

FINANCIAL AND FISCAL COMMISSION  
**POLICY BRIEF**

# Assessing the Economic and Fiscal Effects of the New Growth Path

## EXECUTIVE SUMMARY

**The study makes relevant recommendations on how government policies and programmes can be strengthened to accelerate economic growth without running into a future debt trap.**

In November 2010, Cabinet approved the New Growth Path (NGP) for South Africa, which aims to accelerate the creation of decent jobs and reduce inequality and poverty. A recent study<sup>1</sup> by the Financial and Fiscal Commission is the first to look at the short and long-term impacts of this policy on households, firms and public debt. The study shows that an expansive fiscal policy would have a temporary impact on gross domestic product (GDP) but would translate into higher debt relative to GDP. Using increased taxation to finance the additional spending would lessen this impact but would also negatively affect macroeconomic variables<sup>2</sup>. Increased investment spending would improve long-term GDP, under any financing scheme, and would decrease debt-to-GDP ratio as well as deficit-to-GDP ratio.



1. Mabugu, R, Robichaud, V, Maisonnave, H, and Chitiga, M. 2011. Fiscal Imbalances and Intertemporal CGE Modelling, Chapter 3 in Fiscal and Financial Commission (2011). 2012/13 Submission for the Division of Revenue Technical Report, Midrand, South Africa.

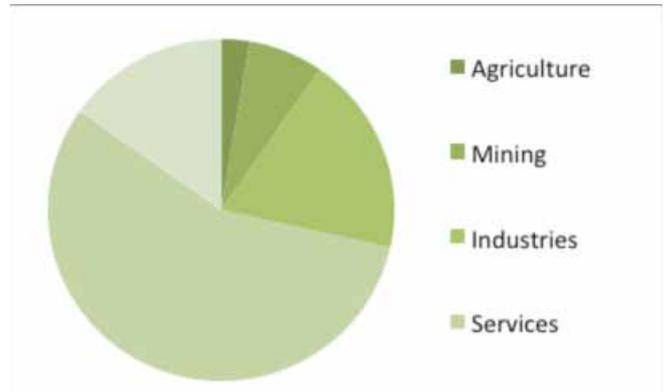
2. The major macroeconomic variables assessed in this study are GDP, private and public consumption, investment, tax revenue, unemployment and inflation.

# BACKGROUND

In the NGP document,<sup>3</sup> the government envisions creating five million jobs by 2020, which will enable the narrow unemployment rate<sup>4</sup> to fall from the current 25% to 15%. Achieving this goal will contribute significantly to reducing inequality and poverty in the country.<sup>5</sup> A vital component of the NGP is increased spending on public services and infrastructure, in particular accelerated investment in social and economic infrastructure. This raises a number of critical policy questions, including how the money should be spent and how the expanded spending should be financed. A study by the Fiscal and Financial Commission (the Commission) provides answers to these questions and looks at whether the additional spending should be financed through reducing government spending, increasing the government's budget deficit or increasing taxation.

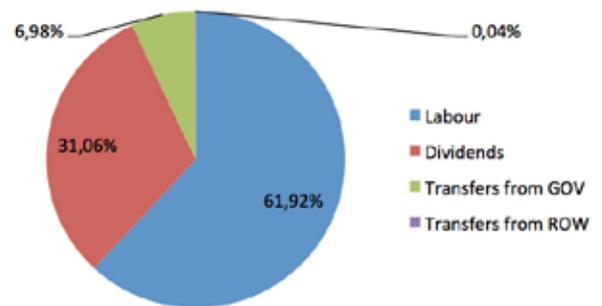
The study was based on a 57-activity social accounting matrix (SAM), which was reduced to five grouped sectors. The relative size of these five sectors in the economy is shown in Figure 1, based on their contribution to GDP. South Africa has a fairly diversified economy, but the importance of the services sector is clear. The sector contributes more than half of GDP, whereas agriculture represents less than 3%.

Figure 1 Share of grouped sectors in GDP



The buyers and sellers in the economy are known as agents. These are households, government, firms and 'rest of the world'. Households receive payment (for the factors of production – labour and capital – that they supply to the activities) and receive transfers from other agents. They use this income to consume, save, pay direct taxes and make transfers to government (GOV) and the rest of the world (ROW). Figure 2 shows the contribution of each source of revenue to total households' income.

Figure 2 Source of income for households



Government collects direct taxes (from households and firms) and indirect taxes (on products, production and imports). It also receives dividends from the firms and transfers from other agents. Figure 3 displays the relative importance of each income source and highlights the reliance on direct taxation.

The buyers and sellers in the economy are known as agents. These are households, government, firms and 'rest of the world'. Households receive payment (for the factors of production – labour and capital – that they supply to the activities) and receive transfers from other agents.

3. The main strategies for achieving the NGP targets through higher economic growth fall within three broad areas: (1) macroeconomic policies; (2) microeconomic measures, and (3) stakeholder commitments. Five job drivers have been identified: (a) Infrastructure (including housing, public works, input manufacture and improved competitiveness); (b) Main economic sectors (including agriculture value chain, mining value chain, manufacturing tourism and high level services); (c) Seizing the potential of new economies (including the green economy, the knowledge economy); (d) Investing in social capital (including cooperatives, social investment community and social initiatives and the public sector); and (e) Spatial development (including rural development and the African regional development).

4. South Africa uses two definitions of unemployment, a strict (official, referred to also as 'narrow') definition and a broad (or 'expanded') definition. The strictly unemployed are those people within the economically active population who (a) did not work during the seven days prior to the interview, (b) want to work and are available to start work within a week of the interview, and (c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview. The broad or expanded unemployment definition excludes criterion (c). It is the narrow definition which serves as the globally accepted norm for measuring unemployment levels.

5. In addition to increasing employment, the NGP document contains other proposals for reducing inequality. One such proposal is to cap bonuses and salaries above R550,000 per annum, and to put in place policies to moderate price increases.





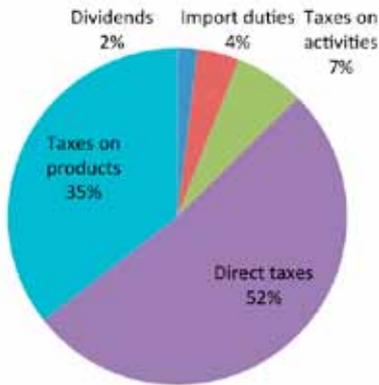


## RESEARCH FINDINGS

Two simulations were run representing the spending increases envisioned in the NGP. Both increase government spending to 2020 by the same percentage, but Simulation 1 increases current spending, while Simulation 2 increases investment spending. Both simulations assume that after 2020 government spending will go back to business as usual (BAU) values.<sup>6</sup> The assumption is that government cannot run a greater deficit, and so taxes will have to increase to compensate for this new spending. To finance the increased government spending, three different methods are envisaged. The first two taxes are domestic taxes in order to keep the country's deficit at the same level. First, the tax rate on households' income is increased. Second, taxes on commodities are increased. For the third method, all taxes are kept constant and government is allowed to increase its deficit. In other words, government uses increased debt to finance its additional spending.

Table 1 shows the impact of increasing public spending for three years (2011, 2015 and 2025) for each of these three financing methods.

Figure 3 Sources of income for government



Vital component of the NGP is increased spending on public services and infrastructure, in particular accelerated investment in social and economic infrastructure.

Table 1 Simulation 1 – Impact of increased current public spending on macroeconomic variables (deviation from BAU in %)

	Direct tax financing			Indirect tax financing			Debt financing		
	2011	2015	2025	2011	2015	2025	2011	2015	2025
GDP	1.18%	0.07%	-0.10%	-0.54%	-0.42%	-0.23%	1.14%	0.04%	-0.12%
GDP deflator	1.19%	0.38%	0.11%	-0.56%	0.15%	0.16%	1.15%	0.35%	0.10%
Real GDP	-0.01%	-0.31%	-0.20%	0.02%	-0.57%	-0.39%	-0.01%	-0.32%	-0.21%
Real consumption	-1.07%	-0.71%	-0.24%	-1.65%	-0.81%	-0.40%	-1.09%	-0.74%	-0.27%
Real investment	-5.56%	-0.77%	-0.05%	-2.54%	-1.27%	-0.28%	-5.69%	-0.81%	-0.07%
Debt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.97%	2.08%
Gov. expenditures	5.92%	1.22%	0.03%	6.23%	1.36%	0.07%	5.91%	1.43%	0.25%
Increase in tax rate	2.65%	0.63%	0.06%	1.01%	0.26%	0.04%	n.a.	n.a.	n.a.

Source: FFC calculations

6. Business as usual (BAU) in macroeconomic terms means here the natural trend of the economy and economic policy.

To finance the additional spending, the government will need to raise actual income tax by 2.65 percentage points in the short term. However, this increase will be temporary, as income tax rates would slowly return to their original levels when public spending reverts to BAU values. If government chooses to finance new spending through indirect taxation, an additional tax of 1% on all commodities will be necessary to keep the deficit constant. This new tax would no longer be necessary in the longer term for the same reasons as in the direct taxation scenario.

Under all these financing methods, the impact on macroeconomic variables is rather small. In the short term, real GDP stays about the same as in the case of BAU, but investment decreases, which affects the long-term value of GDP. The impact on investment is greater when the additional spending is financed by increasing either income tax or the deficit. Increasing indirect taxes to finance additional spending affects investment less in the short term, but in the longer term leads to a similar decrease in real GDP.

To see how sustainable increasing public spending is, the debt-to-GDP and deficit-to-GDP ratios were calculated over the next 60 years. The impact of the three financing methods on these ratios was found to be different (whereas they have a similar effect on macroeconomic variables). In all three cases, the increased current spending resulted in greater debt and deficit relative to the GDP. Using increased debt to finance the additional government spending had the biggest impact: in the long term, both ratios are greater than they would have been – debt-to-GDP by 1.5% and deficit-to-GDP by 1%. In other words, increased government spending for a short period of time will have a long-lasting impact on these two ratios.

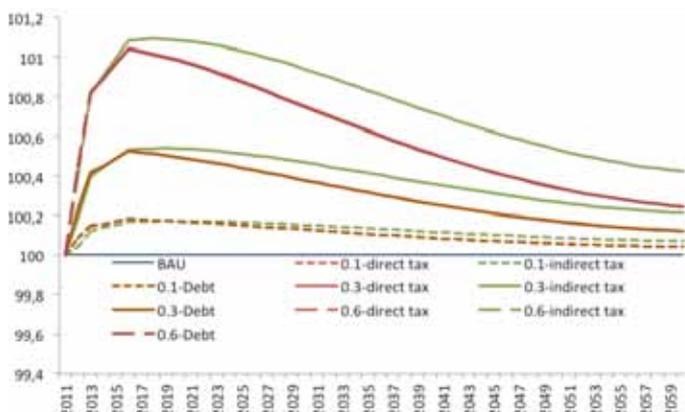
In the short term, the impact on real GDP is negligible if government increases its investment spending. However, in the medium and longer term, GDP grows because spending on investment leads to increased infrastructure and economic output. Under a rigid deficit, taxes would eventually go down as a result of greater production in the economy. As the GDP grows over time, a constant deficit translates into an improvement of both ratios.

More surprisingly, the greatest improvement happens in the debt-financed scenario. If tax rates are kept the same throughout the period (2011–2059), government revenues will increase in the longer term and thus allow for a smaller deficit in the future.

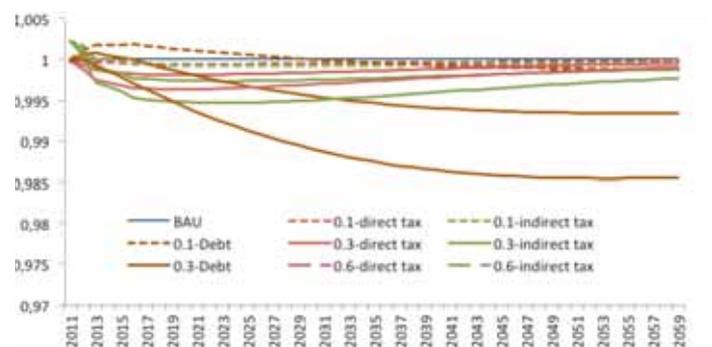
To test the robustness of these findings, Simulation 2 is run to see how increased public investment affects GDP under the three financing methods, using values of 0.1, 0.3 and 0.6 (for the impact such expenditures have on total factor productivity in South Africa). Figures 4 and 5 present the impact on real GDP and debt-to-GDP ratio respectively. Whatever the financing method used, the results are similar for all three values (within a range of less than 1%).



**Figure 4 Simulation 2 – Impact of increased public investment on GDP (BAU = 100)**



**Figure 5 Simulation 2 – Impact of increased public investment on debt-to-GDP ratio (BAU = 1)**





## CONCLUSION

This study looked at how the increased spending outlined in the government's NGP would affect the economy. The emphasis was on the feasibility and impact of three financing methods. The study found that if the government follows an expansive fiscal policy (in other words, its spending is higher than its income), the effect on GDP will be positive in the short term, but the level of debt relative to GDP will be higher. However, the effect will be less if the increased spending is financed through direct or indirect taxation, although in the short term this will negatively affect macroeconomic variables such as inflation or unemployment. Under all the financing schemes, increasing investment spending improves long-term GDP and decreases debt-to-GDP and deficit-to-GDP ratios. This is because infrastructure development increases productivity. Without infrastructure development affecting positively total factor productivity, increased public investment would have almost no impact on the economy.

The following recommendations emerge from the study:

1. Government should actively continue investing significantly in public infrastructure, which has a positive impact on productivity and employment.
2. Government should weigh up carefully the impact of increasing spending against the risk associated with increasing taxation rates, spending levels and re-allocating expenditure from capital expenditure.
3. Further research is required to understand how spending on education and health affects economic growth. While the positive impact of infrastructure development on growth is well documented, less is known about the effect that spending on education and health may have on productivity.

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