both Parliament and the provincial legislatures, who hold government institutions to account. Government must respond to the Commission's recommendations and the extent to which they will be implemented at the tabling of the annual national budget in February each year.

The Commission consists of Commissioners appointed by the President: the Chairperson and Deputy Chairperson, three representatives of provinces, two representatives of organised local government and two other persons. The Commission pledges its commitment to the betterment of South Africa and South Africans in the execution of its duties.

BACKGROUND

The world economy has begun to recover from the COVID-19 shock. To support the recovery, emphasis should be placed on promoting fiscal sustainability. High debt levels across countries will impact borrowing costs and increase debt servicing costs. Gross government debt as a percentage of GDP has reached levels that could negatively affect fiscal sustainability. In Emerging Markets and Developing Economies, the average government debt as a percentage of GDP was at 63.5 per cent in 2020. South Africa's government debt as a percentage of GDP was above average at 69.4 per cent and was above China's government debt of 66.3 per cent but below Brazil's government debt of 98.9 per cent. An unsustainable increase in government debt will likely result in diminished confidence in public sector sustainability.

A sustainable fiscal outlook is an essential foundation for growing the economy. Putting South Africa's public finances on a sustainable fiscal path creates a conducive environment for growth. With a strong fiscal foundation, South Africa will have increased access to capital, more resources for future public and private investments, improved investor confidence, and a stronger safety net. If long-term fiscal imbalances are not addressed, the ability to respond to future economic shocks will be weakened, with fewer economic opportunities and less fiscal flexibility to respond to future crises.

The current increase in price levels could have a detrimental effect on macroeconomic performance and public finances in general. Higher inflation could put soaring debt levels and servicing costs on an unsustainable path. Government bond-holders will require to be compensated for the rise in price levels. Secondly, investors might begin to doubt the government's ability to repay debt as government debt increases. They could demand even higher interest rates, raising the borrowing cost for businesses and households. Consumer prices have reached record high levels, breaching the South African Reserve Bank mid-point.

The rise in inflation also has vast macroeconomic implications. For instance, if inflation rises faster than income, consumers' purchasing power is reduced, which could deteriorate their standard of living, which may lead to workers demanding higher wages. The rising compensation of employees is already placing pressure on public finances and fiscal sustainability. Moreover, high inflation rates have wide-ranging implications for the economy: it can discourage savings, deter businesses from investing due to increased uncertainty and reduce the currency's value, making imports more costly. Rising inflation also raises concerns for fiscal sustainability, as it can increase the state's borrowing costs and costs of public spending, as well as raise vulnerability to macroeconomic crises.

The main aim of this submission is to assess the effects of inflation and growth shocks on government debt and their implication for fiscal sustainability. The research findings aim to make a suite of recommendations contributing to the policy debates on fiscal sustainability as public debt and deficit have soared since the crisis began. We study inflation and growth shocks affecting South Africa's public debt dynamics using a Vector-Auto Regressive model.

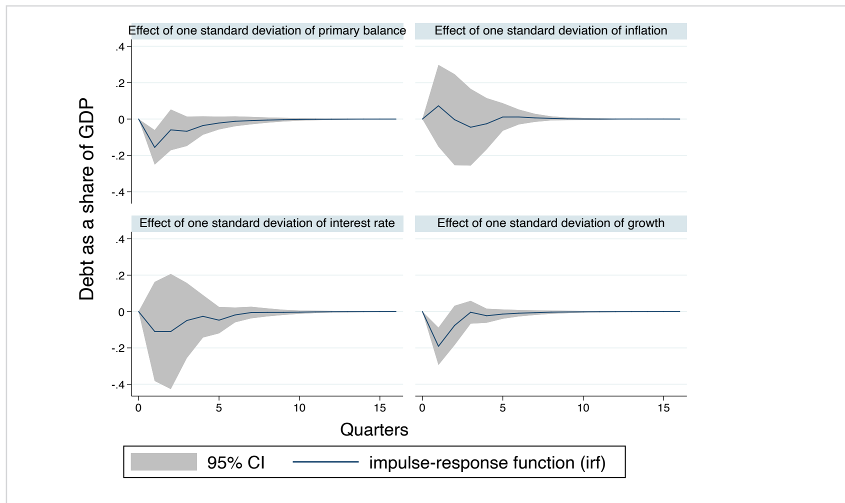
RESEARCH FINDINGS

Inflation and Public Debt Dynamics

Inflation can be expected to erode the real value of debt. Considering that taxes are levied on nominal amounts i.e. income, value-added, profits, etc., tax revenues increase when inflation rises so the burden of servicing the existing debt as a proportion of public revenues declines.

However, the impact of inflation on public finances also depends on whether financial markets anticipated higher inflation and on its expected persistence. An anticipated rise in inflation would have caused an increase in nominal interest rates even before inflation and nominal growth started to pick up, thereby worsening the dynamics of the debt ratio. An unanticipated inflation shock will have a bigger impact on the path of the debt ratio. The persistence of inflation also plays an important role. If it is expected to remain elevated, it will cause an increase in market-based inflation expectations. But this inflation is not expected to persist into the future. Hence the output shows that the debt as a share of GDP goes back into its path after five quarters from the initial shock.

Figure 1: Debt impulse responses



Source: Commission Computation

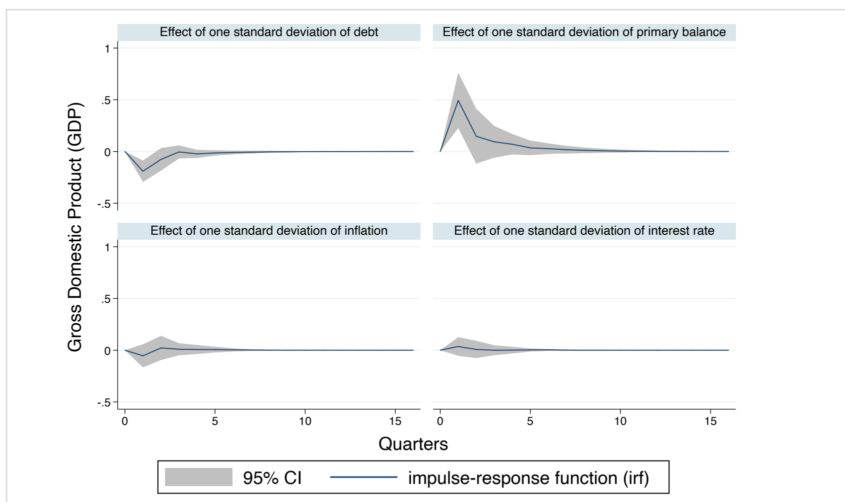
Debt dynamics depend on the primary balance, the budget balance excluding interest charges, and the difference between the average cost of debt and nominal GDP growth . A positive one standard deviation of the primary balance should result in a decrease in debt as a share of GDP. The relationship between primary balances and debt is straightforward. In a situation of a primary surplus, revenue exceeds primary expenditure and means there is more money that can be directed at reducing debt.

The decrease in public debt is mainly driven by the primary surplus and, to a lesser extent, by inflation, while growth and the interest rate counteract the fall in the debt ratio. The effect of interest and growth on debt as a percentage of GDP depends on the differential between interest and growth. Higher growth that exceeds the interest rate means that the government does not need a primary surplus to stabilise the debt. However, when growth is less than the interest rate, the government will need a primary surplus to stabilise the debt. South Africa's growth has been low, so the government requires a primary surplus to stabilise the debt. It means that South Africa must develop a credible plan to reduce expenditure or raise revenue through increases in taxes.

Growth dynamics and impulse responses

The effect of increases in public debt on economic growth has received renewed attention in the context of the COVID-19 pandemic. The pandemic led to a significant contraction in the world economy, and pandemic policy responses, including expansionary fiscal policies, have resulted in sharp increases in public debt levels. The impulse responses show that one standard deviation shock on the debt will result in a decrease in output for South Africa. The results corroborate the recent findings in the literature that an unanticipated debt shock will have a negative impact on the real GDP level after the shock before reverting to the growth path[1]. An increase in the public debt to GDP ratio impacts the real GDP level for countries with a high initial debt level or a rising debt trajectory.

Figure 2:Growth impulse responses



Source: Commission Computation

[1] Soyres, C., Kawai, R. and Wang, M., (2022). Public Debt and Real GDP: Revisiting the Impact.

A primary surplus is also growth-enhancing. The results show that a primary surplus shock will increase output in South Africa. A balanced government budget yields a higher long-run growth rate than a debt policy where public debt grows at the same rate as all other economic variables[2]. With permanent public deficits, there is either no balanced growth path, a unique, balanced growth path, or there exists two balanced growth paths.

CONCLUSION

We study the dynamics of South Africa's public debt in response to shocks from major macroeconomic aggregates. More specifically, we study the effect of inflation and growth shocks on public debt in South Africa. Using a VAR, our findings suggest that given the economic dynamics of the recent past, an inflation shock would increase the debt ratio after only a few quarters. Higher inflation rates will increase short-term and maturing long-term debt because they will be refinanced at higher interest rates, and the floating rate debt will adjust automatically to higher rates. However, the debt ratio will decline before returning to its pre-shock path. Inflation reduces debt primarily by eroding the real value of outstanding medium- and long-term debt. However, debt-to-GDP ratios could start increasing again, underscoring the temporary nature of the relief provided by inflation.

Policymakers should prioritise reducing debt. It is, therefore, essential to highlight that reducing debt through stimulating growth and reducing primary deficits would be a better policy response. Reducing the primary deficit and debt requires fiscal consolidation and expenditure moderation.

RECOMMENDATIONS

The Commission makes the following recommendations:

1. *The Commission recommends that National Treasury strengthens the plan for debt reduction by focusing on improving primary balances. Our analysis suggests that fiscal consolidation focusing on expenditure and revenue mix may be appropriate for debt reduction. The analysis shows that primary surpluses will significantly contribute to debt reduction. Primary surpluses also contribute to economic growth. In other words, fiscal consolidation fosters economic growth and restores fiscal sustainability.*

2. *The Commission recommends that the government departments under the economic cluster develop and implement macroeconomic reforms[3] to address fiscal sustainability. Robust real GDP growth also increases the likelihood of major debt reduction because it helps countries to "grow their way out" of indebtedness. Our analysis suggests that economic growth plays a significant role in debt reduction.*

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[2]Greiner, A., (2015). Public debt, productive public spending and endogenous growth. The Japanese Economic Review, 66, pp.520-535.