

Box 2 Measuring poverty and inequality in South Africa

Statistics South Africa (Stats SA) recently released a pilot study in which it employed the internationally recognised cost-of-basic-needs approach for calculating poverty lines using data from the 2010/11 Income and Expenditure Survey (IES). Three poverty lines were developed to capture different degrees of poverty, namely the food poverty line (FPL), the lower bound poverty line (LBPL) and the upper bound poverty line (UBPL). The food poverty line represents the rand value below which individuals are unable to purchase or consume enough food to supply them with the minimum per-capita-per-day energy requirement for good health (roughly 2 100 kilocalories). The LBPL and UBPL both include a non-food component. Unlike food consumption, there is no universal standard for consumption of non-food basic needs. Therefore, similar to the cost-of-basic-needs approach, Stats SA employed the methodology of Ravallion (1998) to calculate the LBPL and UBPL. Individuals at the LBPL do not have enough resources to consume or purchase both adequate food and non-food items and therefore have to sacrifice food to obtain essential non-food items. Individuals who earn between the LBPL and the UBPL are able to purchase both basic food and non-food items.

Table B2.1: South African poverty lines

	Previous poverty lines			Rebased poverty lines		
	Value per person per month	Per cent	Number of people	Value per person per month	Per cent	Number of people
Food poverty line	R321			R335		
Poverty headcount		20,2	10 185 450		21,7	10 944 089
Poverty gap		6,2			6,9	
Lower bound poverty line	R443			R501		
Poverty headcount		32,3	16 286 636		37,0	18 632 646
Poverty gap		11,8			14,5	
Upper bound poverty line	R620			R779		
Poverty headcount		45,5	22 942 475		53,8	27 117 973
Poverty gap		19,6			25,8	

Source: Statistics South Africa (2015a)

Table B2.1 shows that the share of the population living in extreme poverty (represented by the FPL) as a percentage of the total population increased marginally when moving to the rebased poverty line values. The share of those living at or below the LBPL increased from 32,3 per cent to 37,0 per cent, while the share of those at the UBPL increased notably from 45,5 per cent to 53,8 per cent. The UBPL poverty gap, which indicates how far below that poverty line the poor are on average, also increased sharply from 19,6 per cent to 25,8 per cent.

In addition, Stats SA released a separate report on poverty trends between 2006 and 2011. Although the poverty indicators in this report have not been rebased to the new poverty lines, the inequality section provides the latest Gini coefficient estimates. The Gini coefficient is an internationally recognised measure of inequality, obtained by ranking per capita household income from lowest to highest and calculating the cumulative percentage of households. The cumulative percentages are then plotted, known as the Lorenz curve. The area between the Lorenz curve and a 45-degree line (representing perfect equality) is then calculated. This area is expressed as a percentage of the total area to obtain the Gini coefficient. The coefficient ranges from 0, reflecting complete equality, to 1, reflecting complete inequality.

Table B2.2: South African Gini coefficients

	2006	2011
Gini coefficient (income per capita from salaries and wages)	0,80	0,76
Gini coefficient (income per capita from salaries, wages and social grants) ...	0,72	0,69
Gini coefficient (expenditure per capita, excluding taxes)	0,67	0,65
Gini coefficient (income per capita from salaries, wages, social grants and free basic services, excluding taxes)	0,59*	0,596**

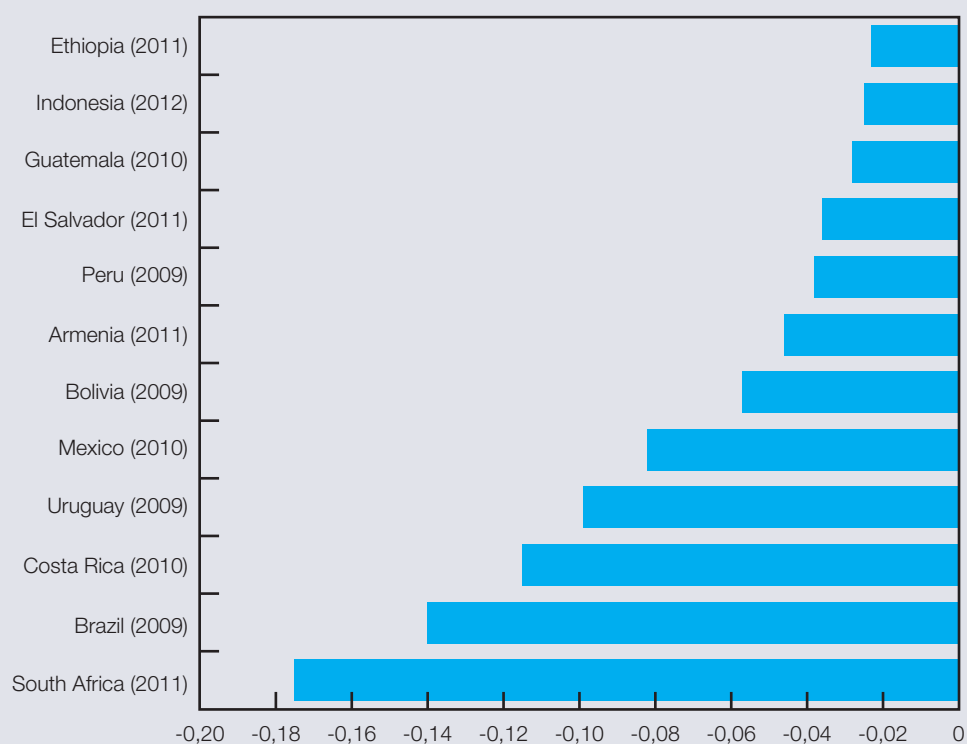
* Bosch et al. (2010)

** Inchauste et al. (forthcoming)

Sources: Statistics South Africa (2014a), Statistics South Africa (2008), Statistics South Africa (2012) and own calculations

Table B2.2 shows that although South Africa's Gini coefficient was fairly high in both 2006 and 2011 when including only income from salaries and wages in the calculation, it improved when supplementing income from salaries and wages with income from social grants, as well as when deducting taxes, and even further when including free basic services. However, the Gini coefficient based purely on income from salaries and wages decreased somewhat from 0,80 to 0,76 between 2006 and 2011, while it increased marginally from 0,59 to 0,596 over the same period when including income from social grants and free basic services, as well as taxes in the calculation, suggesting that the impact of fiscal policy on reducing inequality in South Africa may have reached a plateau.

Figure B2.1: Change in the Gini coefficient: Wage income only versus income, including grants and basic services, less taxes

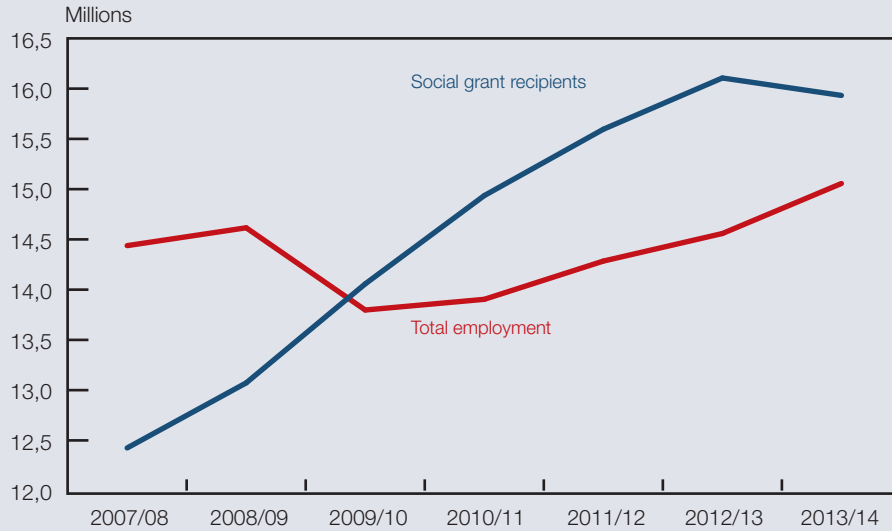


Sources: World Bank (2014a) and own calculations

The World Bank (2014a) uses the commitment to equity (CEQ) methodology to compare the effectiveness of various middle-income countries' fiscal policies in reducing poverty and inequality. Figure B2.1 illustrates that South Africa's policies to reduce inequality assisted in reducing the Gini coefficient much more than in other middle-income countries. The World Bank noted that South Africa spent more than other countries on its social programmes, with this expenditure successfully lifting around 3,6 million individuals out of poverty (based on US\$2,5 a day on a purchasing power parity basis) and reducing the Gini coefficient from 0,76 to 0,596 in 2011. Taxes and social spending have succeeded in closing the gap between the rich and the poor from a situation where the richest decile earns over 1 000 times more than the poorest decile, to where the richest decile earns about 66 times more in 2011.

According to the *2013/14 Annual Report* by the South African Social Security Agency, the total number of social grant recipients has grown from 12,4 million in the 2007/08 fiscal year to 16 million in fiscal 2013/14. As shown in Figure B2.2, the number of social grant recipients has increased much faster than the total number of employed persons in South Africa, which increased from 14,4 million in March 2008 to about 15,1 million in March 2014. In addition, South African's age dependency ratio is around 52,3 (Stats SA, 2014b), implying that the share of people who are not of working age (those younger than 15 years and older than 64 years) who are dependent on those who are of working age (15 to 64 years, i.e. the labour force) is around 52,3 per cent.

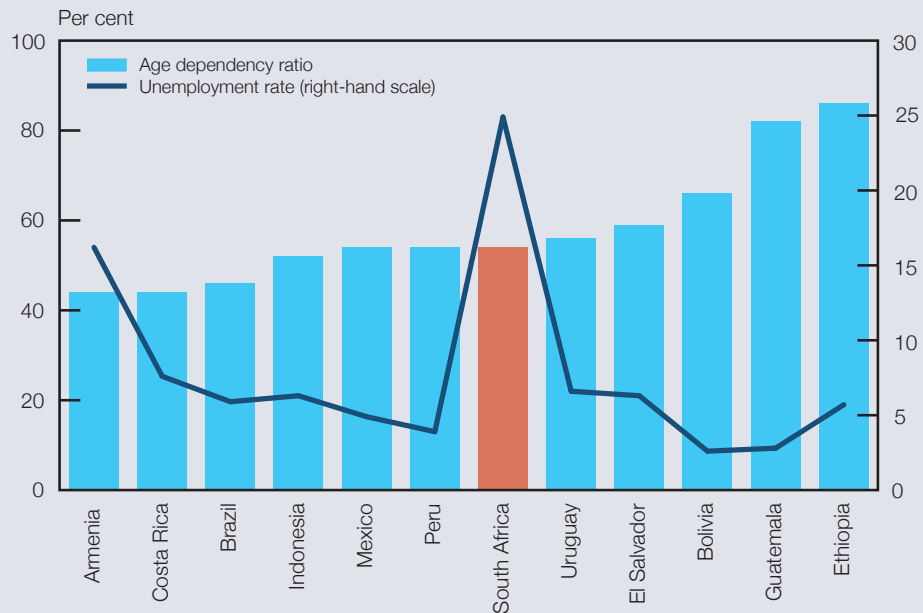
Figure B2.2: Employment and social grant recipients



Sources: South African Social Security Agency (2014), Statistics South Africa (2015b) and Quarterly Labour Force Survey

Figure B2.3 illustrates that when employing the World Bank’s CEQ methodology, South Africa compares favourably with other middle-income countries such as Peru and Uruguay in terms of the age dependency ratio. However, these countries (and most of the CEQ countries) have much lower unemployment rates than South Africa, suggesting that even though a large proportion of the population is dependent on the working age in these countries, relatively more of working age are actually employed and can therefore support their dependents. Conversely, whereas a high proportion of people are similarly dependent on the working age in South Africa, a large number of the working age are unemployed.

Figure B2.3: Age dependency ratios and unemployment rates of selected middle-income countries in 2013



Source: World Bank (2014)

Although fiscal policy has succeeded in reducing poverty and inequality in South Africa, the impact of these policies may have reached a plateau, particularly considering the fiscal sustainability of such policies. In order to meaningfully reduce poverty and inequality further, in a fiscally sustainable manner, South Africa will have to implement policies that will accelerate its economic growth rate and increase its labour absorption rate.

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