

*Summary Report*

**The Social and Economic Impact of  
South Africa's Social Security System**

30 September 2004

**Commissioned by the Directorate: Finance and Economics**



**Department of Social Development**

Produced by the Economic Policy Research Institute

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## Executive Summary

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Social grants in South Africa play a critical role in reducing poverty and promoting social development. This study evaluates the social and economic impact of State Old Age Pensions (SOAP), Disability Grants (DG), Child Support Grants (CSG), Care Dependency Grants (CDG), Foster Care Grants (FCG) and Grants-in-Aid (GIA). The analysis evaluates the role of social assistance in reducing poverty and promoting household development, examining effects on health, education, housing and vital services. In addition, the study assesses the impact of social grants on labour market participation and labour productivity, providing an analysis of both the supply and demand sides of the labour market. The study also quantifies the macro-economic impact of social assistance grants, evaluating their impact on savings, consumption and the composition of aggregate demand. Most of the statistical analysis focuses on the CSG, SOAP and DG since sample sizes are sufficiently large for these grants to support significant inferences.

South Africa's system of social security successfully reduces poverty, regardless of which methodology is used to quantify the impact measure or identify the poverty line. Nevertheless, the quantitative measure of poverty reduction is sensitive to the methodological choices. For instance, the measured impact is consistently greatest when employing the total rand poverty gap as an indicator. The poverty headcount measure, however, consistently yields the smallest results. Likewise, the choice of poverty line heavily influences the measurement of the quantitative impact. The current social security system is most successful when measured against destitution, and the impact is smallest when poverty lines ignore economies of scale and adult equivalence issues. For instance, South Africa's social grants reduce the poverty headcount measure by 4.3%, as measured against the Committee of Inquiry's expenditure poverty line (with no scales). The social security system, however, reduces 45% of the total rand destitution gap—an impact more than ten times greater.

Using the Committee of Inquiry expenditure poverty line (without scales), a 10% increase in take-up of the SOAP reduces the poverty gap by only 1.2%, and full take-up by only 2.5%. The take-up rate for the SOAP is already very high, and many of the eligible elderly not already receiving the SOAP are not among the poorest South Africans. As a result, further extensions of the SOAP have limited potential in reducing poverty. Extensions of the Disability Grant offer greater promise, although at substantially greater expense. A 50% increase in DG take-up reduces the total rand poverty gap by 1.7%, and full take-up

generates a 5.1% reduction. The greatest poverty reducing potential lies with the progressive extension of the Child Support Grant. Extending the eligibility age to 14 reduces the poverty gap by 16.6%, and a further extension to age 18 reduces the gap by 21.4%. Increasing the real grant payment (as the government did in 2003) generates an even greater impact. The extension to age 14 yields a 22% poverty gap reduction, while the extension to age 18 reduces the poverty gap by 28.3%. Combining the higher CSG extended to age 14 with the full take-up of the SOAP and the DG yields a reduction in the total rand poverty gap of 29%.

The magnitudes of these effects, of course, depend critically on the poverty line by which the impacts of the reforms are measured. For instance, the 29% reduction in the total rand poverty gap measured using the unscaled Committee of Inquiry expenditure poverty line is less than half the magnitude of the reduction in destitution, which amounts to a 66.6% reduction. Likewise, the impacts of the scaled Committee of Inquiry income and expenditure poverty lines are substantially greater than for the unscaled poverty lines. The impact of the “all grants” package measured with the scaled Committee of Inquiry income poverty line reflects a 47.4% reduction, and with the expenditure poverty line, a comparable 47.5% reduction. As this makes apparent, the distinction between income and expenditure poverty has not generated material differences in this analysis. Likewise, the impact using the unscaled Committee of Inquiry income poverty line (a 28.9% reduction) is virtually the same as that using the unscaled Committee of Inquiry expenditure poverty line (a 29.0% reduction). For almost every simulation, the HSL poverty line generates very close results to those yielded by the scaled Committee of Inquiry income and expenditure poverty lines, in spite of the substantial methodological differences distinguishing the HSL measure. The relative poverty line yields results that are not closely comparable to any of the other poverty line measures, with the results generally falling in between the results of the Committee of Inquiry scaled and unscaled poverty line measures.

The evidence in this report documents the substantial impact of South Africa’s social security system in reducing poverty and destitution. The magnitudes of the results are sensitive to methodological issues. It matters whether the poverty line is relative or absolute, whether it is scaled for household composition and economies of scale or not, and to a small extent whether it measures income or expenditure. Likewise, it matters how the poverty impact is measured—using poverty headcount or variants on the poverty gap. Nevertheless, the qualitative results, and the answers to critical policy questions, are robust to different methodological approaches. South Africa’s system of social security substantially reduces deprivation, and the progressive extension of the magnitude, scope and reach of social grants holds the potential to dramatically diminish the prevalence of poverty in South Africa.

The results of this study provide evidence that the household impacts of South Africa’s social grants are developmental in nature. These findings are consistent with international lessons of experience, as well as with previous studies of South Africa’s system of social security. Social security programmes in Brazil, Argentina, Namibia and Botswana yield positive impacts in terms of reducing poverty, promoting job search and increasing school attendance. Past studies of social security in South Africa have focused on the State Old Age Pension, identifying important positive effects in terms of broadly reducing household poverty as well as improving health and nutrition.

Poverty and its associated consequences erode the opportunities for children and youth to attend school, fomenting a vicious cycle of destitution by undermining the household’s capacity to accumulate the human capital necessary to break the poverty trap. The statistical evidence from this research documents the extent to which poverty exerts a

negative impact on school enrolment rates. Many poor children cannot attend school due to the costs associated with education, including the necessity to work to supplement family income. In addition, communities that are resource-constrained provide lower quality educational services, which negatively affects enrolment rates. Social security grants counter these negative effects by providing households with more resources to finance education. New findings from this study demonstrate that children in households that receive social grants are more likely to attend school, even when controlling for the effect of income. The positive effects of social security on education are greater for girls than for boys, helping to remedy gender disparities. But both the State Old Age Pension and the Child Support Grant are statistically significantly associated with improvements in school attendance, and the magnitudes of these impacts are substantial. This analysis only measures the direct and static link between social security and education. To the extent that social grants promote school attendance, they contribute to a virtuous cycle with long term dynamic benefits that are not easily measured by statistical analysis.

Nationally, nearly one in five households experienced hunger during the year studied (2000). The highest income provinces—Gauteng and the Western Cape—have the lowest prevalence rates of hunger. The prevalence rate of hunger is highest in one of South Africa's poorest provinces—nearly one in three households in the Eastern Cape experiences hunger. However, another of the poorest provinces—Limpopo—has the third lowest hunger prevalence rate in the country. Meanwhile, Mpumalanga—with a poverty rate below the national average—has the second highest hunger prevalence rate in the country. Social grants are effective in addressing this problem of hunger, as well as basic needs in general. Spending in households that receive social grants focuses more on basics like food, fuel, housing and household operations, and less is spent on tobacco and debt. All major social grants—the State Old Age Pension, the Child Support Grant and the Disability Grant—are significantly and positively associated with a greater share of household expenditure on food. This increased spending on food is associated with better nutritional outcomes. Households that receive social grants have lower prevalence rates of hunger for young children as well as older children and adults, even compared to those households with comparable income levels.

Receipt of social grants is associated with lower spending on health care, perhaps because social grants are associated with other positive outcomes that reduce the need for medical care. For instance, the World Bank identifies the important link between improved education and stemming the spread of HIV/AIDS. Likewise, social grants are associated with greater household access to piped water. The evidence in this chapter underscores the importance of moving beyond measures of income poverty in the assessment of social deprivation. In case after case in this study, household outcomes conflicted with the simple implications of monetary income rankings. While many measures of well-being are correlated with aggregate income and expenditure, the exceptions affect large numbers of people and require careful policy analysis. The interaction between social security and household well-being is complex, and further research continues to explore these interactions. In particular, the broad measures of household well-being analysed in this chapter exert profound effects on labour productivity and the ability of workers to find jobs. Employment in turn provides access to resources that promote improved education, nutrition, health and other outcomes.

Conventional economic theory suggests that social grants may undermine labour force participation by reducing the opportunity cost of not working. Models developed for industrialised countries and applied broadly to South African data sometimes corroborate

this hypothesis. However, when models are developed that reflect the labour market behaviour of South Africans who receive social grants, the results contradict this hypothesis. The response of very low income South Africans to a marginal increase in their income is significantly different from the response of median income South Africans.

To the extent that social grants create adverse labour market effects, the adverse consequences stem from distortions in social security targeting mechanisms. For instance, to the extent that the State Old Age Pensions are employed to target the non-pensioner poor, then the grants may encourage a household formation response that impedes job search. These types of problems can be addressed by broadening the base of the social security programmes. A more comprehensive system of social security generates fewer distortions from the incentive effects created by the social grants.

This study explicitly examines the impact of social grants on the labour market participation, employment success and realised wages of South Africans in households receiving social grants. While statistical analysis cannot prove causation, the empirical results are consistent with the hypotheses that:

- (1) Social grants provide potential labour market participants with the resources and economic security necessary to invest in high-risk/high-reward job search.
- (2) Living in a household receiving social grants is correlated with a higher success rate in finding employment.
- (3) Workers in households receiving social grants are better able to improve their productivity and as a result earn higher wage increases.

The empirical evidence discussed in this chapter demonstrates that people in households receiving social grants have increased both their labour force participation and employment rates faster than those who live in households that do not receive social grants. In addition, workers in households receiving social grants have realised more rapid wage increases. These findings are consistent with the hypothesis that South Africa's social grants increase both the supply and demand for labour. This evidence does not support the hypothesis that South Africa's system of social grants negatively affects employment creation.

At the macro-economic level, South Africa's system of social development grants tends to increase domestic employment while promoting a more equal distribution of income. The effects of grants on national savings and the trade balance are ambiguous, since grants have two competing effects on the national savings—one through private domestic savings, and the other through the trade deficit. Depending on the magnitude of the effects, grants could improve or worsen national savings and the trade balance. Initial analysis suggests that the impact on savings may be negative, while that on the trade balance may be positive. However, since much of the savings of upper income groups are offshore, the negative impact is unlikely to be significant, particularly given the small share of private savings in the national savings rate. The impact on inflation may also be ambiguous. The increase in overall demand in the economy may generate some inflationary pressure. However, the relatively low rate of capacity utilisation may enable the economy to meet this demand without significant increases in inflation. Likewise, the positive trade balance effects may lead to an appreciation of the rand, tending to dampen imported inflation. On balance, the macro-economic impact of South Africa's social security system is largely positive. These positive macroeconomic effects support higher rates of economic growth, which are reinforced by the social security system's positive effects on income distribution and education.

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## CHAPTER 1)

### Introduction

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South Africa's social grants play a vital role in reducing poverty and promoting social development. Numerous academic studies document the broad social and economic impact of these effective social security programmes. This report provides an appraisal of the impact of State Old Age Pensions (SOAP), Disability Grants (DG), Child Support Grants (CSG), Care Dependency Grants (CDG), Foster Care Grants (FCG) and Grants-in-Aid (GIA). The analysis evaluates the role of social assistance in reducing poverty and promoting household development, examining effects on health, education, housing and vital services. In addition, the study assesses the impact of social grants on labour market participation and labour productivity, providing an analysis of both the supply and demand sides of the labour market. The study also quantifies the macro-economic impact of social assistance grants, evaluating their impact on savings, consumption and the composition of aggregate demand.

This summary report presents the major findings of the study. The full report is divided into four major chapters. The first (chapter 2) employs EPRI's micro-simulation model calibrated with administrative data for January 2003. The model, using Statistics South Africa's *Labour Force Survey* and 2000 *Income and Expenditure Survey*, provides measures of social assistance take-up by household income level. In addition, the surveys provide detailed profiles on the household's living standards, labour market activity and consumption patterns. This chapter assesses the impact of the current system of social grants on poverty reduction. In addition, alternative scenarios of social security reform are evaluated and compared, with a particular focus on extensions of the Child Support Grant. The study also assesses the impact of methodological issues on poverty analysis.

The second major chapter (chapter 3) uses this model to evaluate how receipt of social assistance grants affects household access to health care, schooling, housing, electricity, water and social infrastructure. The chapter analyses Statistics South Africa's *Income and Expenditure Survey 2000*, building models of household expenditure and testing how the receipt of social grants affects spending patterns. In addition, the study investigates how social grants affect direct outcomes variables, such as school attendance.

The third major chapter (chapter 4) extends this household analysis to the labour market, examining the impact of social grants on employment and productivity. The chapter analyses Statistics South Africa's *Labour Force Survey*, evaluating the impact of social grants on labour force participation and success in finding employment. The study also evaluates the impact of social grants on realised wages, as a measure of labour force productivity. The analysis includes both cross-section and panel data econometric models, as well as descriptive statistics.

The fourth major chapter (chapter 5) analyses the macro-economic impact, aggregating the micro-simulation variables to calculate effects on national savings and consumption by economic sector. In addition, this chapter evaluates macro-economic data provided by Statistics South Africa, the Reserve Bank of South Africa and the National Treasury. This chapter builds on the household impact analysis from chapter 3, extending these findings to the macro-economic level.

The final chapter (chapter 6) summarises the key findings of the study and briefly discusses the conclusions and policy implications.

## **CHAPTER 2)**

### **The Impact of Social Assistance on Poverty Reduction**

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#### **INTRODUCTION**

This chapter assesses the impact of South Africa's social security system on poverty reduction. Given data availability on three major social grants programmes--the State Old Aged Pension (SOAP), the Child Support Grant (CSG) and the Disability Grant (DG), the analysis focuses on how these three programmes play a major role in supporting the incomes of poor households. This study employs EPRI's micro-simulation model to assess the impact of existing social security programmes as well as the potential impact of social security policy options as identified by the Department of Social Development with respect to extensions and increased take-up of the existing major social grants.

The study assesses the extent of poverty in South Africa using three different measures:

- (1) The poverty headcount measure, which quantifies the number of people in South Africa below a given income or expenditure threshold;
- (2) The relative poverty gap measure, which quantifies the average magnitude of the gap between the incomes of the poor and the income required to keep people out of poverty;
- (3) The rand poverty gap measure, which quantifies the total rand value of the magnitude of the gap between the incomes of the poor and the income required to keep people out of poverty.

These three measures all depend on the calculated poverty line that reflects the minimum income or expenditure necessary to keep a household out of poverty. The analysis in this chapter reflects different calculations of the poverty line, determined using assumptions and methodologies developed in co-ordination with the Department of Social Development. The use of multiple poverty lines provides an analysis of the sensitivity of the final results to different assumptions and methodologies.

In this study, poverty and the impact of social security are evaluated on a household basis. The interaction between household structure and the poverty line are incorporated through the calculation of a household poverty line on an individual basis, reflecting differential expenditure for adults and children as well as economies of scale in supporting households. Several different formulas are evaluated in order to provide a thorough sensitivity analysis. Alternative grant extension and take-up scenarios are analysed below.

#### **METHODOLOGY**

One of the primary objectives of the study is to measure the impact of the social security system on poverty reduction. In order to ascertain the impact of poverty interventions, however, one must first determine an appropriate definition for poverty, and identify who is considered impoverished. A useful analytical tool to inform policy in this regard is the poverty datum line, or poverty line. A poverty line is generally defined as a minimum level of income or expenditure below which an individual or household is designated as "poor." The methodology for analysing poverty lines is discussed further in the main report.

## **THE EPRI MICRO-SIMULATION MODEL**

The EPRI micro-simulation model was calibrated using three data sources: Statistics South Africa's September 2000 *Income and Expenditure Survey*, the September 2000 *Labour Force Survey* and administrative data from the Department of Social Development. The *Income and Expenditure Survey* (I&E) provides measures of social assistance take-up as well as detailed profiles of the income and expenditure patterns of the surveyed households. The *Labour Force Survey* provides the additional demographic information required to determine eligibility for the social assistance grants; furthermore, it provides detailed information on labour market activity and various measures of well-being such as access to public services. The Department of Social Development's administrative data provides actual take-up figures by grant by province, as well as additional information.

## **THE IMPACT OF SOUTH AFRICA'S SOCIAL SECURITY SYSTEM**

The first phase used the micro-simulation model to assess the impact of the existing social security system under the take-up rates of September 2000. To do so, the model calculated total income exclusive of all forms of grant income (CSG, DG, and SOAP) for all grant-receiving households. By calculating the resulting poverty headcount and the poverty gap measures in the absence of social assistance, the model effectively quantifies the impact of the current system of grants, under September 2000 take-up rates. This analysis used the poverty lines established in conjunction with the DoSD and described above.

The magnitude of the poverty reduction varies with the choice of a poverty line. The results calculated with the absolute poverty line (average of R311 per person) and the Committee of Inquiry income poverty line (R394 per adult equivalent) are fairly comparable. The Committee of Inquiry expenditure poverty line without equivalence scales is effectively a much higher poverty line, as the equivalence scales operate to lower the household's poverty line by lowering the number of adult equivalents. Thus, as expected, the measured poverty impact is smaller since the poverty line is higher. Finally, the destitution poverty line is the lowest of the poverty lines, and thus the measured poverty impact is the greatest. Destitution is defined as the bottom 20% of the expenditure distribution, and the resulting destitution poverty line is R180 per person per month. The analysis with the destitution poverty line allows us to gauge the impact of the current social security system on the poorest sector of society. The current social security system with September 2000 levels of take-up effectively reduces the rand destitution gap by 45.0%.

## **SIMULATIONS OF SOUTH AFRICA'S SOCIAL SECURITY REFORM OPTIONS**

EPRI, in consultation with the Department of Social Development project management team, identified eleven scenarios of possible social security reform, and EPRI modelled the poverty impact of these reforms using seven different poverty lines.

The eleven scenarios are:

- (1) An increase of ten percentage points in the take-up rate of the SOAP
- (2) Full take-up of the SOAP
- (3) Full take-up of the CSG to age 7
- (4) Full take-up of the CSG to age 9
- (5) Full take-up of the CSG to age 11
- (6) Full take-up of the CSG to age 14
- (7) Full take-up of the CSG to age 16
- (8) Full take-up of the CSG to age 18
- (9) An increase in take-up of the Disability Grant by 50%
- (10) Full take-up of the Disability Grant
- (11) Full take-up of all grants, including the CSG to age 14.

The poverty impact of each of these scenarios is modelled using seven different poverty lines. The Committee of Enquiry poverty line is based on the R394 per month per adult equivalent identified by the Taylor Committee. The poverty lines included in the analysis are:

- (1) The Committee of Enquiry expenditure poverty line (with no scales)
- (2) The Committee of Enquiry expenditure poverty line (with scales)
- (3) The Committee of Enquiry income poverty line (with no scales)
- (4) The Committee of Enquiry income poverty line (with scales)
- (5) The destitution poverty line (with scales)
- (6) The HSL expenditure line
- (7) The relative expenditure poverty line (with scales).

The choice of poverty line is largely normative, because the subjective elements in identifying a baseline level of income or expenditure outweigh the objective analysis. For this reason, the study focuses largely on the Committee of Enquiry's poverty line. For balance, the study also evaluates the results using an absolute poverty line (HSL), a relative poverty line and a destitution line. Low poverty lines—like the HSL, the destitution line, the relative poverty line and the scaled poverty lines—tend to demonstrate a greater impact of social grants. Absolute poverty lines tend to involve detailed levels of subjectivity, while the relative poverty line requires only one subjective judgement—the proportion of the population that is poor. Based on consultation with the Department of Social Development, the methodology of analysing a number of different poverty lines was adopted. The results of this analysis are discussed below.

EPRI used the micro-simulation model to quantify the potential impact of full take-up of all the social assistance grants with the real value of the CSG payment raised to its 2003 levels. This does not change the number of grant recipients, but the measured social impact is significantly greater. As shown in the table below, using the

Committee of Inquiry unscaled expenditure poverty line, full take-up of all grants (including the CSG at current levels in real terms) frees 2.3 million individuals from poverty and reduces the poverty headcount by 9%. As in the previous analysis, the effects are the greatest in the highest income provinces—Gauteng and the Western Cape, and again the impact is the smallest in one of the poorest provinces—the poverty headcount for individuals in Limpopo is reduced by only 5.6%.

**Table 2.45: All grants(1606) with full take-up: poverty headcount effects**

All grants(1606) with full take-up, using Committee of Inquiry expenditure poverty line with no scales

Statistics SA I&E 2000				Micro-simulation model					
	# grant recipients	Poverty Headcount		# of new grants		# freed from poverty		As % of the poor in September 2000	
		households	individuals	# of new grants	% change since 2000	households	individuals	households	individuals
<b>National</b>	<b>2656508</b>	<b>4887482</b>	<b>25326696</b>	<b>10138898</b>	<b>381.7%</b>	<b>524784</b>	<b>2291425</b>	<b>10.7%</b>	<b>9.0%</b>
Western Cape	241897	252428	1317759	522160	215.9%	46410	235070	18.4%	17.8%
Eastern Cape	499290	951191	4755398	2023378	405.3%	82829	307264	8.7%	6.5%
Northern Cape	69402	88744	388319	150174	216.4%	10191	35046	11.5%	9.0%
Free State	131645	356495	1538747	547697	416.0%	25180	98334	7.1%	6.4%
KwaZulu-Natal	522017	1047001	6074197	2506403	480.1%	91080	397156	8.7%	6.5%
Northwest	208084	376658	1878601	734696	353.1%	47413	196001	12.6%	10.4%
Gauteng	471943	796871	4028132	1444092	306.0%	138647	662610	17.4%	16.4%
Mpumalanga	161387	305035	1656114	649685	402.6%	34361	152967	11.3%	9.2%
Limpopo	350843	713059	3689429	1560613	444.8%	48673	206977	6.8%	5.6%

**Source: EPRI Micro-simulation model (with 2000 I&E data)**

A comparison of various poverty reduction indicators, as in the table below, demonstrates the same kind of differences in terms of how they quantify the social impact of increased grant take-up, as discussed above. Full take-up of all grants reduces the destitution headcount by 55% (for individuals, compared to only 45% with the lower CSG payment), the median rand poverty gap by 99%, and the total rand poverty gap by 67%. The comparisons underscore the importance of understanding the methodological differences distinguishing alternative poverty lines and impact indicators.

**Table 2.46: All grants(1606) with full take-up: comparison of indicators**

poverty measure:	% poverty headcount reduction		percentage point poverty rate reduction		% reduction in avg household rand poverty gap		% reduction in avg household % poverty gap		% aggregate poverty gap reduction
	HH	ind	HH	ind	median	mean	median	mean	
<b>POVERTY LINE:</b>									
Comm. of Inquiry expenditure	10.7%	9.0%	4.8%	5.4%	34.1%	29.0%	30.4%	28.4%	29.0%
Comm. of Inquiry expenditure (scales)	26.9%	27.9%	9.3%	12.9%	59.8%	47.5%	55.5%	44.4%	47.5%
Comm. of Inquiry income	8.4%	7.1%	3.8%	4.3%	35.8%	28.9%	32.3%	28.4%	28.9%
Comm. of Inquiry income (scales)	22.6%	23.1%	8.5%	11.4%	68.1%	47.4%	66.2%	44.7%	47.4%
Destitution expenditure (scales)	49.4%	55.2%	9.9%	16.0%	98.8%	66.6%	98.6%	61.1%	66.6%
HSL expenditure	25.2%	30.0%	9.7%	14.0%	54.0%	46.7%	51.9%	41.3%	46.7%
Relative expenditure (scales)	19.5%	19.7%	7.8%	10.3%	48.2%	40.1%	44.0%	37.8%	40.1%

**Source: EPRI Micro-simulation model (with 2000 I&E data)**

## SUMMARY AND CONCLUSIONS

South Africa's system of social security successfully reduces poverty, regardless of which methodology is used to quantify the impact measure or identify the poverty line. Nevertheless, the quantitative measure of poverty reduction is sensitive to the methodological choices. For instance, the measured impact is consistently greatest

when employing the total rand poverty gap as an indicator. The poverty headcount measure, however, consistently yields the smallest results. Likewise, the choice of poverty line heavily influences the measurement of the quantitative impact. The current social security system is most successful when measured against destitution, and the impact is smallest when poverty lines ignore economies of scale and adult equivalence issues. For instance, South Africa's social grants reduce the poverty headcount measure by 4.3%, as measured against the Committee of Inquiry's expenditure poverty line (with no scales). The social security system, however, reduces 45% of the total rand destitution gap—an impact more than ten times greater.

The table below compares the eleven social security reform scenarios (plus the additional seven variants involving the higher CSG payment), showing the differences in the seven poverty lines as measured by the reduction in the total rand poverty gap. Using the Committee of Inquiry expenditure poverty line (without scales), the table below documents the relatively small impact of improving take-up of the State Old Age Pension. A 10% increase in take-up reduces the poverty gap by only 1.2%, and full take-up by only 2.5%. The take-up rate for the SOAP is already very high, and many of the eligible elderly not already receiving the SOAP are not among the poorest South Africans. As a result, further extensions of the SOAP have limited potential in reducing poverty. Extensions of the Disability Grant offer greater promise, although at substantially greater expense. A 50% increase in DG take-up reduces the total rand poverty gap by 1.7%, and full take-up generates a 5.1% reduction. The greatest poverty reducing potential lies with the progressive extension of the Child Support Grant. Extending the eligibility age to 14 reduces the poverty gap by 16.6%, and a further extension to age 18 reduces the gap by 21.4%. Increasing the real grant payment (as the government did in 2003) generates an even greater impact. The extension to age 14 yields a 22% poverty gap reduction, while the extension to age 18 reduces the poverty gap by 28.3%. Combining the higher CSG extended to age 14 with the full take-up of the SOAP and the DG yields a reduction in the total rand poverty gap of 29%.

**Table 2.47: Summary of EPRI Micro-simulation results**

	Comm. of Inquiry expenditure	Comm. of Inquiry expenditure (scales)	Comm. of Inquiry income	Comm. of Inquiry income (scales)	Destitution expenditure (scales)	HSL expenditure	Relative expenditure (scales)
SOAP with 10% increase in take-up	1.2	2.3	1.3	2.3	3.2	2.2	1.9
SOAP with full take-up	2.5	4.5	2.5	4.5	6.2	4.3	3.8
DG with 50% increase in take-up	1.7	2.8	1.6	3.2	4.8	2.7	2.6
DG with full take-up	5.1	9.3	5.1	9.3	13.0	9.2	7.8
CSG to age 7 with full take-up	7.5	13.4	7.4	13.3	23.0	13.0	10.7
CSG to age 9 with full take-up	10.1	17.9	9.9	17.7	30.3	17.4	14.3
CSG to age 11 with full take-up	12.7	22.4	12.6	22.2	37.5	22.0	18.1
CSG to age 14 with full take-up	16.6	28.8	16.4	28.6	47.4	28.6	23.4
CSG to age 16 with full take-up	19.1	32.9	18.9	32.7	53.5	32.8	26.8
CSG to age 18 with full take-up	21.4	36.4	21.2	36.3	58.7	36.7	29.9
CSG(1606) to age 7 with full take-up	10.0	17.6	9.8	17.4	30.3	17.0	14.1
CSG(1606) to age 9 with full take-up	13.4	23.3	13.2	23.1	39.2	22.8	18.9
CSG(1606) to age 11 with full take-up	16.9	29.1	16.7	28.9	46.9	28.5	23.7
CSG(1606) to age 14 with full take-up	22.0	37.0	21.8	36.9	57.0	36.7	30.5
CSG(1606) to age 16 with full take-up	25.3	42.0	25.1	41.9	62.8	42.0	34.8
CSG(1606) to age 18 with full take-up	28.3	46.3	28.1	46.2	67.9	46.6	38.7
All grants with full take-up	23.8	40.0	23.6	39.9	58.6	39.4	33.5
All grants(1606) with full take-up	29.0	47.5	28.9	47.4	66.6	46.7	40.1

**Source: EPRI Micro-simulation model (with 2000 I&E data)**

The magnitudes of these effects, of course, depend critically on the poverty line by which the impacts of the reforms are measured. For instance, the 29% reduction in the total rand poverty gap measured using the unscaled Committee of Inquiry expenditure poverty line is less than half the magnitude of the reduction in destitution, which amounts to a 66.6% reduction. Likewise, the impacts of the scaled Committee of Inquiry income and expenditure poverty lines are substantially greater than for the unscaled poverty lines. The impact of the “all grants” package measured with the scaled Committee of Inquiry income poverty line reflects a 47.4% reduction, and with the expenditure poverty line, a comparable 47.5% reduction. As this makes apparent, the distinction between income and expenditure poverty has not generated material differences in this analysis. Likewise, the impact using the unscaled Committee of Inquiry income poverty line (a 28.9% reduction) is virtually the same as that using the unscaled Committee of Inquiry expenditure poverty line (a 29.0% reduction). For almost every simulation, the HSL poverty line generates very close results to those yielded by the scaled Committee of Inquiry income and expenditure poverty lines, in spite of the substantial methodological differences distinguishing the HSL measure. The relative poverty line yields results that are not closely comparable to any of the other poverty line measures, with the results generally falling in between the results of the Committee of Inquiry scaled and unscaled poverty line measures.

The evidence in this chapter documents the substantial impact of South Africa’s social security system in reducing poverty and destitution. The magnitudes of the results are sensitive to methodological issues. It matters whether the poverty line is relative or absolute, whether it is scaled for household composition and economies of scale or not, and to a small extent whether it measures income or expenditure. Likewise, it matters how the poverty impact is measured—using poverty headcount or variants on the poverty gap. Nevertheless, the qualitative results, and the answers to critical policy questions, are robust to different methodological approaches. South Africa’s system of social security substantially reduces deprivation, and the progressive extension of the magnitude, scope and reach of social grants holds the potential to dramatically diminish the prevalence of poverty in South Africa.

## **CHAPTER 3)**

### **The Household Impact of Social Assistance Programmes**

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#### **INTRODUCTION**

This chapter evaluates the impact of South Africa’s social development grants on the well-being of individuals and households, evaluating how social security affects household behaviour and access to basic needs, including education, health care, nutrition and other requirements. The previous chapter focused on aggregate household income and expenditure—some of the most common variables used in the measurement of poverty. This chapter broadens the focus, examining dis-aggregated as well as non-monetary measures of well being. The chapter focuses on the main social grants, with a particular emphasis on the State Old Age Pension (SOAP), the Child Support Grant (CSG) and the Disability Grant (DG). Targeted social programmes that provide cash transfers to the poor often have consequences for the behaviour of untargeted individuals due to income sharing within households. Because of income pooling within households, these grants have broad household impacts. This study

quantifies these effects, using a linked data set of Statistic South Africa's *Income and Expenditure Survey* (IES) in October 2000 and *Labour Force Survey* (LFS) in September 2000, as well as previous *October Household Surveys*.

## **SOCIAL SECURITY AND EDUCATION**

Economic theory suggests that social grants, by raising incomes, affect education in three ways. First, to the extent that there are financial barriers to school attendance – purchasing school supplies, uniforms, tuition, transportation, etc. – the boost in disposable income provided by a social grant could help pay the otherwise unaffordable costs of attending school. Second, a grant could relieve the opportunity cost of school attendance; with a cash transfer in hand, a family might be more able to forgo a child's contribution to household income (or food production in the case of subsistence farmers) in favour of making a long-term investment in education. Third, by indirectly increasing the resources available to schools, the quality of education may improve, making education a more attractive option to households. This chapter quantifies these effects using econometric models that evaluate the correlation between measures of social grants and school attendance.

The statistical evidence from this research documents the extent to which poverty exerts a negative impact on school enrolment rates. Many poor children cannot attend school due to the costs associated with education, including the necessity to work to supplement family income. In addition, communities that are resource-constrained provide lower quality educational services, which negatively affects enrolment rates. Social security grants counter these negative effects by providing households with more resources to finance education. The old-age pension transfer programme is particularly effective in this regard. Findings show a positive and statistically significant effect of government pension transfers on school attendance rates of poor children. The effects for poor school-age girls are particularly strong.

For example, in poor households, defined as those falling into the lower quarter of all households in a given province ranked by expenditure per capita, school-age boys are 3 percent more likely to attend school full time if the household receives a pension benefit. The effect is even more pronounced for girls: girls who live in pensioner households are 7 percent more likely to be enrolled full time in school than are their peers who live in households without a pension. Quantitatively, a five hundred rand increase in official pension transfers to a poor household of five would increase the probability of attending school by an estimated 2 percent for a school-age boy and 5 percent for a girl.

## **THE HOUSEHOLD SPENDING IMPACT OF SOCIAL SECURITY**

If different members of the household have diverging preferences for the allocation of overall household expenditure, social grants may enable recipients to become more empowered in the household decision-making process. As a result, household expenditure has a greater likelihood to reflect their preferences. If this is true, changes in how and to whom grants are distributed would have a significant impact on household well being.

Regardless of the type of social grant, or how the food share is calculated, social grants are associated with an increased allocation of spending in a manner that supports better nutrition. The impact of social grants affects non-food expenditure as well. Households that receive social grants have significantly different spending patterns than similar households that do not receive these grants. Social grant recipients spend a greater proportion on basic necessities – food, fuel, housing and household operations. These households spend less on medical care, debt service and tobacco. All three grants were significantly associated with increased allocations for expenditures associated with household operations, with the Child Support Grant exerting the greatest quantitative impact—raising the expenditure share by more than one percentage point. Both the State Old Age Pension and the Disability grant were associated with increased allocations for fuel—by approximately a quarter of one percent.

## **SOCIAL SECURITY AND NUTRITION**

The results of the expenditure model provide important insights into the relationship between social security and the nutrition of household members. In addition, this study more directly assesses the links between access to nutrients and social grants by analysing specific Statistics South Africa survey questions related to adult and child hunger.

The statistical results document the positive significant impact of social security grants on food share expenditures, implying improvements in household nutrition. The coefficient on the State Old Age Pension indicates that each thousand rand of annual pension receipt is associated with an increase of 1.5 percentage points in the share of household spending on all food items, and an increase nearly one percentage point in the share of spending on basic food items. Likewise, receipt of a Child Support Grant was associated with an increase of 1.5 percentage points in the share of household spending on all food items, and an increase of 1.2 percentage points in the share of spending on basic food items. Similarly, receipt of a Disability Grant was associated with an increase of 2.5 percentage points in the share of household spending on all food items, and an increase of 1.3 percentage points in the share of spending on basic food items. These results are all statistically significant at a 99% level.

## **OTHER SOCIAL INDICATORS**

This study has focused on the relationship between social security and the main objectives of social investment—health, education and nutrition. In addition, the results of the expenditure model also provide insights into other indicators of well-being. For example, receipt of the Child Support Grant is associated with a lower household expenditure share on tobacco, even controlling for the number of children in the household. Likewise, receipt of social grants is associated with a lower household spending share on tobacco, alcohol and gambling. In addition, households that receive social grants have lower household indebtedness and smaller debt service burdens, controlling for household income and other explanatory variables.

## CONCLUSIONS

The results of this study provide evidence that the household impact of South Africa's social grants are developmental in nature. These findings are consistent with international lessons of experience, as well as with previous studies of South Africa's system of social security. Social security programmes in Brazil, Argentina, Namibia and Botswana yield positive impacts in terms of reducing poverty, promoting job search and increasing school attendance. Past studies of social security in South Africa have focused on the State Old Age Pension, identifying important positive effects in terms of broadly reducing household poverty as well as improving health and nutrition.

Poverty and its associated consequences erode the opportunities for children and youth to attend school, fomenting a vicious cycle of destitution by undermining the household's capacity to accumulate the human capital necessary to break the poverty trap. The statistical evidence from this research documents the extent to which poverty exerts a negative impact on school enrolment rates. Many poor children cannot attend school due to the costs associated with education, including the necessity to work to supplement family income. In addition, communities that are resource-constrained provide lower quality educational services, which negatively affects enrolment rates. Social security grants counter these negative effects by providing households with more resources to finance education. New findings from this study demonstrate that children in households that receive social grants are more likely to attend school, even when controlling for the effect of income. The positive effects of social security on education are greater for girls than for boys, helping to remedy gender disparities. But both the State Old Age Pension and the Child Support Grant are statistically significantly associated with improvements in school attendance, and the magnitudes of these impacts are substantial. This analysis only measures the direct and static link between social security and education. To the extent that social grants promote school attendance, they contribute to a virtuous cycle with long term dynamic benefits that are not easily measured by statistical analysis.

Nationally, nearly one in five households experienced hunger during the year studied (2000). The highest income provinces—Gauteng and the Western Cape—have the lowest prevalence rates of hunger. The prevalence rate of hunger is highest in one of South Africa's poorest provinces—nearly one in three households in the Eastern Cape experiences hunger. However, another of the poorest provinces—Limpopo—has the third lowest hunger prevalence rate in the country. Meanwhile, Mpumalanga—with a poverty rate below the national average—has the second highest hunger prevalence rate in the country. Social grants are effective in addressing this problem of hunger, as well as basic needs in general. Spending in households that receive social grants focuses more on basics like food, fuel, housing and household operations, and less is spent on tobacco and debt. All major social grants—the State Old Age Pension, the Child Support Grant and the Disability Grant—are significantly and positively associated with a greater share of household expenditure on food. This increased spending on food is associated with better nutritional outcomes. Households that receive social grants have lower prevalence rates of hunger for young children as well as older children and adults, even compared to those households with comparable income levels.

Receipt of social grants is associated with lower spending on health care, perhaps because social grants are associated with other positive outcomes that reduce the need for medical care. For instance, the World Bank identifies the important link

between improved education and stemming the spread of HIV/AIDS. Likewise, social grants are associated with greater household access to piped water. The evidence in this chapter underscores the importance of moving beyond measures of income poverty in the assessment of social deprivation. In case after case in this study, household outcomes conflicted with the simple implications of monetary income rankings. While many measures of well-being are correlated with aggregate income and expenditure, the exceptions affect large numbers of people and require careful policy analysis. The interaction between social security and household well-being is complex, and further research continues to explore these interactions. In particular, the broad measures of household well-being analysed in this chapter exert profound effects on labour productivity and the ability of workers to find jobs. Employment in turn provides access to resources that promote improved education, nutrition, health and other outcomes. The next chapter explores these issues in greater detail.

## **CHAPTER 4)**

### **The Labour Market Impact of Social Assistance Programmes**

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#### **INTRODUCTION**

This chapter evaluates the impact of South Africa's social development grants on labour market activity, identifying theoretically and empirically the impact of the social security programmes in terms of labour demand and supply. This research builds on the household impact assessment in the previous chapter, quantifying those factors that affect worker productivity and consequently employer demand for labour. In addition, the study assesses the incentive effects of social grants and their impact on labour force participation. Taken together, these two dimensions of the analysis provide evidence about the net impact of social grants on employment in South Africa.

This chapter consists of four major sections. The first section (4.2) examines the theoretical and empirical literature on linkages between social security and labour markets, with a specific focus on South African evidence. The second section of the chapter (4.3) analyses the labour supply effects resulting from social development grants. Section 4.4 analyses the demand side of the labour market, evaluating the impact of social grants on wages and implicitly the productivity of labour. The final section (4.5) evaluates and summarises the policy implications of the findings.

#### **SOCIAL SECURITY AND LABOUR SUPPLY**

This section evaluates the impact of South Africa's social security programme on the supply of labour by individuals and households.

#### **LABOUR FORCE PARTICIPATION**

The first set of panel data estimates addressed the question of narrow labour force participation, using the official Statistics South Africa definition that excludes discouraged workers. The model incorporates explanatory variables for both the State Old Age Pension (SOAP) and the Disability Grant (DG). The Child Support Grant (CSG) did not enter significantly into the participation regressions, perhaps due to the relatively

small size of the grant during the sample period, and its low take-up rate in September 2001. In addition, to control for the impact of demographic characteristics, age and gender related variables were included, including the number of age-eligible pensioners (both those receiving and not receiving the SOAP). In addition, changes in household composition were incorporated into the model through variables reflecting the change in the number of children, the change in the number of women and the change in household size overall. Provincial binary (dummy) variables and a variable to capture the rural effect were also included.

Regardless of estimation technique (ordinary least squares or two-stage least squares) and model specification, the two key effects tested by this model are corroborated by all four models: both receipt of the State Old Age Pension and the Disability Grant have a significant positive impact on narrow labour force participation. Depending on the model, households receiving the State Old Age Pension have narrow labour force participation rates significantly higher than households that do not receive the grant. Likewise, households receiving the Disability Grant have significantly higher participation rates. The results are not significantly different across models.

The second set of panel data estimates addressed the question of broad labour force participation, using the expanded Statistics South Africa definition that includes discouraged workers. As with the previous analysis, the models incorporate explanatory variables for both the State Old Age Pension (SOAP) and the Disability Grant (DG). Again, the Child Support Grant (CSG) did not enter significantly into the participation regressions. In addition, the same demographic control variables used in the narrow participation models are employed in these regressions. Similarly, provincial binary (dummy) variables and a variable to capture the rural effect are also included.

Regardless of estimation technique (ordinary least squares or two-stage least squares) and model specification, the two key effects tested by this model are corroborated by all four models: both receipt of the State Old Age Pension and the Disability Grant have a significant positive impact on broad labour force participation. Depending on the model, households receiving the State Old Age Pension have narrow labour force participation rates significantly higher than households that do not receive the grant. Likewise, households receiving the Disability Grant have significantly higher participation rates.

## **EMPLOYMENT**

The third set of estimates addressed the question of employment using the official definition of the labour force, and the results of four models that evaluate the impact of the Child Support Grant are discussed below. The model incorporates explanatory variables for the three major social grants—the State Old Age Pension (SOAP), the Child Support Grant (CSG) and the Disability Grant (DG). As with the labour force participation models, provincial binary (dummy) variables and a variable to capture the rural effect were also included.

In all cases, the variables representing receipt of social grants have a significant positive impact on measured official employment rates. The estimated impact of receipt of the Child Support Grant varies depending on how other social grants are included in the model, reflecting a set of interaction effects that call for further research.

The fourth set of regression models address the linkages between employment and the State Old Age Pension and the Disability Grant. The same demographic control variables used in the participation models are employed in these regressions. Similarly, provincial binary (dummy) variables and a variable to capture the rural effect are also included.

With both the ordinary least squares and two-stage least squares estimation techniques, and under different model specifications, the statistical analysis corroborates the two key effects tested by this model. Both receipt of the State Old Age Pension and the Disability Grant have a significant positive impact on measured household employment rates. Depending on the model, households receiving the State Old Age Pension have employment rates significantly higher than households that do not receive the grant. Likewise, households receiving the Disability Grant have significantly higher employment rates.

## **CROSS-SECTION ESTIMATES**

The individual labour force participation and employment regressions are reported in the full report. In general, because of sample selection problems and data issues, the results are not robust and most of the social grant variables are not statistically significant. The econometric analysis estimates separate regressions for males and females broken down into rural and urban sub-samples. The full report provides both employment and labour force participation regressions, including the sample selection equations in each case.

With respect to labour force participation rates, the effects of the State Old Age Pension and the Disability Grant are statistically significantly positive for rural females. However, for rural males and urban males and females, all the social grants have effects that are not statistically different from zero. Other economically important variables have fragile relationships to labour force participation, or yield theoretically inconsistent signs.

The results from the employment equations yield somewhat more significant results. For both rural males and females, the effects of the State Old Age Pension and the Disability Grant are statistically significantly positive. Workers in households receiving either a State Old Age Pension or a Disability Grant are significantly more likely to be employed. However, the effect of the State Old Age Pension for urban males is significantly negative by the same magnitude. The differential effects for urban and rural workers is a persistent theme in the literature on social security's impact on labour markets. The results identified by the cross-sectional analysis may be spurious because the sample selection methodology is relatively weak in its capacity to control for unobserved heterogeneity in the sample.

Overall, the cross-sectional analysis provides some weak evidence that social grants have positive effects on both labour market participation and employment. However, the results are not unambiguous and certainly not conclusive. However, they tend to corroborate the stronger results identified by the panel analysis, supporting the findings that social grants have positive labour market effects.

## **LABOUR DEMAND**

The analysis of labour demand builds on the household impact study as well as the evidence from the previous section in order to identify specific transmission mechanisms between social security programmes and worker productivity effects. Social assistance that increases labour productivity has the potential to increase the demand by employers for workers, which is generally measured as the marginal productivity of labour. Directly, social grants support the accumulation of human capital by a worker, and it supports the worker's productivity-bolstering consumption. Better nutrition, health care, housing and transportation can all support the increased productivity of the worker. Indirectly, social assistance supports higher worker productivity by reducing the drain on a worker's consumption created by informal remittance-oriented private safety nets. The International Labour Organisation's 1996 labour market report documents how the tendency for large family remittances to flow from urban to rural areas places South African firms at a structural disadvantage, resulting in reduced employment.

The analysis estimates the effects of social grant receipt on wages using this panel data, by computing the average wage per week per worker for which data is available in each Statistics South Africa Primary Sampling Unit (PSU) and regressing the percent change in this average wage against the percent of household receiving social grants, along with a number of other demographic variables. All the wage models analysed in the study corroborated two key effects: both receipt of the State Old Age Pension and the Disability Grant are associated with increases in measured wages. Eligibility for the State Old Age Pension (in the absence of actual receipt of the grant) has no consistent impact on wages, and this variable is not statistically significant for any of these models. The provincial variables are statistically significant for several provinces, reflecting significant labour market differences across provinces. Increases in the number of children and women as a share of total household size have a significant negative impact on wage growth.

## **POLICY IMPLICATIONS**

Conventional economic theory suggests that social grants may undermine labour force participation by reducing the opportunity cost of not working. Models developed for industrialised countries and applied broadly to South African data sometimes corroborate this hypothesis. However, when models are developed that reflect the labour market behaviour of South Africans who receive social grants, the results contradict this hypothesis. The response of very low income South Africans to a marginal increase in their income is significantly different from the response of median income South Africans.

To the extent that social grants create adverse labour market effects, the adverse consequences stem from distortions in social security targeting mechanisms. For instance, to the extent that the State Old Age Pensions are employed to target the non-pensioner poor, then the grants may encourage a household formation response that impedes job search. These types of problems can be addressed by broadening the base of the social security programmes. A more comprehensive system of social security provides fewer opportunities for distortions to be generated by the incentive effects created by the social grants.

This study explicitly examines the impact of social grants on labour market participation, employment success and realised wages of South Africans in households receiving social grants. While statistical analysis cannot prove causation, the empirical results are consistent with the hypotheses that:

- (1) Social grants provide potential labour market participants with the resources and economic security necessary to invest in high-risk/high-reward job search.
- (2) Living in a household receiving social grants is correlated with a higher success rate in finding employment.
- (3) Workers in households receiving social grants are better able to improve their productivity and as a result earn higher wage increases.

The empirical evidence discussed in this chapter demonstrates that people in households receiving social grants have increased both their labour force participation and employment rates faster than those who live in households that do not receive social grants. In addition, workers in households receiving social grants have realised more rapid wage increases. These findings are consistent with the hypothesis that South Africa's social grants increase both the supply and demand for labour. This evidence does not support the hypothesis that South Africa's system of social grants negatively affects job creation.

## **CHAPTER 5)**

### **The Macro-economic Impact of Social Assistance Programmes**

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#### **INTRODUCTION**

Chapter 5 empirically assesses the macro-economic impact of South Africa's social security programmes in terms of changes in the overall level and composition of aggregate demand, with a particular focus on capacity utilisation, savings and investment, the trade balance and the domestic labour content of consumption. Social security programmes redistribute spending power within the economy, and this has important effects on several macro-economic variables. According to the government's ten-year review, public spending on social grants has increased from ten billion rand in 1994 to over thirty-five billion rand in 2003.

#### **COMPOSITION OF SPENDING**

Social assistance programmes redistribute income among groups with significantly varying expenditure patterns, leading to substantial changes in the demand facing different economic sectors. The composition of spending across the income distribution is important because South Africa's system of social security effectively redistributes spending power from upper income groups to those in the lowest income categories. The shares of expenditure of each group provide an indication of how consumers increase or reduce spending in different sectors of the economy as their incomes change. Three particularly significant categories of expenditure affected by the redistribution resulting from South Africa's social grants. Food is the largest category of spending for the poor, but significantly less important for upper income groups. Transport demonstrates the opposite pattern—a relatively low share of spending for

lower income groups, increasing to one of the most important categories for upper income groups.

Contrary to typical spending patterns in most countries; the households in the lowest decile allocate a smaller proportion of their expenditure to food than do the households in the next higher decile. Initially, the expenditure share rises from 41.9% for the lowest income decile of the population to 44.0% for the next higher decile. Then the expenditure share on food declines steadily, falling as low as 11.0% of total expenditure for the population's highest income decile. The upper income groups allocate a greater percentage of their expenditure on transport, communication, and holidays while the lower income households concentrate their spending on basic goods such as food, clothing, and items for personal care. The spending share on clothing is greatest for middle income groups—the relative share of spending is lower for both the lowest and highest income groups.

The change in composition of demand resulting from social security programmes affects the level and composition of employment in South Africa. The transportation industry tends to be adversely affected by spending composition changes resulting from the redistribution impact of social grants. This industry has a relatively low domestic production content, and is very capital intensive. As a result, the reduced spending on transportation has a relatively small impact on national income and an even smaller impact on employment. Likewise, the communications industry tends to be adversely affected by spending composition changes, and while this industry is labour intensive, it has a very low domestic production content. As a result, the reduced spending on communications has a very small negative impact on both national income and employment.

The food, clothing and personal care sectors are positively affected by the redistribution impact of social grants. These industries have relatively high domestic production contents, and are also all relatively labour intensive. As a result, the increased spending in these categories has a relatively large impact on national income and employment. The net impact of the positive and negative changes in the composition of spending tends to increase national income and employment.

## **SAVINGS, INVESTMENT, AND THE BALANCE OF TRADE**

Social grants affect national savings through two channels. First, private domestic savings are affected because social grants redistribute income among groups with different savings rates. In South Africa, as in most countries, this effect tends to reduce private domestic savings as the upper income groups from which taxes are levied to pay for grants have higher savings rates than the lower income households to whom the grants are distributed. All deciles in the lower half of the distribution have savings rates less than one percent—from 0.2% for the poorest decile, rising to 0.9% for the fifth decile. The decile right above the median—the sixth decile—breaks the one-percent barrier with an average savings rate of 1.5%. The savings rate rises steadily up to 3.7% for the ninth decile. The rate then rises to 5.5% for the highest income decile. These savings rates reflect reported savings by households in the 2000 *Income and Expenditure Survey*, across a spectrum of financial instruments listed on the questionnaire. As a result, this measure does not reflect national savings, and is subject to potentially significant measurement bias, particularly with respect to offshore

savings. Reported offshore savings by the top decile are fourteen times the reported offshore savings of the next lower decile.

Further offsetting the greater savings rates of the higher income groups is the increased propensity of upper income groups to incur debt. Average indebtedness (relative to household income) of the highest income groups (the top quintile) is nine times that of the lowest income groups (the bottom quintile). It is likely, however, that the net contribution to national savings from the highest income groups is higher than that of the lower income groups. The second savings channel, however, tends to have the opposite effect. Analysis of the change in the composition of spending demonstrates that the redistribution impact of social grants reduces the demand for imported goods, tending to reduce the need for capital inflows to finance the trade deficit and thus increasing overall savings.

Two industries negatively affected by the redistribution impact (transport and communications) are net importers. Most of the sectors positively affected are net exporters and all have very high domestic production contents. The first order impact of the redistribution impact of social grants tends to improve the balance of trade but has an ambiguous impact on national savings.

## **IMPACT OF SOCIAL GRANTS ON INFLATION**

Similar to the impact on savings and the trade balance, an increase in transfer payments by the South African government to the poor has two effects on inflation. First, as this analysis has established thus far, an increase in social grants would result in an increase in aggregate demand as domestic content of consumption and an increase in domestic labour. Consequently, there would be an increase in total aggregate demand thereby making the economy susceptible to demand-pull inflation.

However, if there is a corresponding increase in production, then there might not be an increase in the price level and the only effect of the policy will be an increase in income. The data suggests that aggregate supply may indeed increase given an increase in aggregate demand. According to Statistics South Africa, in May 2003, the manufacturing industry as a whole was only utilising 78.8% of its existing production capacity. Capacity utilisation for the past several years has been significantly lower than the average for the past decades. As a result, there is a substantial stock of unutilised fixed capital that could be brought into productive use if sufficient demand were available.

While the economy may be susceptible to increased inflation, it appears likely that some of this will be tempered by the increase in aggregate supply, as producers will begin to use under-utilised capacity in response to the higher aggregate demand. This is especially true in the food and personal care industries. The net effect is that this spending tends to provide a demand-side stimulus that increases the demand for labour, promoting increased employment. The government's human resource development strategy recognises that without such a demand-side stimulus, poverty and inequality will continue to undermine the prospects for "increased aggregate demand for goods and services, therefore limiting economic growth."

The second channel influencing inflation through the falling trade deficit's impact on the exchange rate. As the trade deficit falls, the rand tends to appreciate, and an appreciating rand tends to reduce inflation.

## **MACRO-ECONOMIC IMPACT OF SOCIAL GRANTS FROM INEQUALITY REDUCTION**

Persistent and extreme inequality is one of the most serious problems facing South Africa. There is an extensive literature that identifies the relationship between severe inequality and low rates of economic growth. However, while the theoretical and empirical links between severe inequality and low rates of growth are well documented, there still in no consensus among economists about the relationship between inequality and growth under less extreme circumstances.

An increased take-up in social grants would have the effect of reducing South Africa's Gini coefficient (measuring inequality) as the income differentials across the income distribution would be reduced. A redistribution programme that pays for these grants via increased taxes would have an even more pronounced effect for disposable income of the upper income households is thereby reduced. Using the data provided in the 2000 *Income and Expenditure Survey*, this study developed a simulation which determined how the Gini coefficient would change under a scenario of full take-up State Old Age Pensions, Disability Grants, and Child Support Grants, as discussed in chapter 2. The simulation quantifies a reduction in the Gini coefficient of 3 percentage points, from 63% to 60%.

## **MACRO-ECONOMIC IMPACT OF SOCIAL GRANTS THROUGH EDUCATION**

Improvements in the income distribution promote economic growth through diverse transmission channels. Social security grants improve distribution directly—by redistributing income from wealthier groups to poorer groups. But social grants also exert important indirect effects, by changing household behaviour, as discussed in chapter 3 of the report. Improvements in nutrition, health and education increase productivity and support higher wages, with important consequences for the distribution of income. The positive link between improved household incomes and improved educational attainment by children is rigorously documented, and discussed further in the main report. The strong impact of social grants on schooling for girls in South Africa's case is particularly important. Education also improves economic performance; not only through improved labour productivity, but also through improved capital productivity. A more educated workforce is more likely to innovate, raising capital productivity.

One important macroeconomic effect of social grants is the resulting economic growth resulting indirectly through improved education. Numerous academic studies discussed in the full report have underscored the link between improved access to education and higher rates of economic growth. This economic growth increases the resources society has available to fund the social security programme, as well as other public priorities. Economic growth directly supports the expansion of fiscal resources.

## **CONCLUSION**

At the macro-economic level, South Africa's system of social development grants tends to increase domestic employment while promoting a more equal distribution of income. The effects of grants on national savings and the trade balance are ambiguous, since grants have two competing effects on the national savings—one through private domestic savings, and the other through the trade deficit. Depending on the magnitude of the effects, grants could improve or worsen national savings and the trade balance. Initial analysis suggests that the impact on savings may be negative, while that on the trade balance may be positive. However, since much of the savings of upper income groups are offshore, the negative impact is unlikely to be significant, particularly given the small share of private savings in the national savings rate. The impact on inflation may also be ambiguous. The increase in overall demand in the economy may generate some inflationary pressure. However, the relatively low rate of capacity utilisation may enable the economy to meet this demand without significant increases in inflation. Likewise, the positive trade balance effects may lead to an appreciation of the rand, tending to dampen imported inflation. On balance, the macro-economic impact of South Africa's social security system is largely positive. These positive macroeconomic effects support higher rates of economic growth, which are re-inforced by the social security system's positive effects on income distribution and education.

## **CHAPTER 6)**

### **Summary, Conclusions and Policy Implications**

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This study documents how South Africa's social assistance grants play a vital role in reducing poverty and promoting social development. The key findings are summarised and discussed below.

#### **THE IMPACT ON POVERTY**

South Africa's social grants successfully reduce poverty, regardless of which methodology is used to quantify the impact measure or identify the poverty line. Nevertheless, the quantitative measure of poverty reduction is sensitive to the methodological choices. For instance, the measured impact is consistently greatest when employing the total rand poverty gap as an indicator. The poverty headcount measure, however, consistently yields the smallest results. Likewise, the choice of poverty line heavily influences the measurement of the quantitative impact. The current social security system is most successful when measured against destitution, and the impact is smallest when poverty lines ignore economies of scale and adult equivalence issues. For instance, South Africa's social grants reduce the poverty headcount measure by 4.3%, as measured against the Committee of Inquiry's expenditure poverty line (with no scales). The social security system, however, reduces 45% of the total rand destitution gap—an impact more than ten times greater.

Using the Committee of Inquiry expenditure poverty line (without scales), a 10% increase in take-up of the SOAP reduces the poverty gap by only 1.2%, and full take-up by only 2.5%. The take-up rate for the SOAP is already very high, and many of the

eligible elderly not already receiving the SOAP are not among the poorest South Africans. As a result, further extensions of the SOAP have limited potential in reducing poverty. Extensions of the Disability Grant offer greater promise, although at substantially greater expense. A 50% increase in DG take-up reduces the total rand poverty gap by 1.7%, and full take-up generates a 5.1% reduction. The greatest poverty reducing potential lies with the progressive extension of the Child Support Grant. Extending the eligibility age to 14 reduces the poverty gap by 16.6%, and a further extension to age 18 reduces the gap by 21.4%. Increasing the real grant payment (as the government did in 2003) generates an even greater impact. The extension to age 14 yields a 22% poverty gap reduction, while the extension to age 18 reduces the poverty gap by 28.3%. Combining the higher CSG extended to age 14 with the full take-up of the SOAP and the DG yields a reduction in the total rand poverty gap of 29%.

The evidence in this report documents the substantial impact of South Africa's social security system in reducing poverty and destitution. The magnitudes of the results are sensitive to methodological issues. It matters whether the poverty line is relative or absolute, whether it is scaled for household composition and economies of scale or not, and to a small extent whether it measures income or expenditure. Likewise, it matters how the poverty impact is measured—using poverty headcount or variants on the poverty gap. Nevertheless, the qualitative results, and the answers to critical policy questions, are robust to different methodological approaches. South Africa's system of social security substantially reduces deprivation, and the progressive extension of the magnitude, scope and reach of social grants holds the potential to dramatically diminish the prevalence of poverty in South Africa.

## **THE IMPACT ON HOUSEHOLD WELL-BEING**

The results of this study provide evidence that the household impacts of South Africa's social grants are developmental in nature. These findings are consistent with international lessons of experience, as well as with previous studies of South Africa's system of social security.

Poverty and its associated consequences erode the opportunities for children and youth to attend school, fomenting a vicious cycle of destitution by undermining the household's capacity to accumulate the human capital necessary to break the poverty trap. Children in households that receive social grants, however, are more likely to attend school. Spending in these households focuses more strongly on basic needs, like food, fuel, housing and household operations, and less is spent on tobacco and debt. In case after case in this study, household outcomes conflicted with the simple implications of monetary income rankings. While many measures of well-being are correlated with aggregate income and expenditure, the exceptions affect large numbers of people and require careful policy analysis. The evidence in this report underscores the importance of moving beyond measures of income poverty in the assessment of social deprivation.

## **THE LABOUR MARKET IMPACT**

This study explicitly examines the impact of social grants on the labour market participation, employment success and realised wages of South Africans in households

receiving social grants. While statistical analysis cannot prove causation, the empirical results are consistent with the hypotheses that:

- (1) Social grants provide potential labour market participants with the resources and economic security necessary to invest in high-risk/high-reward job search.
- (2) Living in a household receiving social grants is correlated with a higher success rate in finding employment.
- (3) Workers in households receiving social grants are better able to improve their productivity and as a result earn higher wage increases.

The empirical evidence discussed in this chapter demonstrates that people in households receiving social grants have increased both their labour force participation and employment rates faster than those who live in households that do not receive social grants. In addition, workers in households receiving social grants have realised more rapid wage increases. These findings are consistent with the hypothesis that South Africa's social grants increase both the supply and demand for labour. This evidence does not support the hypothesis that South Africa's system of social grants negatively affects employment creation.

## **THE MACRO-ECONOMIC IMPACT**

At the macro-economic level, South Africa's system of social development grants tends to increase domestic employment while promoting a more equal distribution of income. The effects of grants on national savings and the trade balance are ambiguous, since grants have two competing effects on the national savings—one through private domestic savings, and the other through the trade deficit. Depending on the magnitude of the effects, grants could improve or worsen national savings and the trade balance. Initial analysis suggests that the impact on savings may be negative, while that on the trade balance may be positive. However, since much of the savings of upper income groups are offshore, the negative impact is unlikely to be significant, particularly given the small share of private savings in the national savings rate. The impact on inflation may also be ambiguous. The increase in overall demand in the economy may generate some inflationary pressure. However, the relatively low rate of capacity utilisation may enable the economy to meet this demand without significant increases in inflation. Likewise, the positive trade balance effects may lead to an appreciation of the rand, tending to dampen imported inflation. On balance, the macro-economic impact of South Africa's social security system is largely positive. These positive macroeconomic effects support higher rates of economic growth, which are re-inforced by the social security system's positive effects on income distribution and education.