

Chapter 2

INCLUSIVE GROWTH, DEVELOPMENT AND FISCAL POLICY

2.1 Introduction

South Africa experienced a long period of economic decline in the last decades of apartheid (1985–1994). In the immediate post-apartheid period (1995–2003) economic growth rates improved and then picked up substantially from 2004 to 2007. However, in 2008 the global economic crisis resulted in a slowdown in economic growth. As shown in Chapter 1, economic recovery and ensuing fiscal consolidation has evolved better than expected. This good performance, however, masks a more complex reality, that of a tepid economic recovery associated with unemployment, poverty and inequality. Poverty remains high, especially among African and female-headed households, despite an unprecedented extension of government social grants that have helped to reduce absolute poverty. Poor educational and health outcomes are similarly skewed against the poor. These social realities, together with the realisation that dates for attaining the Millennium Development Goals (MDGs) are a mere four years away, have galvanised government to seek alternative ways of using public expenditures to grow the economy in order to address poverty and inequality.

Further ambitious social reforms are being proposed to tackle poverty, growth and inequality problems. The National Health Insurance (NHI) promises to be the largest reform undertaken in the health sector since the end of apartheid. Government has adopted the New Growth Path (NGP) for South Africa, which aims to accelerate the creation of decent jobs and reduce inequality and poverty. There are many dilemmas to be resolved and balances to be struck: between stabilisation, interconnectedness and broad-based development, and short-term growth; between economic inclusion/equity and productivity/efficiency; and between social transformation and stability/confidence.

As government identifies options for public expenditure, the need for reliable assessments of the probable impact of such expenditure becomes critical. To evaluate the impact of large social programmes, linked intertemporal models are used. Firms and households have a forward-looking behaviour and thus take into account all future prices in their investment and consumption decisions. The models suggested in this chapter take into account not only intertemporal dynamics but also a richer production disaggregation. They are a subset of economic models of South Africa built by the Commission that capture complex interactions between government decisions, economy-wide variables, and individual, household, national and provincial economies both within and across time periods.

2.2 Development and Fiscal Policy

Government's key priorities to achieve a more inclusive and equitable growth path are designed to achieve the 12 outcomes of the Medium-Term Strategic Framework. In the 2011 Division of Revenue Bill, government identified the following top policy priorities for the 2011/12 financial year:

- Improving the quality of basic education and skills development,
- Improving the quality of health care and infrastructure,
- Investing in new infrastructure and proper maintenance of social and economic infrastructure networks, and
- Accelerating job creation.

Furthermore, the government adopted the United Nations Millennium Declaration alongside other countries, as an unprecedented declaration of solidarity to rid the world of poverty. Some of the indicators expressed by the MDGs are closely related to the socio-economic rights mentioned in the South African Constitution and to the government's policy priorities. The government's outcomes and the MDGs indicate the results that the country wants to achieve, based on certain inputs (resources), outputs (the goods and services actually delivered) and impact (the change brought about by, or the effect of, an intervention). Updated targets for each

MDG taken from the South African Country Report (UNDP, 2010) show that MDG7 and MDG8 (environmental sustainability and global partnership for development) have already been achieved, while MDG2 and MDG6 (primary education and HIV/AIDS, malaria and other diseases) are likely to be achieved. However, the country has fared badly in terms of MDG4 and MDG5, which pertain to child and maternal mortality, largely because of the HIV/AIDS and TB pandemics. A series of policies, delivery agreements and budgets give expression to the government's commitment. In particular, the intergovernmental fiscal system is a key instrument for funding public sector delivery across the three spheres of government. In this respect, the country has followed four major development strategies since 1994 (see Box 2.1).

Box 2.1: Brief history of development strategies in South Africa

The four major development strategies since 1994 are:

1. The Reconstruction and Development Programme (RDP), which was launched in 1994. Its primary objective was to remove racial biases in a bid to address poverty and socioeconomic inequalities inherited from the previous regime.
2. The Growth, Employment and Redistribution (GEAR) strategy, introduced in 1996, was a macroeconomic policy framework that aimed to achieve sustained annual real gross domestic product (GDP) growth of 6% or more by the year 2000 and create 400,000 new jobs annually.
3. The Accelerated and Shared Growth Initiative for South Africa (AsgiSA), embarked on in 2006, was a coordinating framework to enable the achievement of new government goals of halving unemployment and poverty between 2004 and 2014. It aimed to accelerate economic growth to an average of at least 4.5% between 2005 and 2009 and further to a sustainable 6% average annual rate between 2010 and 2014.
4. The New Growth Path (NGP) was launched in 2010/11 and gives top priority to boosting employment and tackling poverty and inequality.

The main policies to be used to achieve the NGP targets fall within three broad areas: (1) macroeconomic policies, (2) microeconomic measures and (3) stakeholder commitments, which are envisaged to lead the economy to higher growth. As Box 2.2 shows, this growth will then translate into more jobs through five job drivers: (a) infrastructure (including housing, public works, input manufacture and improved competitiveness); (b) the main economic sectors (including the agriculture value chain, the mining value chain, manufacturing, tourism and high-level services); (c) seizing the potential of new economies (including the green economy and the knowledge economy); (d) investing in social capital (including cooperatives, the social investment community, social initiatives and the public sector); and (e) spatial development (including rural development and African regional development).

Box 2.2: The New Growth Path and job drivers

The Minister of Finance announced several complementary measures to the NGP in the 2011 Budget (National Treasury, 2011). These are:

- Education and skills development remain top priorities in government expenditure
- Investment in infrastructure of over R800 billion over the next three years
- Phased implementation of social security and National Health Insurance reform
- Additional R94.1 billion in government expenditure plans over the next three years.

The NGP targets five million jobs over ten years, distributed as follows:

- Infrastructure development and housing: 250,000 jobs a year to 2015

- Agriculture and agro processing: 500,000 jobs by 2020
- Mining: 140,000 by 2020
- Manufacturing: 350,000 jobs by 2020
- Tourism: 225,000 jobs by 2015
- Green, knowledge and social economies: 660,000 jobs by 2020
- Health, education and policing: 100,000 jobs by 2020
- Regional integration: 150,000 jobs by 2020.

Other far-reaching social security reforms will also be introduced in the period ahead. Government has promised to table proposals on the alignment of social security arrangements and retirement savings in 2011. The 2011 Budget also showed government's intent to introduce an NHI system (see Box 2.3), which is expected to be phased in over 14 years.

Box 2.3: National Health Insurance in South Africa

According to Amnesty International, National Health Insurance (NHI), which is sometimes called statutory health insurance, insures a national population for the costs of health care. It is usually instituted as a programme of health care reform, is enforced by law, and may be administered by the public sector or the private, or by a combination of both. On 11 September 2009, the South African Minister of Health signed a notice establishing the National Health Insurance Advisory Committee (Government Notice No. 903 in Government Gazette No. 32564, dated 11 September 2009). According to the 2011 Budget Review, the NHI will be phased in over 14 years. The 2011 Budget sets aside allocations for specific health service interventions, which are meant to lay the foundation for NHI as part of the Department of Health's Ten-Point Plan for restructuring public health. The full NHI will require more funding than what is currently allocated to public health. Proposals under review for raising money to finance the NHI include:

- Payroll tax
- Higher VAT
- Surcharge on taxable income
- Core payments or user charges.

Government has promised to announce specific funding instruments in the 2012 Budget.

To finance government priorities, expenditure in the 2011 fiscal framework rose by a total of R94.1-billion relative to the baseline of the Medium-Term Expenditure Framework. The respective policy levers and budget set out the means to realise these proposals. The proposed intensified use of expansionary fiscal strategies raises a number of critical policy questions, such as the composition of spending and whether the expanded spending is financed by reductions in government expenditure, by increases in government's budget deficit or by increased taxation. As Mountford and Uhlig (2009) note, these questions are critical for the science of economics and the practice of fiscal policy alike. Hence it is an opportune time to reflect on the current state and likely future of South African fiscal policy. The rest of this chapter provides such reflection, focusing specifically on the impact that the composition of government spending and alternative financing arrangements will have on the economy, for both short and longer term development and on the allocation of resources.

2.3 Comparative Analysis of Scenarios and Results

Increased public expenditures can have a positive impact on the economy. However, assuming all else is held constant, increased spending will translate into a greater debt, which may not be sustainable in the long run. Indeed, increasing spending may mean that the government will either need to reduce spending in the future or increase taxes, in order to get back to its original debt-to-GDP ratio. To evaluate the impact of such policies, the Commission carried out a dynamic analysis of the major policy initiatives. Three simulations were carried out, representing three different financing option scenarios, corresponding to:

- The NGP,
- The MDGs, and
- Reform of the intergovernmental transfer system.

The specifications and the results of these simulations are discussed in the following sections in terms of their current and future effects relative to a “business as usual” (BAU) scenario.²²

2.3.1 New Growth Path

Two simulations representing the NGP were run, both increasing government expenditures by the same percentage up to 2020: Stimulation 1 increases current expenditures, while Stimulation 2 increases investment expenditure. Both simulations assume that government expenditures will go back to their BAU values thereafter. Three different financing mechanisms are envisaged. The first assumption is that government cannot run a greater deficit and therefore taxes would have to be increased in order to compensate for this new spending. Two different types of taxes are alternatively set as endogenous to keep the deficit constant: tax rate on households’ income and taxes on commodities. As a third experiment, all taxes are kept constant and government is allowed to increase its deficit. In other words, the public administration finances its additional expenditures through increased debt.

Table 3 shows the impact of increased current public spending under these three financing mechanisms for three years (2011, 2015 and 2025). It shows that, in order to finance its additional expenditures, government would need to raise actual income tax by 2.65 percentage points in the short run, but this increase would be temporary as income tax rates would slowly go back to their original levels, as public expenditures revert to their 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.

As in the direct taxation scenario, this new tax would no longer be necessary in the longer run, for the same reasons. Under all these financing mechanisms, the impacts on macroeconomic variables are rather small. In the short run, real GDP stays about the same as in the BAU, but impacts on investment are bigger, thus affecting the long-run value of GDP. This impact on investment is greater under the income tax and the debt financing mechanisms because of the greater effect on savings from households and public deficit respectively. Although an indirect tax affects investment less in the short run, its impact is more even across periods, thus leading to a similar decrease in real GDP in the longer run.

Table 3. Simulation 1 – Impact of increased current public expenditures on macroeconomic variables (deviation from BAU in %)

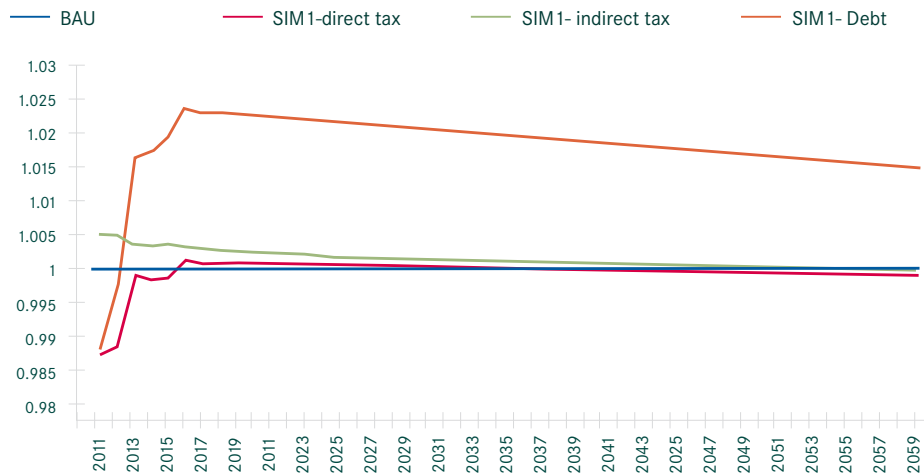
	Direct tax financing			Indirect tax financing			Debt financing		
	2011	2015	2025	2011	2015	2025	2011	2015	2025
GDP	1.18%	0.07%	-0.10%	-0.54%	-0.42%	-0.23%	1.14%	0.04%	-0.12%
GDP deflator	1.19%	0.38%	0.11%	-0.56%	0.15%	0.16%	1.15%	0.35%	0.10%
Real GDP	-0.01%	-0.31%	-0.20%	0.02%	-0.57%	-0.39%	-0.01%	-0.32%	-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

²² “Business as usual” in macroeconomic terms is taken here to mean the natural trend of the economy and economic policy. In other words, this is the trajectory the economy would have followed without the positive shocks or deliberate interventions that are simulated.

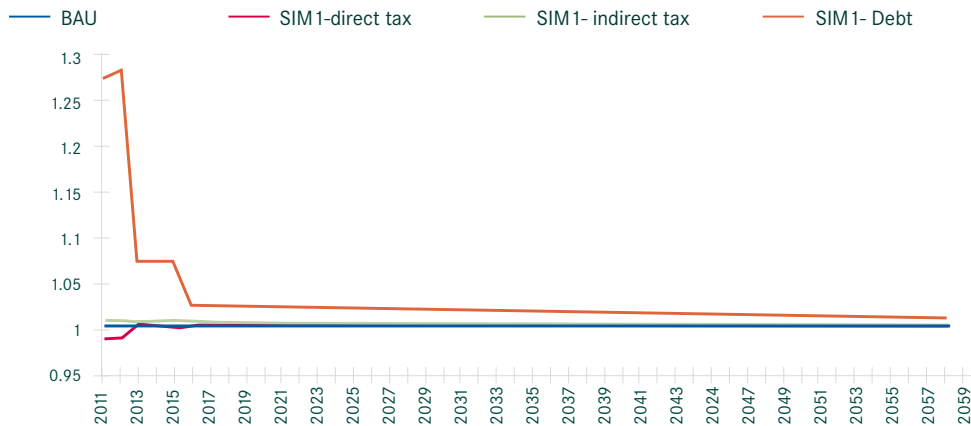
Figures 4 and 5 show the debt-to-GDP ratio and the deficit-to-GDP ratio respectively, over the next 60 years for Simulation 1. Although the impacts of the three financing mechanisms are about the same for the macroeconomic variables, these two ratios do vary quite differently. Indeed, in all cases the ratios would be greater than they would have been without the increased current spending. However, the impact is very much more important if the government chooses to finance its extra spending through increased debt. In the very long run, the debt-to-GDP ratio is 1.5% greater than it would have been and close to 1% for the deficit-to-GDP ratio. In other words, increased government spending for a short period of time will have a long-lasting impact on these two indicators.

Figure 4. Simulation 1 – Impact of increased public current expenditure on debt-to-GDP ratio (BAU = 1)



Source: FFC calculations

Figure 5. Simulation 1 – Impact of increased public current expenditure on deficit-to-GDP ratio (BAU = 1)



Source: FFC calculations

It is worth mentioning that increased public spending in education and health would probably have a positive impact on the productivity of the factors of production. A more educated and healthy work force is likely to be more productive. However, in its current version, the model does not attempt to capture this impact. Further econometric work on how public spending affects productivity would be required in order to take this aspect into account. In other words, the results presented here could be considered the worst case scenario, as any positive impact on productivity would generate a positive impact on GDP and other economic variables. Furthermore, assuming all else is held constant, a positive impact on GDP would translate into smaller debt-to-GDP and deficit-to-GDP ratios. In Simulation 2, the government increases its investment spending (see Table 4). Although the amplitude of the shock is the same as in Simulation 1, current expenditures represent a greater part of public expenditures. It is thus not surprising to see that the required rise in taxes (direct or indirect) is much less than the one presented in Table 3. Similarly, impacts on real GDP in the short run are negligible. However, as these expenditures finance investment, thus increasing total infrastructure and output, the GDP is positively affected in the medium and longer run. In fact, under a rigid deficit, taxes would eventually go down in the future as a result of greater production in the economy.

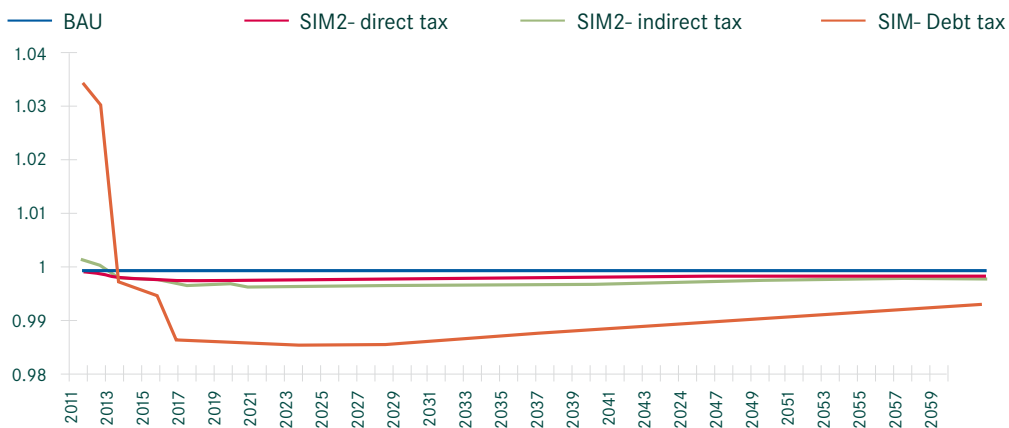
Table 4. Simulation 2: Impact of increased public investment (2011–2015) on macroeconomic variables (deviation from BAU in %)

	Direct tax financing			Indirect tax financing			Debt financing		
	2011	2015	2025	2011	2015	2025	2011	2015	2025
GDP	0.02%	0.15%	0.17%	-0.22%	0.16%	0.26%	0.02%	0.15%	0.17%
GDP deflator	0.02%	-0.34%	-0.27%	-0.22%	-0.33%	-0.25%	0.02%	-0.34%	-0.27%
Real GDP	0.00%	0.49%	0.44%	0.00%	0.49%	0.51%	0.00%	0.49%	0.44%
Real consumption	0.07%	0.30%	0.37%	-0.09%	0.23%	0.37%	0.07%	0.30%	0.38%
Real investment	-0.21%	0.89%	0.51%	0.46%	1.12%	0.79%	-0.25%	0.88%	0.51%
Debt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	-0.15%
Gov. expenditures	0.73%	0.07%	-0.07%	0.76%	0.06%	-0.10%	0.73%	0.08%	-0.08%
Increase in tax rate	0.34%	-0.03%	-0.11%	0.13%	-0.01%	-0.04%	n.a.	n.a.	n.a.

Source: FFC calculations.

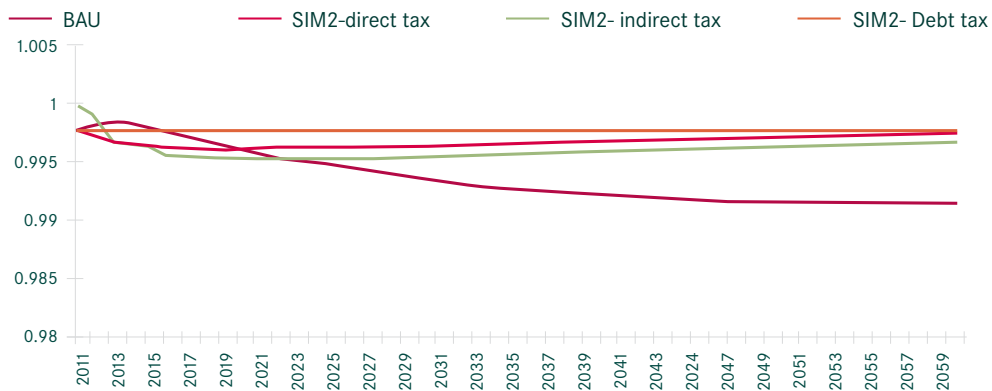
Figures 6 and 7 display different trends for the debt-to-GDP and deficit-to-GDP ratios to those seen in Simulation 1. In fact, as the GDP grows over time, a constant deficit translates into an improvement of both ratios over time. More surprisingly, this improvement is the greatest under the debt-financed scenario. In fact, keeping the same tax rates throughout the model horizon (2011–2059) would increase government revenues in the longer run and thus allow for a smaller deficit in the future.

Figure 6. Simulation 2 – Impact of increased public investment on debt-to-GDP ratio (BAU = 1)



Source: FFC calculations

Figure 7. Simulation 2 – Impact of increased public investment on deficit-to-GDP ratio (BAU = 1)

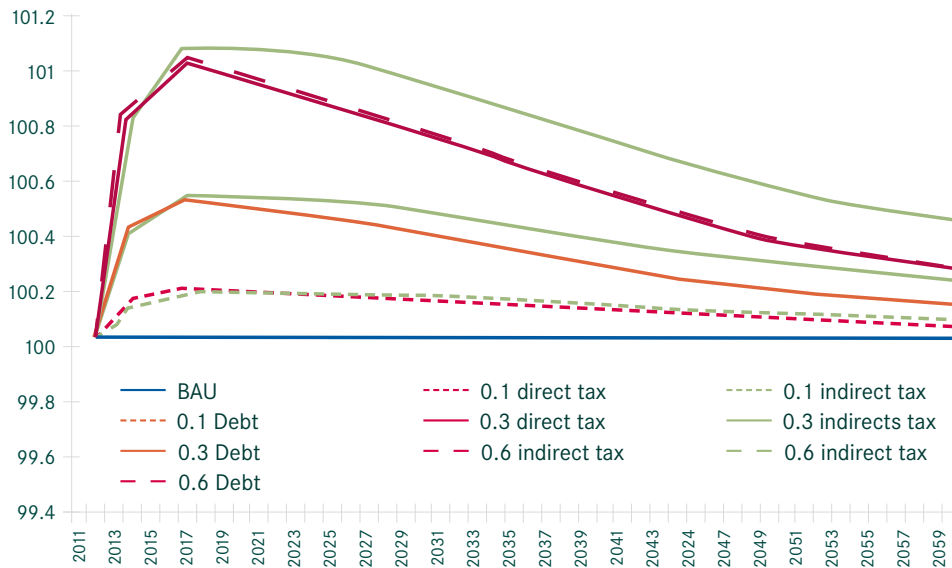


Source: FFC calculations

To test the robustness of the model to the elasticity values, Simulation 2 was run under the three different financing mechanisms using the lowest (0.1) and the highest (0.6) values of elasticities obtained from the South African econometric literature (Abedian and Van Seventer, 1995; Ayogu, 2005; Bogetic and Fedderke, 2005). Figures 8 and 9 present

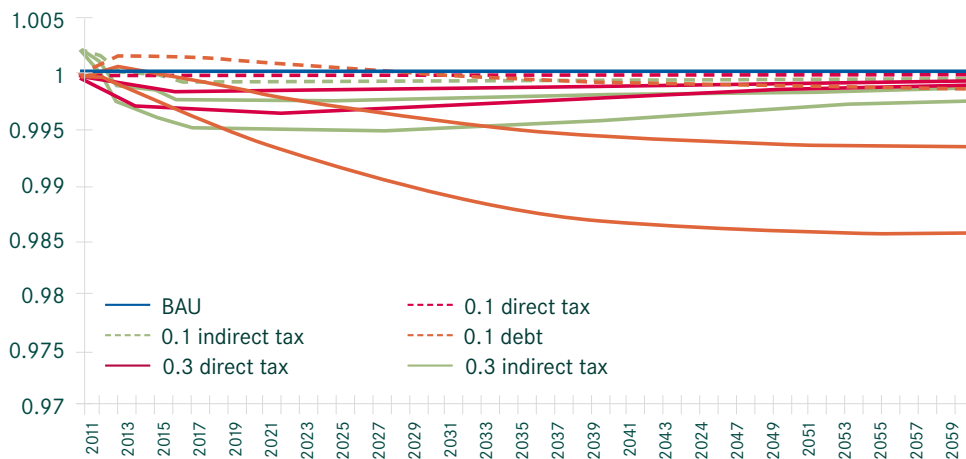
the impact of increased public investment on real GDP and debt-to-GDP ratio respectively. The results are qualitatively similar, whatever the value of the elasticity of the total factor productivity to infrastructure. In fact, the conclusions discussed above still hold when comparing the different financing schemes. As might be expected, the magnitude is somewhat different, but the impacts differ in a range of less than 1% and thus are not significant.

Figure 8. Simulation 2 – Impact of increased public investment on GDP (BAU = 100)



Source: FFC calculations

Figure 9. Simulation 2 – Impact of increased public investment on debt-to-GDP ratio (BAU = 1)



Source: FFC calculations

2.3.2 Attaining the Millennium Development Goals

A key question that needs answering is whether South Africa can achieve the MDGs, considering that 2015 is just a few years away. As discussed earlier, some of the MDGs have already been attained, but for the health-related ones (MDGs 4 and 5) attainment seems unlikely, even infeasible (UNDP, 2007, 60). Therefore, this section looks at how much additional public spending is needed to reach some of the goals. Moreover, some MDGs have a feedback effect on other MDGs. For instance, the HIV/AIDS MDG (MDG6), which will probably be reached, directly affects MDG4 and MDG5 (National Treasury, 2011). Indeed, more mothers who are HIV positive die giving birth than HIV negative ones. The same is true for under-five mortality (UNDP, 2007). Thus, investing in this particular MDG will also have positive effects on the other MDGs. The purpose is not to impose any hierarchical structure of importance or

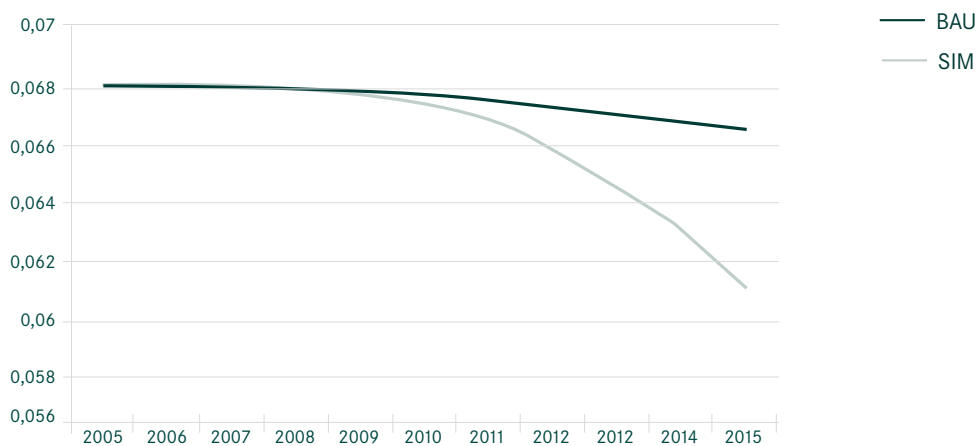
preference on the MDGs, but to try to simulate an improvement in the general situation within the time constraints. Simulations were run for the following three scenarios:

- Scenario 1: How much would it take to reach MDG2 (universal education) by 2015?
- Scenario 2: How much would it take to reach MDG6 (HIV indicators) by 2015?
- Scenario 3: Can MDG6 be reached through indirect tax financing by 2015?

(a) Scenario 1. How much would it take to reach MDG2 (universal education) by 2015?

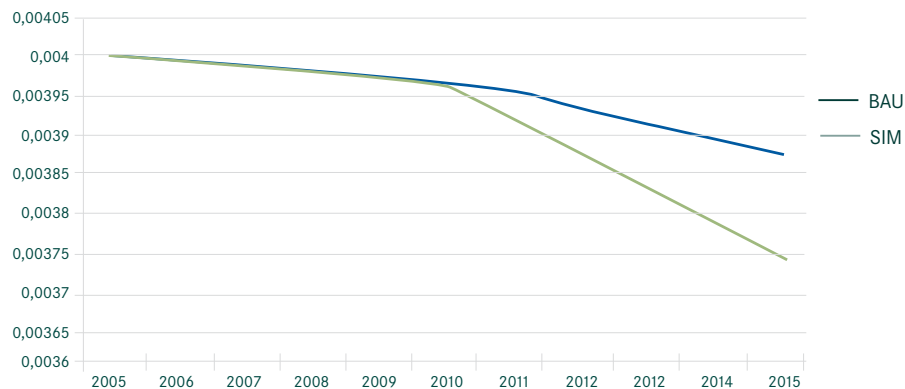
This scenario consists of reaching MDG2 (universal education) and seeing the cost in terms of primary education public spending. As explained earlier, improving the skills level of the population will have positive spillovers for other MDGs, by creating more skilled people for the economy in the long run. However, the assumption is that government borrows from domestic agents, and no corresponding tax or expenditure adjustment is available elsewhere to finance the policy. Increasing public spending in education for the primary education sector is not only about increasing teachers' salary. Increasing the education budget in fact means that government hires more teachers, gives subsidies to children for transport, supplies teaching aids, builds new safer schools, and so on. This increase in government's spending will have an impact on the rest of the economy as well as on the other MDGs. Figures 10, 11 and 12 below show the positive impact the policy has on the other MDGs.

Figure 10. Impact on MDG4 (deviation from BAU in %)



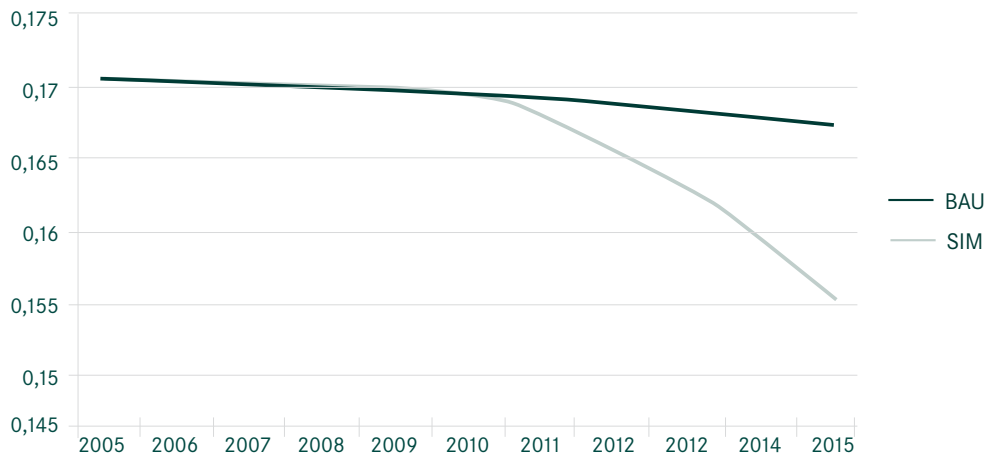
Source: FFC calculations

Figure 11. Impact on MDG5 (deviation from BAU in %)



Source: FFC calculations

Figure 12. Impact on MDG6 (deviation from BAU in %)



Source: FFC calculations

As mentioned previously, increased public spending also has an impact on the whole economy. As government hires more people (to teach, to build new schools, etc.), the effect on labour demand, and therefore on unemployment rates, is positive. A general equilibrium effect occurs, which means that government carries the other sectors of the economy through backward and forward linkages. The categories that really benefit from the policy are highly skilled and semi-skilled labour, but the effect is negligible for the low-skilled workers. The impact on households' income is also positive, as their spending on consumption also increases, by 1.14%, as do direct taxes (1.17%).

Government's income increases, notably due to the increase in households' direct taxes and in indirect taxes (as households consume more commodities). However, not surprisingly government savings decrease due to the absence of fiscal reform to compensate for the policy. The corresponding value is small, which explains the huge variation. Increased government borrowing, notably from domestic firms, has an impact on domestic investment, as firms are normally the main contributors to total investment, which declines. It is a typical crowding-out effect. GDP increases slightly in this scenario.

Summing up this simulation, the increase in public expenditures on education has a very positive short-term effect on employment because of the strong increase in the labour demand of the education sectors. The impact on student behaviour is also positive, with the number of drop-outs falling. This policy also has long-term beneficial impacts, notably on the education sector and through improved skilled labour endowment of households. However, over a longer timeframe, the education policy results in an increase in the unemployment rate of skilled workers.

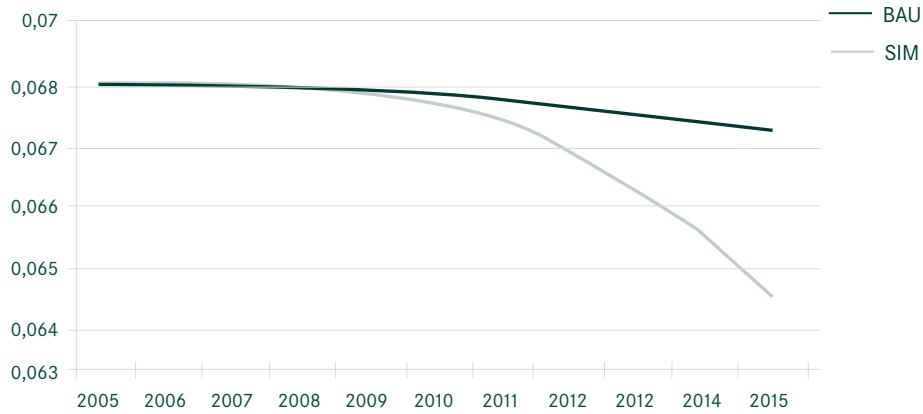
Moreover, the policy is expensive for some sectors, causing them to hire fewer people and reduce their production, whereas one would have hoped that the policy could generate enough qualified people who could find a job and pay taxes. Government could decide to increase households' both direct and indirect taxes to finance this policy. Such tax simulations indicate that similar positive effects would be felt in the education system, but the tax's introduction is quite bad for the economy. In the long run, unemployment and production of all sectors would decrease due to the tax increase.

(b) Scenario 2. How much would it take to reach MDG6 (HIV indicators) by 2015?

This scenario assumes that MDG6 (HIV indicator) is reached in 2015. According to the South African MDG Report, this objective is attainable (UNDP, 2007, 75). In order to reach the target, government increases its consumption for health services. In other words, it builds extra hospitals where necessary, improves the transport system to enable people to reach their health centres, allowing more people to access free treatments and so on, and implements the Department of Health's Ten-Point Plan effectively.

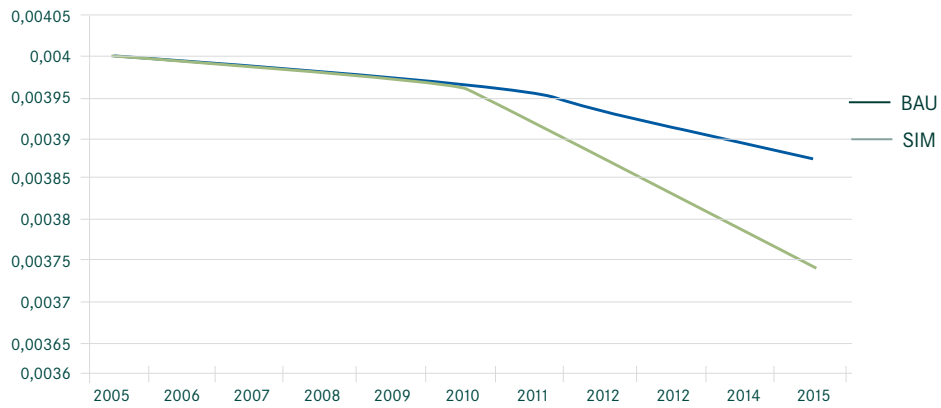
As previously mentioned, targeting MDG6 has positive knock-on effects for other MDGs, especially MDG4 and MDG5. Figures 13 and 14 show these effects.

Figure 13. Impact on MDG4



Source: FFC calculations

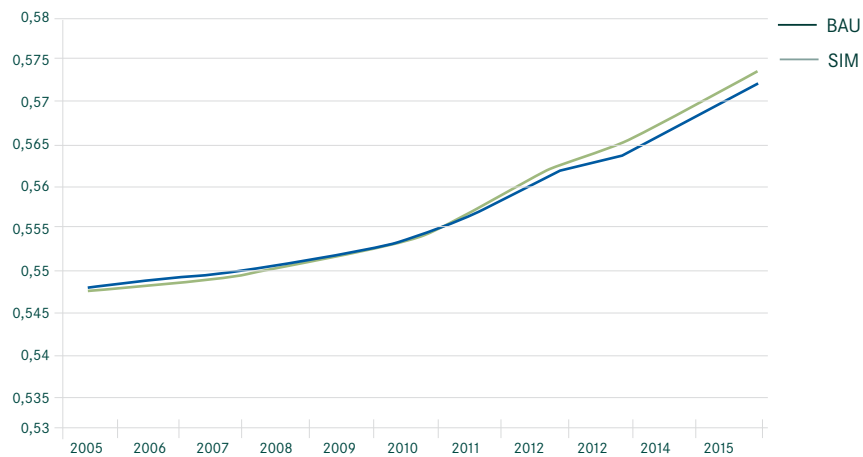
Figure 14. Impact on MDG5



Source: FFC calculations

The general improvement in health also affects the education indicator (MDG2), as children who are not sick can go to school and follow a normal school life. However, as Figure 15 shows, the impact is not as strong as for the previous indicators.

Figure 15. Impact on MDG2

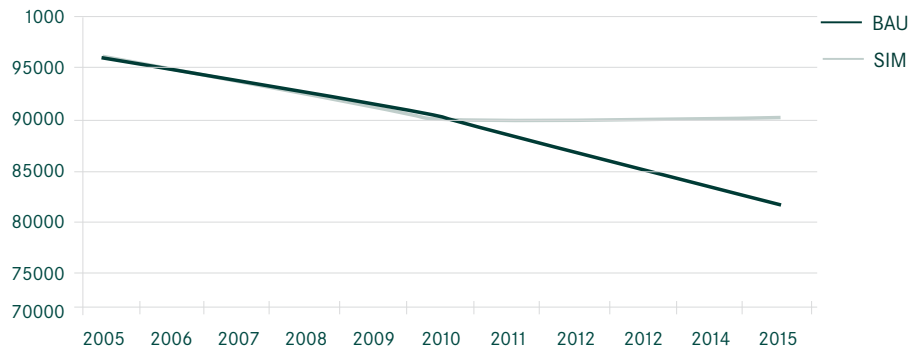


Source: FFC calculations

The implementation of the policy has positive effects on the entire economy. Indeed, government needs to hire people in order to build new care centres, as well as new doctors and nurses, which has a positive impact on the level of employment. The results clearly show that unemployment decreases for each type of worker and especially for skilled and highly skilled workers.

The impact on households is also positive, as their income increases by 0.63% in 2015, and as a result they start saving. The level of direct taxes collected by government also increases, which leads to an increase in government's income in 2015. Again in this scenario, government savings decrease by 2015, as in order to finance its policy the government borrows from the domestic market. Figure 16 clearly shows that from 2011 government increases its borrowing.

Figure 16. Impact on domestic borrowing (deviation from BAU in %)



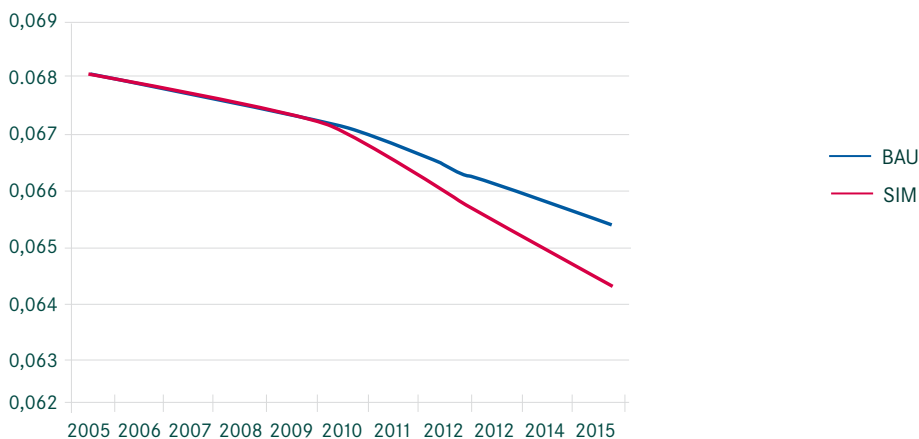
Source: FFC calculations

This increase in public borrowing, mainly from the domestic firms, has an impact on total investment. As in the previous scenario, increased public expenditure has a crowding-out effect. In order to avoid this crowding-out effect, and the bad consequences of a negative impact on total investment in the long run, the same stimulation was run. This time a fiscal reform was added, so that government will not have to borrow from the domestic economy.

(c) Scenario 3. Can MDG6 be reached through indirect tax financing by 2015?

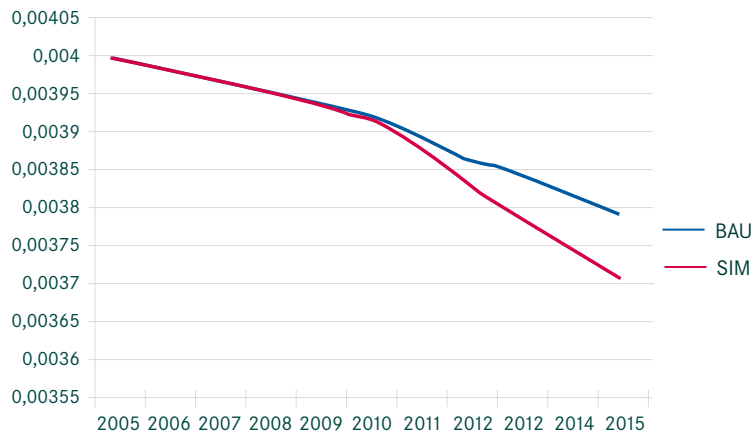
The scenario consists of reaching MDG6 by increasing government's consumption in health services, but adding a uniform tax on commodities to keep government's deficit constant. As in the previous scenario, the health-related MDGs (4 and 5) improve and child and maternal mortality decrease (Figures 17 and 18). However, a slight decrease is observed in MDG6 (Figure 19), as this indicator depends on the graduation rate, which relies on several proxies. Among them, households' per capita consumption decreases sharply, due to the tax financing option adopted. However, the decrease is almost undetectable, dropping from 0.588 to 0.584.

Figure 17. Impact on MDG4 (deviation from BAU in %)



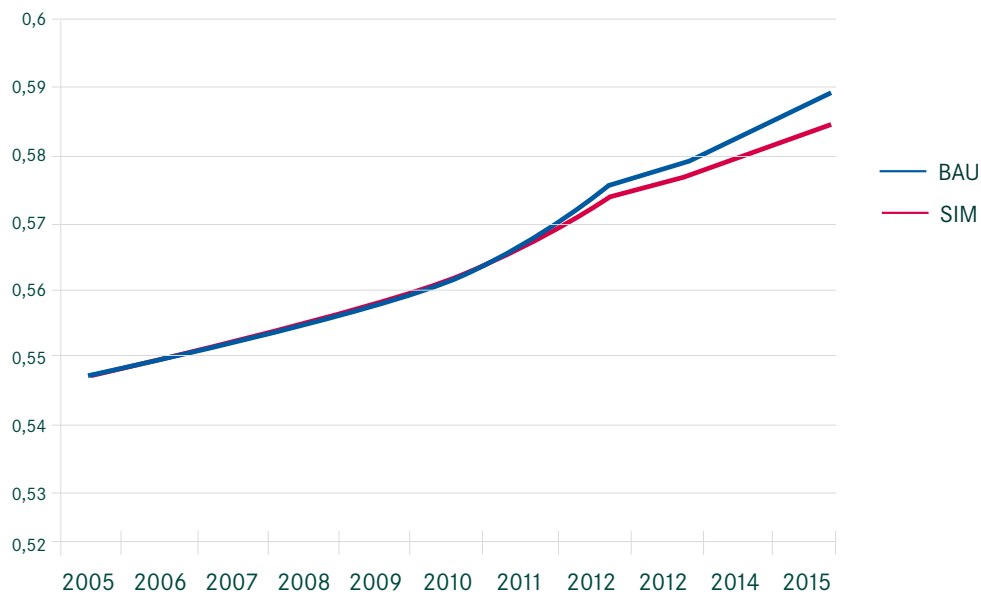
Source: FFC calculations

Figure 18. Impact on MDG5 (deviation from BAU in %)



Source: FFC calculations

Figure 19. Impact on MDG6 (deviation from BAU in %)



Source: FFC calculations

As in the previous simulation, government's increased consumption in health services stimulates activity in the whole economy and leads to an increase in labour demand, which results in an increase in households' income. However, due to the indirect tax, real consumption per capita decreases by 0.4% in 2015. The impact on government's income is positive, as it finances the policy by setting an indirect tax. The drop in households' consumption has a negative impact on total production, which decreases. The wage rate and the rate of return of capital consequently decrease. The decrease in the rate of return affects firms' incomes, and consequently the transfers²³ they make and their savings. Here investment is affected by the decrease in firms' savings, whereas in the previous simulations, it was affected by the decrease in government's savings. The impact on GDP (at basic prices) is hardly noticeable.

23 This explains why households' transfer and government's transfer incomes decrease.

2.3.4 Reforming the intergovernmental fiscal transfer system

To analyse the effectiveness of reforms to the intergovernmental fiscal transfer system, a simulation was run that reduced these transfers across the board assuming a low and high interprovincial factor mobility rate. This has heterogeneous effects on the well-being of households, as measured by changes in the equivalent variation of initial consumption expenses. Although, nation-wide, welfare does not change significantly (0.6% in both scenarios), its distributional effect among provinces is important. Changes in welfare are negative in four provinces: Limpopo, the Eastern Cape, KwaZulu-Natal and the North West, but positive in the other five: Mpumalanga, the Northern Cape, the Free State, Gauteng and the Western Cape.

A negative change in welfare is expected in Limpopo and the Eastern Cape, as these two provinces are initial net receivers of the intergovernmental revenue transfers and so experience a loss of revenues. KwaZulu-Natal and the North West Province also experience a reduction in welfare, as they lose transferred revenues. Positive changes in welfare in Mpumalanga, the Northern Cape, the Free State, Gauteng and the Western Cape are due to the additional revenue spending in these provinces because of the partial cancelling of revenues initially transferred to other regions.

When regional disparities are measured (using Theil indices), in particular within and between provinces, the overall regional disparity increases by 5–6%. Although the within-province disparities remain unchanged, the results vary from one province to another. In general, the effects are more pronounced among the bottom income groups of households (Table 5). Income disparities between the top and bottom income categories increase in Limpopo and the Eastern Cape, provinces that initially receive net positive intergovernmental revenue transfers. The reduction of revenue transferred to other provinces – and consequently an increase in national government spending in the province – has more benefit for the bottom income groups in the Northern Cape, Mpumalanga and the Free State. A similar trend is observed for the two scenarios.

Table 5. Impact of change in intergovernmental transfer arrangements on equivalent variation (% change of initial consumption expenses)

Household category	Eastern Cape	Free State	Gauteng	KwaZulu Natal	Limpopo	Mpumalanga	Northern Cape	North West Province	Western Cape
P1	-27.2	9.8	5.9	-3.4	-39.8	14.4	10.8	-2.3	6.3
P2	-26.0	9.8	5.6	-3.8	-36.6	12.5	8.7	-2.5	6.0
P3	-26.6	9.9	5.2	-3.7	-37.3	12.9	8.4	-2.2	6.3
P4	-26.3	9.9	4.8	-3.6	-37.8	13.1	9.3	-2.2	6.6
P5	-26.5	9.8	5.1	-3.7	-36.8	12.9	9.0	-2.3	6.4
P6	-26.7	10.0	4.8	-3.6	-38.2	13.4	9.9	-2.2	6.3
P7	-27.8	10.0	5.3	-3.4	-39.4	12.7	10.9	-2.3	6.2
P8	-27.9	10.1	4.8	-3.5	-40.0	13.1	16.2	-2.3	6.5
P9	-28.1	10.4	4.4	-3.4	-41.6	14.2	15.1	-1.9	6.9
P10	-35.4	11.6	4.5	-3.7	-51.7	17.9	13.8	-1.8	7.0
P11	-41.9	12.4	6.9	-3.9	-49.8	17.3	18.5	-2.5	7.2
P12	-31.5	13.9	5.2	-3.7	-42.2	15.4	54.8	-1.9	7.4
ALL	-30.4	11.3	5.1	-3.7	-41.7	14.8	14.3	-2.1	7.0

Source: FFC calculations

Decreasing intergovernmental fiscal transfers would therefore lead to an increase in regional disparities. Provinces like Limpopo and the Eastern Cape witness significant welfare losses compared to other provinces. Similarly, low-income households are heavily hit compared to the middle- and high-income households in these provinces. Provinces that were initially transferring revenue witness welfare gains and falling income disparities.

These findings suggest that decreases in grants play an important role in attaining the equity objective. Thus, the current intergovernmental transfer system is effective and contributes to realising the national government equity goal, and indeed achieving social cohesion. However, if fiscal restraint is widely perceived to be associated with not only a higher net tax burden on current generations, but also a more unequal distribution of their after-tax incomes, it would seem difficult to agree on painful measures to keep the interregional budgets balanced. Such concerns about intragenerational equity appear to be well justified if deficit reduction is implemented through cuts in social assistance or less regressive taxes. Not least from a South African welfare state perspective, a programme of fiscal consolidation could easily conflict with ambitious (re)distributive objectives.

The overall GDP effect is small; indeed, in this scenario, GDP falls by 0.1%. Higher provincial integration lowers the adverse effect of reducing intergovernmental transfers, but provincial disparities are more important. The group of provinces receiving revenues within the system witnesses a fall in GDP, which is particularly significant in Limpopo and the Eastern Cape. GDP falls slightly in KwaZulu-Natal and the North West Province. Regions transferring revenues (the Northern Cape, Mpumalanga, the Free State, Gauteng and the Western Cape) see their GDPs increase.

2.4 Recommendations

The New Growth Path is an accelerated investment programme in social and economic infrastructure and general government spending. South Africa has made some progress in achieving its MDGs. There are, however, some gaps that need attending to: inequality, poor educational attainment, child mortality and maternal mortality. The intensified use of expansionary fiscal strategies in this way raises a number of critical policy questions, such as the composition of spending and whether it matters that the expanded spending is financed by reductions in government expenditure, or by increases in government's budget deficit, or by increased taxation? To attempt to answer these questions, the Commission used intertemporal economy-wide models with elaborated government features.

With respect to inclusive growth, development and fiscal policy it is recommended that:

- National, provincial and local government should further reprioritise expenditures in respect of the Equitable Share and Conditional Grants for 2012/13 to move towards attaining the Millennium Development Goals. In this respect:
 - a. Government should prioritise MDG2 (universal education) and MDG6 (HIV indicators) in the interim as their attainment will have positive impacts on the other MDGs (positive spillovers); and
 - b. The time frame for attaining all outstanding MDGs simultaneously should be extended beyond 2015 to make the task feasible.
- Government should continue strengthening the equity focus of the current system of intergovernmental transfers, in particular in the health and education sectors. The existing transfer system is not the most effective instrument to support government's growth objectives, and this aspect should continue to be strengthened so that it plays a supportive role in this respect.
- Government should actively and specifically continue pursuing the implementation of significant capital investment in public infrastructure that has a positive impact on total factor productivity and employment in the context of the New Growth Path.