

Understanding the effects of fiscal policy on South Africa

Increased investment spending would decrease the national debt of the country as a percentage of its Gross Domestic Product, reduce government deficit and improve the economic health of the country, says *Margaret Chitiga-Mabugu*.

low debt-to-GDP (Gross Domestic Product) ratio indicates an economy that produces a large amount of goods and services and most likely, profits that are high enough to pay back debts. Increases in government expenditure can benefit the economy by affecting the level of income and its distribution. This can influence people's wages and returns to capital thereby affecting saving and investment, thus potentially boosting economic growth. However, increased spending translates into greater debt, which might not be sustainable in the long run.

Indeed, if the government increases its spending, it might need to either reduce spending in future or increase taxes in order to return to its original debt-to-GDP ratio.

In a paper oriented towards the constraints the government faces in financing its expenditures, myself and some colleagues evaluated the impact of such policies by constructing an intertemporal model and applied it to South Africa. By intertemporal model we mean a multi-period model in which results are computed simultaneously for all periods rather than computed one-period-at-a-time.

In such a model, firms and households have a forward-looking behaviour and take into account all future prices in their investment and consumption decisions. By taking this approach, major contributions to existing literature on the transmission mechanism of fiscal policy in African economies are made.

To the best of our knowledge, no published study has empirically analysed the macroeconomic effects of fiscal policy in the context of an open, middle-income sub-Saharan African economy like South Africa, using an intertemporal model that quantifies the implications of sectoral and temporal linkages, which are crucial for understanding the effects of fiscal policy. It is believed that this approach could provide important insights into fiscal constraints as well as their impact on the economy as a whole.

Simulations with the model focused on the intertemporal impact of increased current and investment spending. The results showed that an expansive fiscal policy would have a short-term positive impact on GDP but would translate into a greater debt-to-GDP ratio. Financing increased spending through taxation, direct or indirect, would mitigate this impact but would also have negative short-term impact on macroeconomic variables. Increased investment spending would improve long-term GDP under any financing scheme and would decrease the debt-to-GDP ratio as well as the deficit-to-GDP ratio.

These lessons are not only valuable for South Africa, but for all developing countries where considerable attention is being given to the use of expansive fiscal policy for economic growth and the creation of jobs. These conclusions are driven by the positive impact infrastructure has on total factor productivity. Without this feature, increased public investment would have almost no impact on the South African economy. Although the positive impact of infrastructure on growth is well documented, less is known about the impact current expenditures on education and health have on total factor productivity. More conclusive econometric work for South Africa on how this spending affects economic growth would allow a better modelling of public spending and thus a better understanding of their impact on the economy.

Author: Professor Margaret Chitiga-Mabugu, Executive Director, Economic Performance and Development, HSRC

This article is based on a shortened version of Impact of fiscal policy in an intertemporal CGE model for South Africa, by Ramos Mabugu, Veronique Robichaud, Helene Maisonnave and Margaret Chitiga. The full article is available at http://dx.doi.org/10.1016/j.econmod.2013.01.019.