

# Develop a Global Partnership for Development

The South Africa I know, the Home I understand











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## MILLENNIUM DEVELOPMENT GOALS

Goal 8: Develop a Global Partnership for Development

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## **ACRONYMS**

CPI Consumer Price Index	
DAC Development Assistance Committee	
DST Department of Science and Technology	
EU European Union	
FDI Foreign Direct Investment	
GDI Gross Disposable Income	
GDP Gross Domestic Product	
GERD Gross domestic Expenditure on R&D	
GFCF Gross Fixed Capital Formation	
GNI Gross National Income	
ICASA Independent Communications Authority of South Africa	
ICT Information and Communications Technology	
ILO International Labour Organisation	
ITU International Telecommunication Union	
LDC Least Developed Country	
MDG Millennium Development Goal	
NDP National Development Plan	
NGP New Growth Path	
NSI National System of Innovation	
ODA Official Development Assistance	
OECD Organisation for Economic Co-operation and Development	
R&D Research and Development	
SARB South African Reserve Bank	
Stats SA Statistics South Africa	
UNCTAD United Nations Conference on Trade and Development	
UNESCO United Nations Educational, Scientific and Cultural Organization	on

## **STATUS AT A GLANCE**

Goal 8: Develop a Global Partnership for Development						
Indicators	1994 baseline (or nearest year)	2010 Status (or nearest year)	Current status (2013 or nearest year)	2015 Target	Target achievability	Indicator type
Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system						
Gross domestic product (GDP) per capita in current prices, Rand Thousand	22 758 (2001)	49 134 (2009)	57 700 (2011)	NA		Domesticated
Inflation rate by headline consumer price index, %	5.8 (2001)	7.1 (2009)	5.0 (2011)	3 to 6	Achieved	Domesticated
Employment-to- population ratio, %	41.5 (2003)	42.5 (2009)	40.8 (2011)	NA		Domesticated
Labour productivity, 2008 = 100	92.0 <sup>1</sup> (2003)	111.6 (2008)	110.0 (2011)	NA		Domesticated
Investment share in GDP, %	14.8 <sup>2</sup> (2001)	19. 3 (2009)	19.0 (2011)	NA		Domesticated
Foreign direct investment in GDP, %	5.7 <sup>3</sup> (2001)	1.4 (2009)	1.5 (2011)	NA		Domesticated
Gross savings share in gross disposable income (GDI), %	15.9 (2001)	15.8 (2009)	16.6 (2011)	NA		Domesticated
Public debt to gross national income (GNI), %	43.3 (2001)	28.4 (2008)	36.7 (2011)	NA		Domesticated
Current account balance as a proportion of GDP, %	0.3 (2001)	-4.0 (2009)	-3.4 (2011)	NA		Domesticated
Share of imports from developing and least developed countries, %	1.0 (LDC) 32.1 (DC) (2002)	4.3 (LDC) 46.4 (DC) (2009)	3.5 (LDC) 49.0 (DC) (2011)	NA		Domesticated
Official development assistance received as	0.23 (2005)	0.21 (2009)	0.11 (2011)	NA		Domesticated

<sup>1</sup>Changed from 100.0 (2003) <sup>2</sup> Changed from 15.1 (2001) <sup>3</sup>Changed from 8.4 (2001)

Indicators	1994 baseline (or nearest year)	2010 Status (or nearest year)	Current status (2013 or nearest year)	2015 Target	Target achievability	Indicator type
a proportion of GNI, %						
Gross domestic expenditure on research and development (R&D)	0.79 <sup>4</sup> (2003)	0.92 (2007)	0.87 (2009)	NA		Domesticated
as a percentage of GDP, %						
Target 18: In coopera information and com	-	rivate sector, ma	ake available the k	enefits of	f new technolog	ies, especially
Fixed telephone lines per 100 population, %	25.8⁵ (2002)	18.4 (2007)	15.3 (2011)	NA		Domesticated
Cellular telephone subscribers per 100 population, %	35.4 <sup>6</sup> (2002)	73.5 (2007)	89.2 (2011)	NA		Domesticated

 <sup>&</sup>lt;sup>4</sup> Changed from 0.6 (2002)
<sup>5</sup>Changed from 11.1 (2001)
<sup>6</sup> Changed from 18.5 (2001)

## **INTRODUCTION**

The 2005 World Summit reaffirmed the commitment to a global partnership for development, focusing on sound economic policies, good governance, the promotion of international trade and increasing the resources made available for development assistance and debt relief.7 Millennium Development Goal (MDG) 8 focuses on this international (global) development agenda, with targets and indicators focusing on Official Development Assistance (ODA), market access and international trade, and access to new technologies (particularly in terms of information and communications). Given the unique circumstances of the country's macroeconomic structure (for example, having little reliance on ODA), South Africa has chosen to customise its targets for Goal 8, deriving 14 indicators which track the country's overall macroeconomic performance. The report therefore provides an overview of South Africa's performance in achieving a solid foundation on which to achieve the Goals 1 to 7, while also highlighting the extent to which South Africa has contributed to the global development.

Since the previous MDG 8 report (2010), a number of policy developments have occurred in South Africa. These policies outline the strategic macroeconomic direction that the South African government has chosen to take over the medium- to long-term. The two most significant of these are the New Growth Path (NGP) (endorsed by South Africa's Cabinet in October 2010) and the National Development Plan (NDP) (endorsed by South Africa's Cabinet in September 2012). The NGP provides a framework for industrial and economic development, specifically targeting investment in industrial activities that have been identified as comparatively more labour intensive. The NDP provides an overview of the challenges and needs of the country, identifying key constraints to achieving inclusive growth and proposing broad solutions to ensure that South Africa achieves set targets by 2030.

After the global recession in 2009 World growth has improved, with global (real) gross domestic product (GDP) growth averaging just over 4% between 2010 and 2012. This growth has been driven by emerging markets, where growth has averaged over 6% in this period. While South Africa has also recovered somewhat from a recession in 2009, GDP growth has not matched the record growth levels seen prior to 2009. This is, in part, due to sluggish growth in developed economies, such as the Euro Area where growth has averaged 2% between 2010 and 2012. 8 The European Union (EU) still accounts for a significant proportion of South Africa's export market. Domestically, a slowdown in investment since the 2010 FIFA World Cup has also impacted negatively on growth.

While none of South Africa's MDG 8 indicators have official MDG targets, South Africa is unlikely to achieve the high level goals set out in the NDP and the NGP in the short-term. Significant action and intervention is required to achieve its medium- and long-term objectives.

<sup>&</sup>lt;sup>7</sup> United Nations General Assembly (2005)

<sup>&</sup>lt;sup>8</sup> GDP growth figures based on data from the IMF World Economic Outlook (April 2013) database.

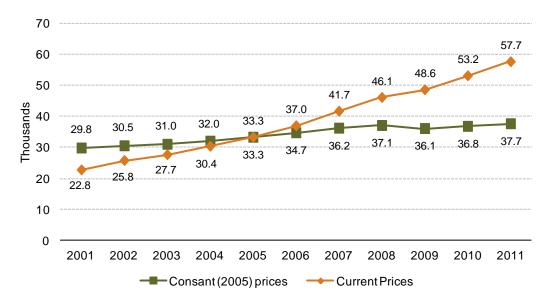
The MDG Goal 8 indicators for South Africa have been divided into four sections, each looking at key aspects of the country's overall performance. The indicators have been grouped into sections providing an overview of South Africa's macroeconomic environment (growth, inflation and employment), the levels of investment and savings in South Africa, the country's international trade and ODA relations, and a section highlighting South Africa's Information and Communication Technology (ICT) advances and investment in Research and Development (R&D). The official indicators selected by South Africa for goal 8 have been provided by Statistics South Africa (Stats SA), with these indicators supplemented by analyses of other data where relevant.

## **GROWTH, INFLATION AND EMPLOYMENT**

Income per capita estimates the income earned by each individual in a country given that income was distributed equally across the population. GDP per capita subsequently provides an indication of the average level of economic development and macroeconomic performance of a country and can be used to assess the health of an economy and measure its response to changing domestic and international economic conditions. The main shortcoming of this measure is that it does not account for the distribution of income amongst the population.

Figure 1 depicts the trend of South Africa's nominal GDP per capita as well as real GDP per capita. Real GDP per capita<sup>9</sup> is included as it compensates for changes in the overall price level and therefore provides a more accurate indication of the change in output / real income over time. South Africa has experienced moderate increases in income per capita when taking price inflation into account. Between 2001 and 2011, real per capita income increased by 26%, equal to an effective average annual growth rate of 2.4%. Improvements in per capita income in this period have been dampened somewhat by the effects of the global recession in 2009, and the subsequent sluggish growth in the domestic economy. Real GDP per capita declined in 2009 by 2.7%, with South Africa only able to surpass 2007 levels in 2011.

<sup>&</sup>lt;sup>9</sup> Real GDP per capita is nominal GDP per capita adjusted by the GDP deflator. The GDP deflator is the ratio of nominal estimates of GDP to the real estimates of GDP. It is a variable supplied by Stats SA and uses 2005 as the base year. This is also why nominal GDP per capita equals real GDP per capita in 2005 in *Figure 1*.



#### Figure 1: GDP per capita in current and real prices, Rand thousand

Source: Gross Domestic Product, Statistics South Africa

In South Africa income inequality is a persistent worry, and Indicator 1 fails to highlight this. In 2008, South Africa's Gini Coefficient10 was estimated as one of the highest in the world at 0.711. This inequality is further highlighted by average household income changes from data collected during the 2001 and 2011 censuses.

High inflation tends to have a disproportionately high negative impact on the poor, who can least afford such changes, and can therefore exacerbate income inequalities. Inflation targeting was adopted by the South African Government in February of 2000. This entails the Minister of Finance mandating the South African Reserve Bank (SARB) to pursue a specific target range. The range or band was set at 3 - 6 per cent and has remained as such, except for a short period in 2001 when the upper limit was lowered to 5%.

The SARB sets and adjusts the repurchase (repo) rate that directly impacts the prime interest rate in order to manage the inflation rate. In general, there is a two-year lag in the reaction of prices to changes in interest rates, and interest rate changes must therefore be made on the basis of forecasted price levels.12 Therefore, even though there were significant increases in interest rates in the early 2000s, inflation only moved back to within the band in September 2003. Headline (CPI) inflation reached an annual low of 1.4% in 2004, and then rose strongly until 2008, remaining within the target range until 2006. Rising food and commodity prices in this period saw inflation peak in 2008, before the global and domestic economic slowdown brought inflation back to within the target range and this can largely be attributed to weaker demand and lower commodity prices.

<sup>&</sup>lt;sup>10</sup> Value between 0 and 1 where 0 represents perfect equality and 1 perfect inequality.

<sup>&</sup>lt;sup>11</sup> Leibbrandt et al (2012)

<sup>&</sup>lt;sup>12</sup> de Waal & van Eyden, (2012)

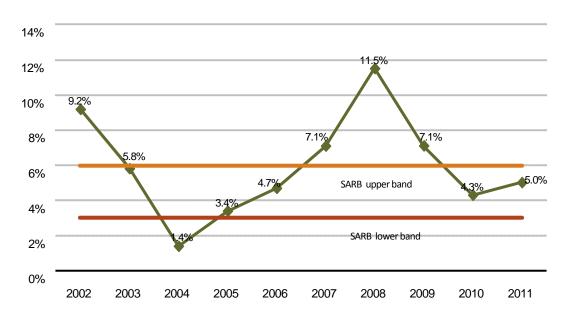
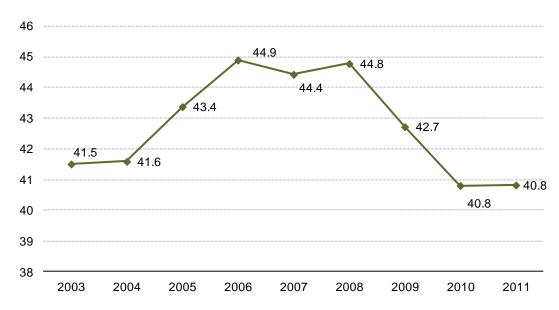


Figure 2: Inflation rate based on headline-CPI (per cent)

Source: Consumer Price Index, Statistics South Africa

While more recently inflation has remained within the target range, and per capita incomes have risen (albeit slowly), South Africa's employment has not recovered from the impact of the global financial crisis in 2009. Figure 3 and Figure 4 describe the employment and labour landscape in South Africa. The first indicator provides insight into the proportion of the population (of working-age) employed in South Africa, thereby showing the labour absorption rate.

The International Labour Organisation's (ILO) (2012) estimates indicate a world average employment-to-population ratio of roughly 60% in 2011, with this figure close to 65% for Sub-Saharan Africa and as high as 70% for East Asia. In 2011, South Africa's labour absorption rate was just under 41%, declining from around 45% in 2008. This decline is in line with global employment trends – though the global employment-to-population ratio is estimated to have declined by just under 1% between 2008 and 2011. Developed economies and countries in South Asia have been hardest hit, with employment-to-population ratios falling by close to 2% between 2009 and 2011. Positively, the gender difference in employment levels in South Africa is much smaller when compared to the global average. In 2011, the employment-to-population ratio was 47% for men and 35% for women in South Africa, compared to global estimates of 73% for men and 48% for women.

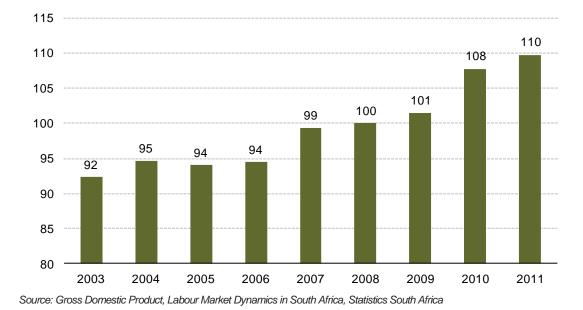


#### Figure 3: Employment-to-population ratio (per cent)

Source: Quarterly Labour Price Survey, Mid-Year Population Estimates, Statistics South Africa

Labour productivity (effectively measured as real GDP per worker) has increased by 10% between 2008 and 2011, with a sharp increase between 2009 and 2010. Labour productivity improvements can be a result of increasing efficiency, technological advances and capital investments (e.g. in machinery). While this data may suggest a positive improvement in the country's productivity, the data highlight a key structural problem in South Africa's economy. The increase in productivity levels between 2008 and 2011 have occurred alongside a decline in the absolute number of people employed in the economy. Between 2008 and 2010, South Africa's economy shed over 800,000 jobs while real GDP grew at an annual average rate of 0.8%. Although the economy has absorbed more labour in 2011, the absolute number of people employed in 2011 was still well below 2008 levels<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> Based on data from Stats SA release P0441 and Stats SA (2012a).



#### Figure 4: Index of average labour productivity (2008 = 100)

The extent to which labour productivity improvements have overshadowed job losses is illustrated in Figure 5, which shows the percentage change in employment, value added and labour productivity across South Africa's production sectors between 2008 and 2011. In this period, only two sectors have seen an increase in the levels of employment: the financial and government and personal services sectors. For the primary and secondary sectors, employment levels have fallen, while labour productivity (of those still employed) has increased. Even in sectors where value added (output) has declined (such as the agriculture and manufacturing sectors), labour productivity has increased, despite the even greater fall in employment.

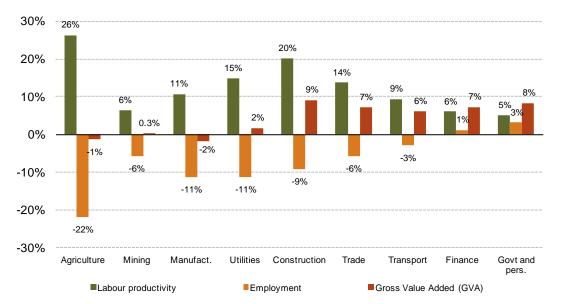


Figure 5: Change in productivity, employment and value added between 2008 and 2011 (%)

Source: Gross Domestic Product, Labour Market Dynamics in South Africa, Statistics South Africa

Low growth (particularly low labour-absorbing growth) and structural unemployment are recognised as key areas of concern by the South African Government. The NDP suggests that South Africa faces a "low-growth, middle income trap", with this trap exhibited by four key features, including uncompetitive goods and services markets, uncompetitive labour markets, low domestic savings and a poor skills profile. The Plan's high level employment targets include:

- A fall in the strict unemployment rate from 25% to 14% in 2020 and to 6% by 2030
- An increase in the labour force participation rate from 54% to 65% by 2030 and 11 million additional jobs by 2030.

The NDP highlights a number of overall elements considered key for employment creation (such as a better educated workforce and improved health outcomes) but also highlights specific policies that the plan considers consistent with the NGP.

The NGP aims to grow employment by 5 million jobs by 2020 by focusing on areas identified as having the potential to create jobs on a large scale. These drivers include:

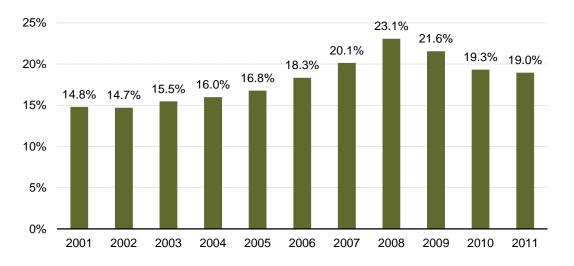
- Substantial public investment in infrastructure both to create employment directly: in construction, operation and maintenance as well as the production of inputs; and indirectly, by improving efficiency across the economy.
- Targeting more labour-absorbing activities across the main economic sectors the agricultural and mining value chains, manufacturing and services.
- Taking advantage of new opportunities in the knowledge and green economies.
- Leveraging social capital in the social economy and the public services.
- Fostering rural development and regional integration.

While these policies highlight the importance of investment in capital (both human and infrastructure), as well as the importance of developing both internal and external linkages, comparatively less attention is paid to the labour market itself. The World Economic Forum's (2012-13) Global Competitiveness Report ranked South Africa 113<sup>th</sup> out of 144 countries in terms of overall labour market efficiency and 128<sup>th</sup> in terms of labour market flexibility. It is clear that any improvements in South Africa's unemployment situation will require interventions to address long-standing structural impediments and to improve the functioning of South Africa's labour markets.

#### **INVESTMENT AND SAVINGS**

Figure 6 depicts the level of investment in South Africa as a percentage of GDP from 2001 to 2011. From 2001 to 2008, a strongly positive trend can be seen, with investment increasing from 14.8% of GDP in 2001 to 23.1% in 2008. However, from this point onwards, uncertainty resulting from the global financial crisis and slower domestic growth has contributed to a sharp drop in investment from 23.1% of GDP in 2008 to 21.6% in 2009. Worryingly though, this downward trend has continued into 2011 with investment recorded at 19% of GDP, 4.1 percentage points down from pre-crisis levels. When comparing South Africa's 2011 figures to that of the other BRICS countries,

it is clear that South Africa is lagging behind the rest of this group, with the exception of Brazil (20%). Levels of investment in China (48%), India (35%) and Russia (25%) are far higher.<sup>14</sup>



#### Figure 6: Investment share in GDP (%)

Source: Gross Domestic Product, Statistics South Africa; Quarterly Bulletin, South African Reserve Bank

*Figure 7* shows, in terms of percentage, the sources of investment in South Africa. The share of investment from private business enterprises declined up to 2009, while during this same period, the relative contribution of public corporations has increased. Post-2009 and likely due to the completion of World Cup-related investments, the share of public investment has fallen. The subsequent rising share of private sector investment has not been enough to prevent an overall decline in investment in South Africa. It is also interesting to note that Public Corporations and

<sup>&</sup>lt;sup>14</sup> The World Bank's World dataBank database.

State Owned Entities now account for a greater proportion of investment than the General Government, suggesting that Para-statal entities are being used to drive public sector investment.

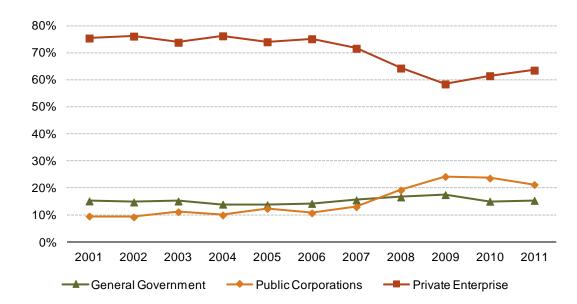


Figure 7: Gross capital formation by type of organisation (per cent of GDP)

Source: KBP6181J, KBP6182J, KBP6183, South African Reserve Bank

Looking forward, the public sector (fiscus and state-owned companies) plans to spend R827 billion on infrastructure over the next three years<sup>15</sup>. It is expected that the national infrastructure programme will result in a gross fixed capital formation growth rate of 9% per year over the next three years<sup>16</sup>.

In addition to domestic gross capital formation, investment from outside the country is an invaluable source of external financing. This is particularly true in South Africa, which has a comparatively low savings rate. As can be seen in

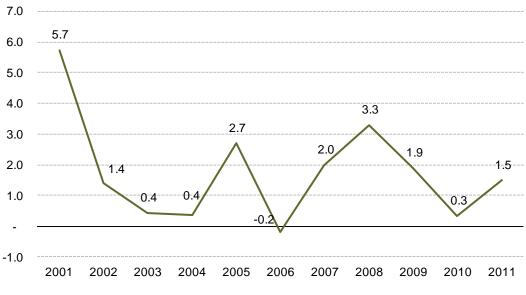
<sup>&</sup>lt;sup>15</sup> National Treasury (2013a)

<sup>&</sup>lt;sup>16</sup> National Treasury (2013b)

*Figure 8*, foreign direct investment (FDI) has fallen considerably from 5.73% of GDP in 2001 to 1.49% in 2011. This is partly a result of slower world growth and falling commodity prices, but also a reflection of increased domestic risk, as reflected in the downgrading of South Africa's credit rating by the major rating agencies. Nevertheless, within Sub-Saharan Africa, Nigeria and South Africa remain the top recipients of foreign investment. This is illustrated by the fact that out of 764 investment projects (Greenfield and existing) in Africa last year, South Africa was the recipient of 154<sup>17</sup>.

Figure 8: Foreign Direct Investment as percentage of GDP (per cent)

<sup>&</sup>lt;sup>17</sup> Ernst & Young (2013)



Source: Statistics South Africa

The World Bank *Ease of Doing Business* indicators provide a useful comparative review of the regulatory environment across almost all countries, and as such, are good indicators of the ability of a country to compete for foreign investment. The 2013 index ranked 185 countries with South Africa performing slightly better than in 2012, improving by two positions to 39<sup>th</sup>. Looking at the different sub-categories there are areas where South Africa does well and others where interventions seem needed. South Africa performed particularly well in the "Getting Credit" and "Protecting Investors" sub-categories, ranking 1<sup>st</sup> and 10<sup>th</sup> respectively. Areas where South Africa ranks in the lower half of the global rankings include "Getting Electricity", "Trading across borders", "Registering Property", "Enforcing Contracts" and "Resolving Insolvency". The cost of importing and exporting improved significantly in 2013 (ranked 115) compared to 2012 (ranked 145), although there is clearly still room for improvement.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Data based on The World Bank's Doing Business database (<u>http://www.doingbusiness.org/</u>)

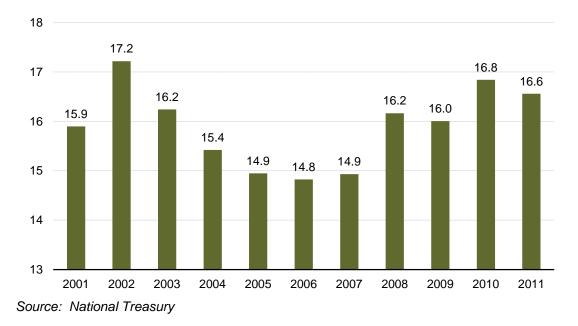
Indicator	Ranking
Starting a business	53
Dealing with Construction Permits	39
Getting Electricity	150
Registering Property	79
Getting Credit	1
Protecting Investors	10
Paying Taxes	32
Trading Across Borders	115
Enforcing Contracts	82
Resolving Insolvency	84
Ease of Doing Business	39

#### Table 1 : World Bank's Ease of Doing Business Indicators (South Africa, 2013)

Source: Doing Business database (2013), The World Bank

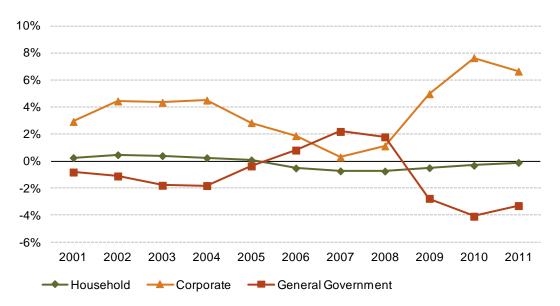
South Africa has a low savings rate compared to other emerging economies, which greatly increases the country's dependence on, and vulnerability to, foreign investment flows. After dipping below 15% of Gross Disposable Income (GDI) for 3 years from 2005, gross savings recovered slightly, reaching 16.6% of GDI in 2011. In 2010, South Africa's gross savings as a percentage of gross domestic product was 16.5%, which is low compared to other emerging economies such as Russia (27.5%), China (52.4%), India (35%), Mexico (23.6%) and Thailand (31.0%). Brazil, at 18%, is the only BRICS country that has a savings rate that is comparable to South Africa<sup>19</sup>.





<sup>&</sup>lt;sup>19</sup> 2013 data base on The World Bank's World Development Indicators (<u>http://data.worldbank.org/indicator</u>)

To better understand the aggregate trend in savings, it is necessary to look at its various components, as shown in Figure 10. Since 2005, South African households have been dis-saving (i.e. they are spending more than they earn). General government was also a dis-saver for most of the decade, except for three years between 2005 and 2008. As a consequence of the financial crisis (and the need to adopt a counter-cyclical approach), the Government has been dis-saving since 2009. The South African corporate sector has been the only net contributor to the country's savings over this period. Except for 2006, 2007 and 2008, private business has been able to maintain a savings rate above 2% of GDP. Relatively high levels of corporate savings were reached in 2010 and 2011, with private operators withholding investment and expenditure, largely in response to the increased economic uncertainty over this period.<sup>20</sup>



#### Figure 10: Gross savings as a % of GDP (per cent)

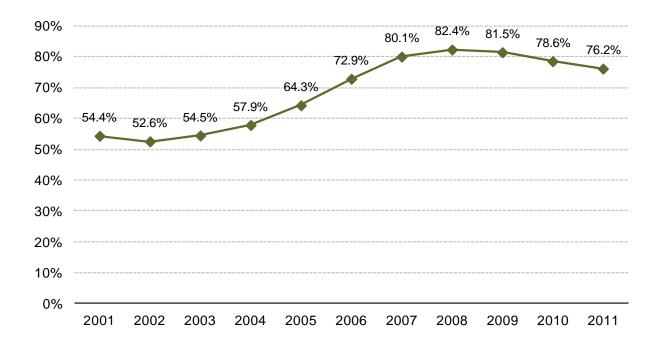
The reasons for low household savings in South Africa are varied but include low levels of disposable income, high levels of unemployment, inflationary pressures and other disincentives to save. This, together with high levels of household debt, as shown in Figure 11, dampens the ability of households to contribute to overall investment and consumption. The NDP highlights the low overall savings rate as a key contributor to South Africa's reliance on volatile, foreign investment flows, and points to the need to raise savings to ensure better growth over the medium- to long-term. In order to encourage increased savings the National Treasury has been exploring various savings vehicles and in 2012 released proposals for potential tax incentives<sup>21</sup>.

#### Figure 11: Household debt to income (per cent)

Source: Publications KBP6200J, KBP6201J, KBP6202J, KBP6006J, South African Reserve Bank

<sup>&</sup>lt;sup>20</sup> Gross saving is made up of savings by the household, corporate and general government sectors, as well as consumption of fixed capital, or depreciation of fixed assets. Consumption of fixed capital, the largest component of gross saving in South Africa, is not shown on the graph.

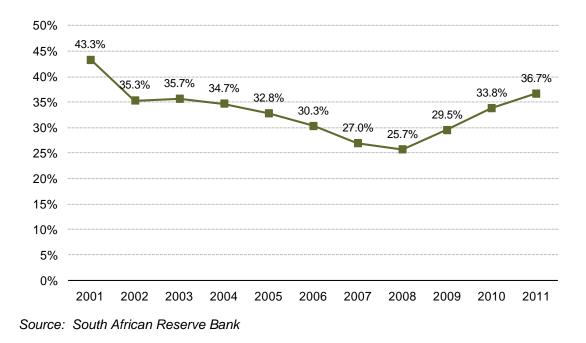
<sup>&</sup>lt;sup>21</sup> National Treasury (2012)



Source: Publication KBP6525J, South African Reserve Bank

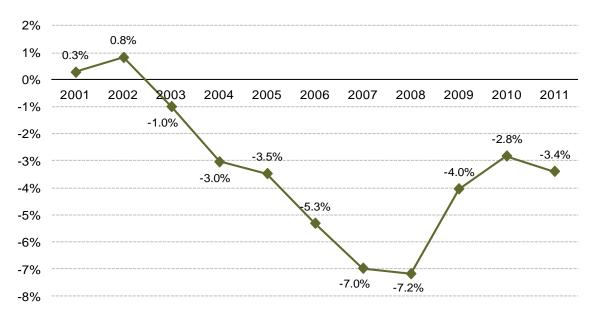
Figure 12 shows the trend in government borrowing from 2001 to 2011. There are two distinct phases over this time period. In the first phase prudent fiscal policies aimed at producing a balanced budget in boom years caused the downward trend that lasted until 2008. In the second phase, between 2008 and 2011, government debt increased from 25.7% to 36.7% as government expenditure increased (and revenue stagnated) in response to the global recession and economic contraction in South Africa. Increased government expenditure in the period leading up to the FIFA World Cup in 2010 might also have played a role.

Figure 12: Public Debt as a proportion of GNI (per cent)



## **INTERNATIONAL TRADE AND ODA**

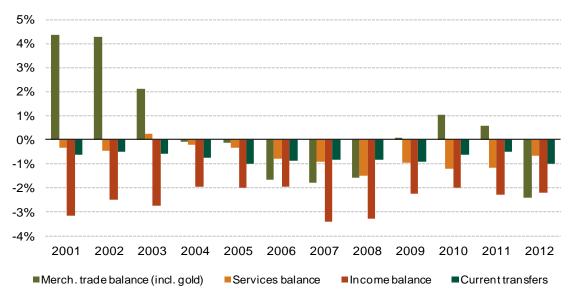
The current account provides a reflection of South Africa's balance of trade and income with the rest of the World. The last time that South Africa registered a current account surplus was in 2002 and even then it was marginal. In the years following, there was a sharp deterioration in the current account culminating in an exceptionally large deficit in 2008 of 7.2% of GDP, shown in Figure 13.





Source: South African Reserve Bank and Statistics South Africa

Components of the current account are shown in Figure 14. It is clear that throughout this period South Africa has been a net importer of services, while income (items such as dividends and profit repatriation) and current (items such as remittances and donations) payments from South Africa have exceeded South Africa's receipts from abroad. South Africa's trade balance (which reflects the difference between merchandise exports and imports) has also swung from a surplus in the early 2000s, to a substantial deficit in 2012. This is also the primary factor contributing to the current account balance shown in Figure 13 moving from a surplus to a perpetual deficit since 2003.



#### Figure 14 : Components of current account as a % of GDP (percent)

Source: Publication: KBP5000J, KBP5001J, KBP5003J, KBP6006, , South African reserve Bank

South Africa's trade balance deficit can be explained by two key factors. First, the impact of the 2009 global financial crisis resulted in the value of South Africa's exports falling by 21% between 2008 and 2009, with exports only surpassing pre-crisis levels in 2011. Second, and perhaps more importantly, the growth in the volume of imports has significantly outpaced export growth. South Africa's volume of exports (including gold) has grown by roughly 4% between 2005 and 2012, while the volume of goods imported has grown by just over 38%. Only a positive terms-of-trade for South Africa, likely driven by the rise in platinum and gold commodity prices, has meant that South Africa's trade deficit has not been larger over this period.<sup>22</sup>

Table 2 indicates that infrastructure-related commodities (machinery and equipment) constituted 26% of South Africa's total value of imports over the last decade. With an additional R4,000 billion to be spent on infrastructure over the next 15 years and R827 billion over the next three years starting from 2013/14<sup>23</sup>, imports are likely to remain at very high levels. There is a close link between South Africa's current account performance and the country's comparatively low level of savings. A current account deficit implies that South Africa has undertaken levels of investment that

<sup>&</sup>lt;sup>22</sup> Calculations based on data from the South African Reserve Bank.

<sup>&</sup>lt;sup>23</sup> South African Government (<u>http://www.info.gov.za</u>)

have exceeded the country's rate of savings over the last decade. Unless there is a dramatic increase in the domestic rate of savings, or planned infrastructure projects do not occur, it is likely that South Africa will continue to experience a deficit in the current account of the balance of payments over the near- to medium-term.

Chapter	Average (R million) (2001 - 2011)	Per cent of total imports	
Mineral fuels and oils	83 457.4	18.5	
Machinery, reactors, boilers, etc	71 075.3	15.8	
Electrical and electronic equipment	45 798.2	10.2	
Vehicles	38 311.3	8.5	

#### Table 2: South Africa's major merchandise imports

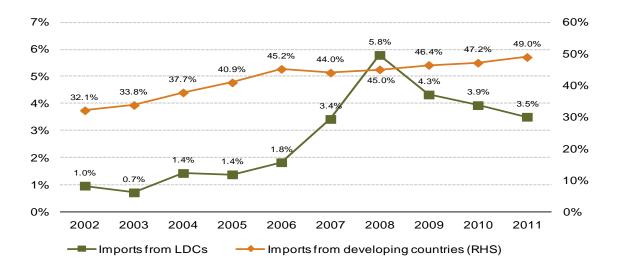
Source: Based on data from ITC Trademap database, segmented by Harmonized System (HS) chapter.

A primary element of Goal 8 is the liberalisation of trade, especially with least developed countries (LDCs) and other developing countries.

Figure 15 shows that the proportion of goods imported from developing nations has consistently increased over the entire period, except for a slight downturn in 2007. A large portion of the growth in import share of developing countries can be attributed to China. In 2001, China constituted 4.2% of South Africa's total imports and by 2011 its share had risen to 14.4%.24 The same can be said of goods imported from LDCs, though their share of the total has declined somewhat since 2008.

*Figure 15: Imports from LDCs and Developing countries as a proportion of total imports by South Africa (per cent)* 

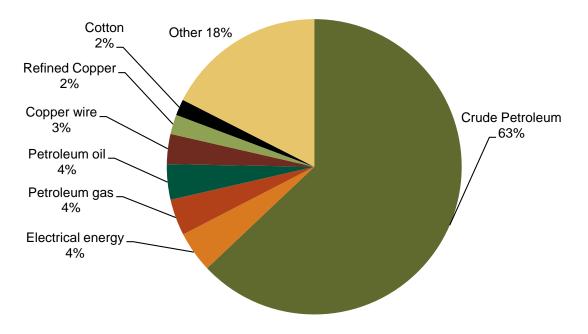
<sup>&</sup>lt;sup>24</sup> DNA calculations based on ITC TradeMap database (<u>http://www.trademap.org/</u>)



Source: The Department of Trade and Industry

To explain the recent decline in imports from LDCs and prospects for future growth, it is necessary to consider what is being imported. South Africa's imports from LDCs continue to be dominated by a few primary commodities (of which 75% is explained by oil or gas), as shown in Figure 16. This suggests that South Africa is not achieving much in the way of developing meaningful trade relations with least developed countries, many of whom are found in Sub-Saharan Africa.

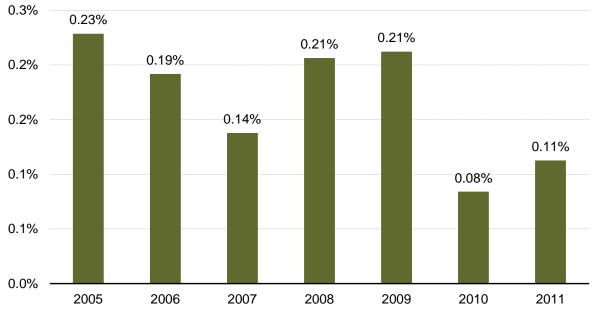
Figure 16: Share of imports from LDCs (2001 - 2011)



Source: ITC Trademap database

Figure 17 shows that external donor funding is not a major source of South Africa's overall government revenue, accounting for less than 0.2% of Gross National Income (GNI) in 2011. Since 2009, ODA (as a percentage of GNI) has roughly halved; this is not surprising given that developed countries (and particularly the EU) have encountered severe fiscal constraints, which are likely to have impacted their development budgets negatively. Donor countries have also recently shifted the focus of their funds away from South Africa to less developed countries and to regions of current strategic importance. Donor countries have also engaged in a long-term shift of their funds away from South Africa to other less developed countries and to regions of current strategic donor countries.

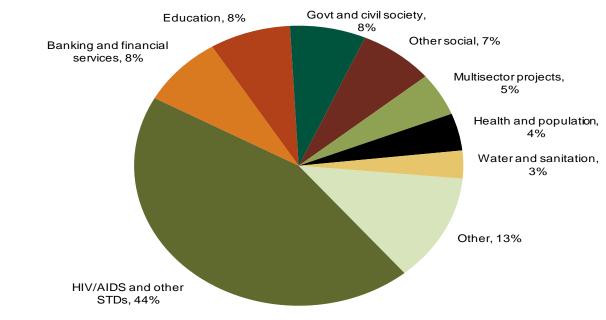
Figure 17: ODA received as a Proportion of GNI



Source: National Treasury

Based on figures from the OECD DAC database, development assistance has largely flowed into the health sector, and particularly in programmes related to the combating of HIV/AIDS. This is shown in Figure 18. Other sectors of importance for donors include banking, education and civil society programmes.





Source: OECD.StatExtracts Creditor Reporting System (CRS) database

South Africa also plays a significant role in the development of neighbouring states particularly in its role as one of the main sources of investment for other African countries. South Africa ranks

among the top five investors in Africa (by FDI stock) globally and is the second largest developing country investor on the African continent, when measured by FDI stock<sup>25</sup>.

## **R&D AND ICT**

## 1.1 Research and Development (R&D)

R&D plays an important role in generating long-term growth in an economy, by both accelerating technological advances and change, and by ensuring a wider dispersion of new and existing technologies. Gross domestic Expenditure on R&D (GERD) as a percentage of GDP is used as a proxy for measuring R&D intensity in an economy. After consistent increases in R&D expenditure since 2001, in 2009 South Africa's ratio of expenditure to GDP fell to below 2005 levels, as reflected in Figure 19. Business enterprises (the biggest contributors to GERD) accounted for just over 53% of total R&D expenditure in 2009, falling from close to 58% in 2006<sup>26</sup>. This fall in the share of expenditure by business enterprises is likely due to the impact of the global economic crisis and explains the overall decline in R&D expenditure, as a percentage of GDP, in South Africa.

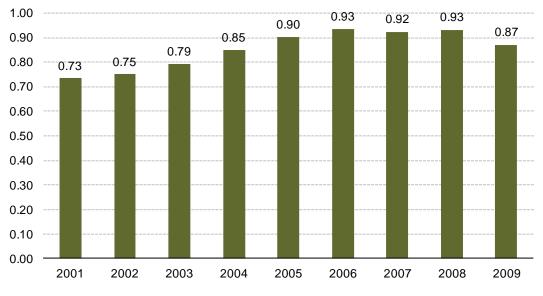


Figure 19: Gross domestic expenditure on R&D (GERD) as a Proportion of GDP

Source: Department of Science and Technology, Statistics South Africa<sup>27</sup>

South Africa's overall expenditure on R&D exceeds that of many developing countries but compares poorly with other BRICS countries (with the exception of India) and lags greatly in terms of investments in R&D made by developed countries, as shown in Figure 20. In addition, countries

<sup>&</sup>lt;sup>25</sup> Based on UNCTAD (2013)

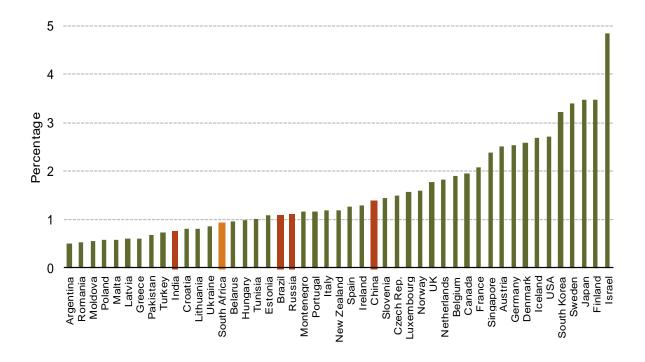
<sup>&</sup>lt;sup>26</sup> Based on National Survey of Research and Experimental Development 2007/08 and 2009/10.

<sup>&</sup>lt;sup>27</sup> Note that these figures differ from those published in the DST's R&D survey reports due to revisions in the underlying GDP figures by Stats SA.

such as Brazil, Russia and China (as well as many other developing and developed countries) have all seen a rise in the percentage of GDP spent on R&D between 2007 and 2009, despite the negative effects of the global financial crisis<sup>28</sup>.

While South Africa has experienced declining expenditure on R&D since the global financial crisis (reflected in falling a R&D expenditure ratio between 2008 and 2009), the country has nevertheless made significant advances in the recent past in scientific research in key sectors that are particularly relevant to South Africa's development, including advances in biomedical stem cell technology, information security (fingerprint technology) and the development HIV/AIDS vaccines<sup>29</sup>.

Figure 20: Comparison of GERD as a percentage of GDP (2007)



#### Source: UNESCO Institute for Statistics

The Department of Science and Technology (DST) formulated its Ten-Year Innovation Plan in 2008, which introduced strategic R&D programmes in key technology areas, including the bioeconomy sector, space science and technology, energy security, environmental sustainability and human and social dynamics. The plan also provided targets for investment in innovation and R&D. These included increasing expenditure on R&D to 2% of GDP by 2018, a substantial increase in patent registrations, and increasing South Africa's share of global research outputs from 0.5% in 2002 to 1% by 2018. While these targets were formulated prior to when the full effects of the global crisis could be understood and felt, they nevertheless provide an important benchmark for South African innovation policy. The NDP builds on these targets and provides further proposals for

<sup>&</sup>lt;sup>28</sup> Based on data from the UNESCO Institute for Statistics

<sup>&</sup>lt;sup>29</sup> Based on information from the Department of Science and Technology

improving South Africa's national research and innovation system. These proposals largely align with the weaknesses highlighted in the OECD's peer-review of South Africa's National System of Innovation (NSI) in 2007 and include<sup>30</sup>:

- Enhancing linkages and cooperation between education institutions, state-owned enterprises and the private sector with regard to R&D and innovation.
- Improving mathematics and science outcomes at primary and secondary schooling level.
- Improving linkages and coordination within and between higher education institutions and other R&D institutions and providing a more stable funding model for education institutions conducting research and innovation development.
- Ensuring sufficient funding for research and research capacity is provided to transform the demographic composition of researchers and to support the emergence of young, female and black researchers.
- Relaxing immigration requirements for highly skilled science and mathematics professionals, including teachers, and ensuring that a suitable investment climate is provided to encourage and allow the private sector to compete effectively and innovatively both at a local and international level.
- Developing world-class centres and programmes, such as the Square Kilometre Array project, especially in areas where South Africa may have a comparative advantage.

## 1.2 Information and Communication Technology (ICT)

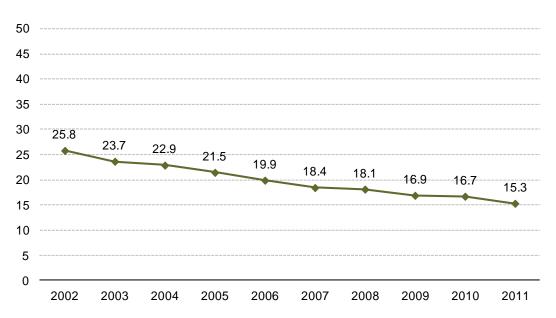
The ICT sector plays an important role in the economy, acting both a conduit for the conducting of business and by providing a backbone for the development new technologies across different sectors of the economy. Stats SA estimates that the ICT sector contributed over 4% to GDP in 2005, through both ICT-specific activities (such as manufacturing and telecommunications services) and ICT-related activities. Telecommunications services make up the bulk of this contribution – contributing over 3% to GDP in 2005<sup>31</sup>.

South Africa's ICT sector has seen contrasting trends in fixed and mobile telephony as reflected in

*Figure 21* and Figure 22. Fixed telephony has seen a high rate of attrition and steady decline, with fixed-line penetration falling from 25.8% in 2002 to 15.3% in 2011.

<sup>&</sup>lt;sup>30</sup> Based on National Planning Commission (2012)

<sup>&</sup>lt;sup>31</sup> Statistics South Africa (2013)

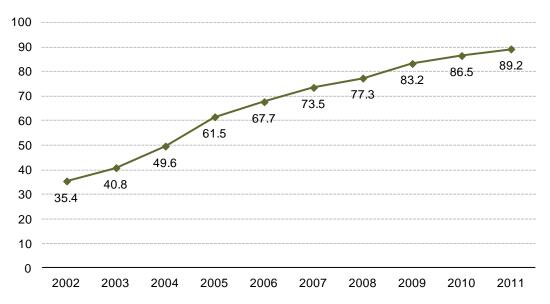


#### Figure 21: Fixed telephone line holders per 100 population (per cent)

Source: General Household Survey Database and Mid-year Population Estimates Release, Statistics South Africa

By contrast, South Africa's mobile-cellular base has seen a consistent upward trend, with the number of mobile users increasing dramatically and penetration approaching 90% in 2011.

Figure 22: Cellular telephone subscribers per 100 population (per cent)



Source: General Household Survey Database and Mid-year Population Estimates Release, Statistics South Africa

The contrasting trend in the penetration of fixed and mobile telecommunications is largely in line with trends in both developed and developing countries. International Telecommunication Union (ITU) data suggest that fixed-telephone penetration (and the number of subscribers in absolute terms) in both developed and developing countries is on a downward trend, with global fixed line penetration falling from 19.1% in 2005 to 17.3% in 2011. Conversely, mobile-cellular penetration has seen a rapid take-up, with penetration (based on the number of subscriptions) increasing from 23% in 2005 to 78% in 2011 for developing countries and from 82% to 119% for developed countries<sup>32</sup>.

While South Africa's transition to mobile telephony has largely mirrored global trends, South Africa's internet (and broadband internet) penetration has been far more limited. The ITU estimates that fixed-broadband penetration in South Africa was 1.8% in 2011, compared to fixed-broadband penetration rates of 26% and 5% in developed and developing countries respectively. Estimates from South Africa's 2011 census suggest that close to 65% of households have no access to the internet and for those that do, 46% access the internet through mobile devices.<sup>33</sup> Given the low internet penetration in South Africa, the NDP has indicated that South Africa's ICT infrastructure compares poorly against international best practice<sup>34</sup>.

The Department of Communications launched a process to review ICT policies in 2012, leading to the appointment of an ICT Policy Review Panel and the development of an ICT Policy Review Process in 2013. The aim of the process is to produce a comprehensive White Paper policy document in order to provide clarity in terms of the policy and regulatory frameworks for the ICT sector<sup>35</sup>.

<sup>&</sup>lt;sup>32</sup> Based on information from the ITU (http://www.itu.int)

<sup>&</sup>lt;sup>33</sup> Stats SA (2012b)

<sup>&</sup>lt;sup>34</sup> National Planning Commission (2012)

<sup>&</sup>lt;sup>35</sup> Department of Communications (2013a)

The Department of Communications has also produced a draft National Broadband Policy, gazetted for public comment in 2013. This policy highlights that broadband penetration (both fixed and fixed wireless) is estimated at only 2%, with the price of broadband high and not affordable for the majority of the country's population. The draft National Broadband policy outlines a number of key policy objectives, including ensuring universal access to affordable and secure broadband services. Both public and private sector firms have substantial infrastructure initiatives in place in order to deepen penetration of mobile and fixed broadband penetration. Accelerating broadband penetration also requires that a number of important hurdles be overcome in South Africa. These include the migration of South Africa's broadcasting infrastructure from analogue to digital signals and the implementation of the process of local loop unbundling.

South Africa has previously committed itself to completing the transition from analogue to digital broadcasting by 2015. The Department of Communications has committed to meeting this deadline but South Africa has missed the original digital switch-on (November 2008) and analogue switch-off (November 2011) dates determined in the 2008 Broadcasting Digital Migration Policy<sup>36</sup>. A revised policy was published in 2012, indicating that a dual illumination period (with both digital and analogue signals transmitting) will begin in the last quarter of 2012<sup>37</sup>. In May 2013, the Minister of Communications indicated that the digital broadcasting network reached more than 80% of the population and the performance period for digital migration switch on was set to be announced shortly<sup>38</sup>. Digital switchover is especially important given the extent to which South Africans make use of mobile-cellular devices to access the internet - the move from analogue to digital broadcasting will allow for the redistribution of scarce frequency to mobile broadband services. From a fixed-line internet perspective, the process of "local loop unbundling" by South Africa's regulator (ICASA) is an important step in increasing competition, further reducing costs and increasing penetration in the sector.

## **CONCLUSION**

South Africa's use of domesticated indicators highlights the unique macroeconomic position in South Africa. While the country has little overall reliance on ODA, South Africa has nevertheless committed to a global partnership for development in line with the Millennium Development framework. The Goal 8 report therefore reflects on South Africa's domesticated goals within this context, highlighting the extent to which South Africa has successfully contributed to global development by ensuring a stable macroeconomic environment, developing trade linkages with developing and less developed countries and encouraging the dispersion of new technologies through investment in R&D and increasing ICT penetration.

South Africa has been successful in ensuring GDP growth in a low inflation environment, with inflation largely within the SARB's target range since 2010. However, South Africa's major concerns remain high levels of inequality and stagnating employment levels, with this exacerbated by the after effects of the global financial crisis. The extent to which South Africa is able to invest in

<sup>&</sup>lt;sup>36</sup> Department of Communications (2008)

<sup>&</sup>lt;sup>37</sup> Department of Communications (2012)

<sup>&</sup>lt;sup>38</sup> Department of Communications (2013b)

long-term growth through infrastructure development is further hampered by a comparatively low domestic savings rate. Progress in R&D expenditure has been negatively affected by the global financial crisis, while South Africa is in the process of accelerating broadband penetration through infrastructure developments and the migration from analogue to digital transmission.

The Goal 8 domesticated indicators provide an overview both of South Africa's development progress and progress in developing global partnerships. There is an interdependent link between the targets in Goal 8 (especially as defined by South Africa's domesticated indicators) and the targets defined by MDGs 1 to 7. Progress in achieving the targets in Goals 1 to 7 will ultimately ensure that there is significant progress in achieving Goal 8. Conversely the indicators in Goal 8 provide a useful overview of South Africa's development progress and position. While none of South Africa's MDG 8 indicators have official MDG targets, South Africa is unlikely to achieve the high level goals set out in the NDP and the NGP in the short-term. Significant action and intervention is required to achieve its medium- and long-term objectives.

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Statistics South Africa	http://www.statssa.gov.za
OECD.StatExtracts Creditor Reporting System (CRS) database.	http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW
UNESCO Institute for Statistics	http://www.uis.unesco.org/Pages/default.aspx
World Bank, Doing Business database	http://www.doingbusiness.org/
World Bank's World dataBank	http://databank.worldbank.org/data/home.aspx

Indicator	Name	Data source		
Indicator 1	Gross domestic product per capita (current prices)	Stats SA GDP Release and Mid-year Population Estimates Release		
Indicator 2	Investment share in GDP, %	SARB Quarterly Bulletins and National Accounts Supplements		
Indicator 3	Foreign direct investment in GDP, %	SARB Quarterly Bulletins and National Accounts Supplements; Stats SA GDP Release		
Indicator 4	Gross savings share in Gross disposable income, %	SARB Quarterly Bulletins and National Accounts Supplements		
Indicator 5	Public debt to GNI ratio	National Treasury Budget Reviews, and SARB Quarterly Bulletins		
Indicator 6	Current account balance as proportion of GDP, %	SARB Quarterly Bulletins and National Accounts Supplements; Stats SA GDP Release		
Indicator 7	Share of imports from developing and least developed countries (LDC's)	DTI COMTRADE Database		
Indicator 8	Inflation rate	Stats SA CPI Release		
Indicator 9	Employment-to-population ratio	Stats SA Quarterly Labour Force Survey and Mid- year Population Estimates Release		
Indicator 10	Labour productivity	National Productivity Institute (NPI) Productivity Statistics and SARB Quarterly Bulletins; alternatively Stats SA GDP Release and Quarterly Labour Force Survey		
Indicator 11	Gross domestic expenditure on R&D in GDP, %	Department of Science and Technology National R&D Survey; Stats SA GDP Release		
Indicator 12	Official development assistance received as proportion of GNI, %	National Treasury International Development Co- operation Database		
Indicator 13	Fixed telephone lines per 100 population	Stats SA Censuses and Community Survey, DBSA		

Fixed telephone lines per 100 population

Cellular telephone subscribers per 100

population

Indicator 13

Indicator 14

## SOUTH AFRICA'S DOMESTICATED INDICATORS FOR MDG 8

Infrastructure Barometer

Infrastructure Barometer

Stats SA Censuses and Community Survey, DBSA