OECD Social, Employment and Migration Working Papers
No. 101

Trends in South African Income Distribution and Poverty since the Fall of Apartheid

Murray Leibbrandt,
Ingrid Woolard,
Arden Finn,
Jonathan Argent

https://dx.doi.org/10.1787/5kmms0t7p1ms-en

OECD

Unclassified **DELSA/ELSA/WD/SEM(2010)1**

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development **28-May-2010**

English - Or. English

DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS
EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS COMMITTEE

DELSA/ELSA/WD/SEM(2010)1
Unclassified

Cancels & replaces the same document of 20 January 2010

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS No. 101

TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID

Murray Leibbrandt, Ingrid Woolard, Arden Finn and Jonathan Argent
Southern Africa Labour and Development Research Unit, School of Economics, University of Cape Town

JEL Classification:

D31, I32, I38

All Social, Employment and Migration Working Papers are now available through the OECD website at www.oecd.org/els/workingpapers

JT03284353

English - Or. English

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS

www.oecd.org/els

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS

www.oecd.org/els/workingpapers

This series is designed to make available to a wider readership selected labour market, social policy and migration studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language – English or French – with a summary in the other.

Comment on the series is welcome, and should be sent to the Directorate for Employment, Labour and Social Affairs, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

The opinions expressed and arguments employed here are the responsibility of the author(s) and do not necessarily reflect those of the OECD.

Applications for permission to reproduce or translate all or part of this material should be made to:

Head of Publications Service
OECD
2, rue André-Pascal
75775 Paris, CEDEX 16
France

Copyright OECD 2009

ACKNOWLEDGEMENTS

We would like to thank Michael Förster of the OECD Social Policy Division for detailed and excellent commentary and advice. It has been a pleasure working with him. Useful discussion on an earlier draft of this paper followed its presentation at the 28th Meeting of the Working Party on Social Policy on 19 October 2009. We thank the participants.

ABSTRACT

1. This report presents a detailed analysis of changes in both poverty and inequality since the fall of Apartheid, and the potential drivers of such developments. Use is made of national survey data from 1993, 2000 and 2008. These data show that South Africa's high aggregate level of income inequality increased between 1993 and 2008. The same is true of inequality within each of South Africa's four major racial groups. Income poverty has fallen slightly in the aggregate but it persists at acute levels for the African and Coloured racial groups. Poverty in urban areas has increased. There have been continual improvements in non-monetary well-being (for example, access to piped water, electricity and formal housing) over the entire post-Apartheid period up to 2008.

2. From a policy point of view it is important to flag the fact that intra-African inequality and poverty trends increasingly dominate aggregate inequality and poverty in South Africa. Race-based redistribution may become less effective over time relative to policies addressing increasing inequality within each racial group and especially within the African group. Rising inequality within the labour market – due both to rising unemployment and rising earnings inequality - lies behind rising levels of aggregate inequality. These labour market trends have prevented the labour market from playing a positive role in poverty alleviation. Social assistance grants (mainly the child support grant, the disability grant and the old-age pension) alter the levels of inequality only marginally but have been crucial in reducing poverty among the poorest households. There are still a large number of families that are ineligible for grants because of the lack of appropriate documents. This suggests that there is an important role for the Department of Home Affairs in easing the process of vital registration.

RÉSUMÉ

3. Ce rapport présente une analyse détaillée de l'évolution de la pauvreté et des inégalités depuis la fin de l'Apartheid et des facteurs susceptibles de l'expliquer. Les comparaisons ont été effectuées sur la base des dernières micro-données comparables sur les ménages de 1993, 2000 et 2008. Ces données montrent que le niveau global des inégalités de revenu de l'Afrique du Sud a continué d'augmenter entre 1993 et 2008. Cette même réalité des inégalités se retrouvent également dans chacun des quatre groupes ethniques d'Afrique du Sud. La pauvreté a légèrement chuté dans sa globalité, mais persiste gravement parmi les groupes ethniques africains et interraciaux. La pauvreté en zone urbaine a augmenté. L'amélioration du bien-être non monétaire (accès à l'eau courante, à l'électricité, à un logement formel etc.) s'est poursuivie jusqu'en 2008.

4. D'un point de vue de politique publique, il est important de signaler que les inégalités et la pauvreté au sein de la population africaine ont et auront de plus en plus un poids prépondérant dans les inégalités et la pauvreté globales du pays. L'augmentation des inégalités au sein du marché du travail - due à la fois à la hausse du chômage et à l'augmentation des inégalités de salaires - provient de l'augmentation du niveau global des inégalités. Ces tendances ont empêché le marché du travail de jouer son rôle positif en termes de réduction de la pauvreté. Les prestations d'aide sociale (essentiellement l'allocation pour enfant à charge et les pensions d'invalidité et de vieillesse) n'ont qu'une incidence marginale sur les inégalités et la pauvreté. Toutefois, ces transferts réduisent réellement l'écart de pauvreté, en particulier parmi les ménages les plus pauvres. Un grand nombre de familles qui pourraient prétendre aux allocations familiales ne font pas valoir leurs droits parce qu'elles ne disposent pas des pièces justificatives requises. Par conséquent, le ministère des Affaires intérieures (Department of Home Affairs) a un rôle important à jouer en ce sens qu'il peut faciliter le processus d'enregistrement à l'état civil pour que tous les enfants puissent accéder aux prestations d'aide sociale auxquelles ils ont droit.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS 3

ABSTRACT 4

RÉSUMÉ 5

TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID 9

INTRODUCTION 9

CHAPTER 1: AN INTRODUCTION TO THE TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID 12

1.1 A long run-empirical picture of changes in inequality and poverty by race using census data 12
1.2 Evidence about post-Apartheid inequality and poverty trends from national household survey data 15
1.3 Explaining Changes in Post-Apartheid Inequality 19
1.4 Alternatives to the money-metric picture 20
1.5 Conclusion 21

CHAPTER 2: AN EMPIRICAL DESCRIPTION OF INEQUALITY AND POVERTY OVER THE POST-APARTHEID PERIOD 22

2.1 Data and Methods 22
2.2 Trends in Inequality 24
2.3 Trends in Poverty 35
2.4 Evidence from NIDS on non-money-metric poverty 43
2.5 Conclusion 45

CHAPTER 3: THE IMPACT OF SOCIAL ASSISTANCE GRANTS IN REDUCING POVERTY AND INEQUALITY 47

3.1 The Unemployment Insurance Fund 47
3.2 Public Works Programmes 49
3.3 Social Assistance Grants 53
3.3.1 Child grants 54
3.3.2 Other child grants 55
3.3.3 Profile of recipients of child grants 56
3.3.4 Social assistance for the elderly 60
3.3.5 The impact of the grants on poverty 61
3.4 The impact of social assistance grants on education, health and labour supply 63
3.4.1 Impact on education 63
3.4.2 Impact on health 64
3.4.3 Impact on labour force participation 65
3.5 Policy simulation exercise 66

CHAPTER 4: CONCLUSION 68

ANNEX I: DESCRIPTION OF DATA 70
ANNEX II: A DECOMPOSITION OF HOUSEHOLD LABOUR MARKET INCOME 73
ANNEX III: ADDITIONAL TABLES AND FIGURES 75
REFERENCES 86

Tables

Table 1.1: A compilation of estimates of annual per capita personal income by race group in 2000 Rands and relative to White levels, 1917-2008 13
Table 1.2: Gini coefficients by race and location, 2004 16
Table 1.3: Selected indicators of poverty, assuming poverty line of R3000 per capita per year (in constant 2000 prices) 18
Table 1.4: Changes in access to housing, water, electricity and sanitation over the post Apartheid period 20
Table 2.1: Household structure by decile 29
Table 2.2: Average age of household head and the household by decile 30
Table 2.3: Labour force participation rates by decile 31
Table 2.4: Labour absorption rates by decile 31
Table 2.5: Unemployment rates by decile 32
Table 2.6: Gini coefficients for per capita income by race and geotype 32
Table 2.7: Inequality decomposition by income source 1993 34
Table 2.8: Inequality decomposition by income source 2000 35
Table 2.9: Inequality Decomposition by Income Source 2008 35
Table 2.10: Poverty measures from 1993-2008 36
Table 2.11: Individual level poverty by race and gender (Poverty line R515 per capita per month) 37
Table 2.12: Individual level poverty by geotype (Poverty line R515 per capita per month) 38
Table 2.13: Poverty by education of household head (Poverty line R515 per capita per month) 38
Table 2.14: Individual level of poverty by household structure (Poverty line R515 per capita per month) 39
Table 2.15: Individual level of poverty by age structure (Poverty line R515 per capita per month) 39
Table 2.16: Individual level of poverty by household labour market status (Poverty line R515 per capita per month) 40
Table 2.17: Poverty with and without government grants 46
Table 3.1: UIF revenues and expenditures 48
Table 3.2: UIF benefits and recipient numbers 48
Table 3.3: Previous incomes of unemployment benefit claimants, 2006 49
Table 3.4: Work opportunities and budget for EPWP, 2004/05-2008/09 50
Table 3.5: Wage bill for all EPWP sectors 50
Table 3.6: Weighted number and percentage of respondents of working age that report that they have participated in an EPWP programme in the previous six months 51
Table 3.7: Percentage of respondents of working age that report that they have participated in an EPWP programme in the previous six months, by age and gender 52
Table 3.8: Comparison of eligibility and self-reported receipt of the grant 58
Table 3.9: Percentage of households reporting grants as their main source of income, by quintile 62
Table 3.10: Percentage of households reporting any income from grants 62
Table 3.11: Percentage of households reporting income from social grants, by quintile 62
Table 3.12: The poverty reduction effect of the OAP and CSG, using the lower poverty line 66
Table 3.13: The poverty reduction effect of the OAP and CSG, using the higher poverty line 66

Table A.2.1: Decomposition of shared household earnings ... 74
Table A.3.1: Variables in the 2008 data ... 75
Table A.3.2: Income overview ... 78
Table A.3.3: Shares of income by decile ... 78
Table A.3.4: Cumulative shares of income by decile ... 78
Table A.3.5: Shares of income components by decile ... 79
Table A.3.6: Household structure by decile - no zero incomes ... 80
Table A.3.7: Age of household head by decile - no zero incomes ... 81
Table A.3.8: Disparity indices ... 81
Table A.3.9: Generalised entropy measures of inequality ... 81
Table A.3.10: Measured ... 81
Table A.3.11: Poverty under different poverty lines using the NIDS 2008 data ... 82

Figures

Figure 2.1: Kernel density of household per capita agriculture income, 1993, 2008 ... 24
Figure 2.2: Overlaid kernel densities of log real household income per capita, 1993, 2000 and 2008 ... 25
Figure 2.3: Shares of total income by decile, 1993, 2000, 2008 ... 25
Figure 2.4: Income components by decile, 1993 ... 26
Figure 2.5: Income components by decile, 2000 ... 27
Figure 2.6: Income components by decile, 2008 ... 27
Figure 2.7: CDF's for 1993, 2000 and 2008 ... 41
Figure 2.8: CDF's across racial groups in 2008 ... 42
Figure 2.9: CDF's across geotypes in 2008 ... 43
Figure 2.10: Access to services ... 44
Figure 2.11: Access to assets ... 44
Figure 3.1: Educational attainment of recent EPWP participants and non-participants ... 52
Figure 3.2: Average total remuneration per ... 53
Figure 3.3: Expenditure items as percentage of GDP ... 54
Figure 3.4: Percentage of children receiving social assistance, by orphanhood status ... 57
Figure 3.5: Number of children receiving Child Support Grants ... 57
Figure 3.6: Main reason grant was not applied for ... 59
Figure 3.7: Main reason grant was not applied for by age ... 59
Figure 3.8: Simulated number of eligible children under the different means tests ... 60
Figure 3.9 Annual value of the State Old Age Pension in constant 2009 prices, by race ... 61
Figure 3.10: Sources of cash income, by quintile ... 63
Figure A.3.1: Overlaid Lorenz curves ... 83
Figure A.3.2: CDF's from 1993-2008, without zero incomes ... 83
Figure A.3.3: CDF's from 1993-2008, without zero incomes ... 84
Figure A.3.4: CDF's by racial groups in 1993 ... 84
Figure A.3.5: CDF's by geotype in 2000 ... 85
Figure A.3.6: CDF's by geotype in 1993 ... 85

Boxes

Box 1. A range of South African poverty lines at 2008 Rand and PPP Dollar Values ... 17

TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID

INTRODUCTION

5. In addition to high poverty levels, South Africa's inequality levels are among the highest in the world. Furthermore, levels of poverty and inequality continue to bear a persistent racial undertone. Two indicators of the post-Apartheid political economy have attracted special attention in this regard. The first indicator responds to the question whether the evolving character of the post-Apartheid economy and the policy efforts of the post-Apartheid government have been able to start to lower these very high aggregate levels of poverty and inequality. A related question is whether the racial footprint underlying poverty and inequality is starting to grey and will be replaced by new social strata and more subtle socio-economic dynamics.

6. Using the latest comparable household micro data, this report attempts to address these issues by reviewing the development of poverty and inequality levels in South Africa since the country's transition to democracy some 15 years ago. It also explores a range of social policies and their efficacy in influencing these outcomes.

7. Chapter 1 provides a background for the discussion by reviewing existing empirical work on South African inequality and poverty. Trends since 1970 are reviewed and described in the long-run, with a special focus on aggregate figures and racial shares. The very name "Apartheid" indicates the importance of race-based geography and race-based policy. While formal policies of spatial separation by race are long gone, a lingering legacy remains in the rural-urban marker of inequality and poverty. In Chapter 1, we also present evidence on the changes in access to services and other assets over the same period, so as to determine whether such factors have effects on inequality and poverty that are different from those based on money-metric measures. The discussions are supplemented by evidence from national household survey data. The most important conclusion of this chapter is that intra-African inequality and poverty trends have increasingly dominated the aggregate measures. While between-race inequality remains high and is falling only slowly, it is the increase in intra-race inequality which is preventing the aggregate measures from declining. Therefore, policy initiatives which address the increase in intra-racial inequality are recommended, rather than those focused solely on redistribution between inter-racial population groups.

8. But between-race inequality too remains a central issue. Although real incomes have been rising for all groups over the long run, many Africans in the country still live in poverty. At any poverty line, Africans are very much poorer than Coloureds, who are very much poorer than Indians/Asians, who are poorer than whites. Inequality by rural/urban ("geotype") on the other hand is changing. While rural poverty rates remain substantially higher than those in urban areas, urban poverty rates are rising and rural rates seem to be falling. Finally, access to services is shown to have improved, deeming service delivery together with asset growth as being pro-poor.

9. Chapter 2 provides new empirical analyses of poverty and inequality from three comparable national household survey data sets from 1993, 2000 and 2008. This chapter also looks at possible drivers of changes in poverty and inequality patterns. Generally, the new findings in this section support those of the first chapter. It is found that the high level of overall income inequality has further accentuated between 1993 and 2008, and that income has become increasingly concentrated in the top decile. Thus, the country's Gini coefficient increased by four percentage points, from 0.66 to 0.70, between 1993 and 2008. The Gini coefficient for the African population has risen most sharply.

10. Chapter 2 finds that poverty levels have decreased only slightly over the period under review. Further impeding poverty reduction is the fact that labour force participation rates increased faster than the share of employed in the working-age population, with a consequent increase in unemployment rates across all deciles. Government social assistance grants are found to be increasingly important in the composition of household income of low-income households. While their impact on poverty incidence remains negligible overall, they succeed in reducing the poverty gap, especially among the poorest households. That said, households without children have become relatively poorer, most often linked to a lack of successful integration into the labour market. The number of household heads with little or no schooling has fallen significantly and the number of those with upper secondary education (grades 10-12) has increased. This has been accompanied by a drop in the returns to an education level of less than Grade 12. Despite the increase in educational attainment, younger age cohorts have the highest incidence and shares of poverty and this has not improved notably over time. The fact that better-educated young people remain poor suggests that the labour market has not been playing a successful role in alleviating poverty and that the education system is not delivering the skills needed in the labour market. Thus, it is concluded that it is not the labour market but rather social assistance grants which have driven the relative improvement in poverty levels over time.

11. Chapter 3 analyses the role of social policies. It focuses predominantly on social assistance grants, but also briefly touches on unemployment insurance and the country's Expanded Public Works Programme. Although the Unemployment Insurance Fund provides necessary income to those temporarily unemployed and previously employed, it does not offer any assistance to the jobless without previous work experience. As a result, the vast majority of South Africa's unemployed are not covered by the scheme. As for the public works programme, the study shows that the majority of South Africans are unaware of the programme and only modest amounts of income are transferred to a few households via this scheme. Thus, the initiative does not seem to be fulfilling its stated objectives and meeting its targets of employment creation and poverty alleviation.

12. Chapter 3 deals predominantly with social assistance grants, and shows that consolidated expenditure on welfare and social assistance has increased substantially in the post-Apartheid period. Two-thirds of income to the bottom quintile now comes from social assistance, mainly child support grants. The study finds that a high number of paternal orphans receive such grants, compared to a low number of maternal orphans. In addition, it is found that orphans are less likely to be receiving the Child Support Grant than children with both parents. Most significantly, there appear to be many eligible children in need who are not receiving the grant. The most common reason for not applying when eligible for the grant is found to be a lack of correct documentation. More than 80 percent of the elderly receive the country's Old Age Pension. More than two-thirds of the recipients are women. There are three main reasons for this: women currently receive this benefit slightly earlier than men, they are more likely to be eligible since they are less likely to have private employer-based pensions, and they have a longer life expectancy. Chapter 3 also discusses the impacts of social assistance grants on health, education and labour supply. Reviewing secondary sources, it is concluded that the social grants have a positive effect on school attendance rates, health status and nutritional outcomes.

13. There are many who argue that the social grant system should be extended to focus directly on the unemployed who remain uncovered by other grants. While economic growth has supported the sustainability of the growth of the grants system so far, it is questionable whether a permanent income support for the unemployed would lead to the desired outcomes. Many of the unemployed are young school leavers and while they clearly need some sort of social safety net or temporary social insurance, the longer term goal of policy should be directed at helping this group enter the labour market and remain in work in the long-term.

CHAPTER 1: AN INTRODUCTION TO THE TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID

14. This chapter provides the background for the rest of the report by reviewing the existing empirical work on South African inequality and poverty since the advent of the post-Apartheid era in 1994. This review highlights points of agreement and dispute within this empirical literature.

15. South Africa has an infamous history of high inequality with an overbearing racial stamp. The issue of inequality has continued to dominate the post-Apartheid landscape. There are two indicators of the post-Apartheid political economy that have attracted special attention in this regard. The first is whether the evolving post-Apartheid economy and especially the policy efforts of the post-Apartheid government have been able to lower inherited inequality. The second is the related question of whether the blunt racial footprint would start to fade under more subtle post-Apartheid socio-economic dynamics. Historically the profiling and measurement of poverty have formed sub-themes of this inequality discussion because of the overt relegation of the black[1] majority to the bottom of the income and wealth distributions in the country under Apartheid. Showing this to be the case and illuminating the poverty inducing features of Apartheid policies were the central tasks of much Apartheid era social science.

16. Section 1.1 describes inequality and poverty trends in South Africa over the long-run. Census data provide the primary sources for such comparisons. The focus is on aggregate indicators and also on racial shares. In addition, the rural-urban dimension of inequality and poverty is given some attention. Section 1.2 augments this long-run picture by describing and summarising the evidence from national household survey data on post-Apartheid inequality and poverty changes. Sections 1.3 then reviews the decomposition exercises that have been undertaken to get underneath the description of inequality and poverty and to begin to explain the changes in poverty and inequality. Section 1.4 then augments the money-metric focus of the previous sections by reviewing the evidence on the changes in the access to services and other assets in South Africa over the post-Apartheid period. The key purpose of this discussion is to assess whether these non money-metric dimensions of wellbeing tell a similar or different story to that told through the lens of income. Section 1.5 concludes.

1.1 A long run-empirical picture of changes in inequality and poverty by race using census data[2]

17. Few data series allow for the presentation of a long-run empirical picture of wellbeing in South Africa. Leibbrandt *et al.* (2001) derive a series of estimates of the per capita incomes of the different race groups since 1917 from a range of data sources. These are presented in Table 1.1. Three key points emerge from the two sections of the table. Looking at the top section of the table, it can be seen that average real incomes have been rising for all groups over the long run. This is true even of the poorest group, Africans. However, as shown later, even today many members of this group are still in poverty. Second, the relative ratios presented in the bottom section of the table show the persistence of stark average income gaps by race over the course of the twentieth century. The fact that these gaps pre-date Apartheid indicates that

[1] In South Africa, "Black" refers to all groups that were classified as "non-White" under Apartheid classifications. Black can be further broken down into the groups African, Coloured and Asian/Indian.

[2] This section summarises a much longer discussion in Leibbrandt, Woolard and Woolard (2009).

they are the products of a very long-run development trajectory of the South African economy. This is important context to the stubborn persistence of these differences over the post-Apartheid period too.

Table 1.1: A compilation of estimates of annual per capita personal income by race group in 2000 Rands and relative to White levels, 1917-2008

Year	White	Coloured	Asian	African	Average
Per capita income in constant 2000 Rands:					
1917	13 069	2 875	2 894	1 184	3 946
1924	13 853	2 770	2 694	1 099	4 137
1936	19 212	3 000	4 443	1 462	5 359
1946	26 252	4 280	6 037	2 331	7 556
1956	30 494	5 158	6 668	2 627	8 541
1960	31 230	4 977	5 340	2 532	8 378
1970	45 751	7 929	9 248	3 133	11 140
1975	49 877	9 688	12 687	4 289	12 696
1980	48 340	9 238	12 304	4 088	11 818
1987	45 828	9 572	13 823	3 879	10 661
1993	46 486	8 990	19 537	5 073	11 177
1995	48 387	9 668	23 424	6 525	12 572
2000	56 179	12 911	23 025	8 926	16 220
2008	75 297	16 567	51 457	9 790	17 475
Relative per capita personal incomes (% of White level):					
1917	100	22.0	22.1	9.1	30.2
1924	100	20.0	19.4	7.9	29.9
1936	100	15.6	23.1	7.6	27.9
1946	100	16.3	23.0	8.9	28.8
1956	100	16.9	21.9	8.6	28.0
1960	100	15.9	17.1	8.1	26.8
1970	100	17.3	20.2	6.8	24.3
1975	100	19.4	25.4	8.6	25.5
1980	100	19.1	25.5	8.5	24.4
1987	100	20.9	30.2	8.5	23.3
1993	100	19.3	42.0	10.9	24.0
1995	100	20.0	48.4	13.5	26.0
2000	100	23.0	41.0	15.9	28.9
2008	100	22.0	60.0	13.0	23.2

Source: Leibbrandt *et al.* (2001) and own calculations.

18. An important empirical tradition in tracking longer-run South African inequality and poverty changes has made use of records of personal income collected in the national censuses of 1970, 1991, 1996 and 2001 (McGrath, 1983; Whiteford & McGrath, 1994; Whiteford & van Seventer, 2000; Leibbrandt *et al.*, 2006; Simkins, 2005). Two important points emerge from this census-based work. First, starting in 1970 through to 2001 inequality as measured by the Gini coefficient was very high by international standards; illustrating just how high the levels of inequality are that underlie the average figures presented in Table 1.1. Whiteford & van Seventer (2000) show that national Gini coefficients for the period 1975 to 1996 remained close to 0.68. Leibbrandt *et al.* (2006) then show that this national inequality remained at least this high in the period 1996-2001. Second, the Gini coefficients by race show widening inequality within each group for each census from 1975 to 2001. From the 1991 census onwards, the Gini coefficients for the African and white groups are, respectively, the highest and lowest of the four race groups.

19. This picture of rising aggregate inequality and also rising inequality within each race group begs the question of the relative importance of the within-race versus the between race components of inequality. To address this, the South African literature has decomposed total inequality into within-group and between-group contributions. All of the census-based empirical work makes a consistent case that between-group inequality declined over the period 1975 to 1996. Clearly, the forces driving a widening inequality within each racial group over the last forty years have been strong enough to increase the overlap between the within-race distributions. Some of the declining between-group inequality is due to the fact that the African share of the population has increased significantly over the period. Between 1970 and 2001 the African population share increased from 70 percent to 80 percent. This increased share was matched by the declining shares of the white group which fell from 17 percent of the population in 1970 to 9 percent of the population in 2001. Clearly such demographic change gives increasing importance to the intra-African distribution in driving the aggregate distribution.

20. However, there is more to these changes than shifting population shares. Whiteford & Van Seventer (2000) show that the income share of the African group rose much more strongly than the African population share over this period from a low base of 19.8 percent in 1970 to 30 percent in 1991 and 36 percent in 1996. The Coloured and the Indian/Asian shares rise too. These rising shares are matched by the sharply declining income share of the white group. These shares decrease from 71 percent in 1970 to 60 percent in 1991 and 52 percent in 1996.

21. Leibbrandt *et al.* (2006) found that the rapid decline in the white income share took place up only until 1996 and then slowed or even stopped in the period to 2001. Support for this picture emerges from an examination of the ratios between mean white per capita income and the mean per capita income of other groups from 1970 to 2001. Census data suggest that the period 1970 to 1996 saw this disparity ratio of African to white mean per capita incomes decrease from 15 to 9. This ratio fell for Coloured and Indian/Asian groups too. This is consistent with the evidence presented in Table 1.1 above. However, the evidence from the 2001 census suggests that this ratio did not fall further for any racial group between 1996 and 2001. This too is consistent with the evidence presented in the last two rows of Table 1.1 above. Thus, the direction of these changes is not inexorable but rather is the product of actual socio-economic developments in the post-Apartheid period.

22. Unfortunately, long run comparisons of poverty using census data are hard to make because the income bands within which incomes are reported in the censuses do not allow for a coherent set of real income comparisons since 1970. Only 1996 and 2001 census data are consistent enough. Leibbrandt *et al.* (2006) go on to interrogate the full distributions of real per capita incomes in South Africa between 1996 and 2001. The top end of the 2001 distribution lies to the right of the 1996 plot which suggests that the top end of the 2001 distribution contains a greater share of the population than it did in 1996. Thus, there is some evidence of improved real incomes at the top end. However, apart from this group at the top, the 2001 distribution shows a leftward shift, implying decreased real incomes for the rest of the distribution. This is particularly pronounced in the middle and lower-middle sections of the distribution, with the situation at the bottom looking largely unchanged. As we have discussed above, the net effect of all of these changes is an unambiguous increase in inequality from 1996 to 2001.

23. The poverty analysis follows on from the above by focussing on the changes at the bottom of these distributions of real per capita incomes. A lower poverty line of $2 per day (R91 per person per month in 1996 purchasing power parity terms) and an upper poverty line of R250 per person per month (in 1996 Rands) are used to show that the leftward shift of incomes in the middle and lower-middle areas of the 2001 distribution is indeed a reflection of a slight but unambiguous increase in measured poverty between 1996 and 2001.

24. The poverty rankings by race are completely robust. At any poverty line, Africans are very much poorer than Coloureds, who are very much poorer than Indians/Asians, who are poorer than whites. In addition, measured poverty increased for Africans, coloureds and Indians/Asians between 1996 and 2001. However, here the choice of poverty line seems to make a difference. There were only small increases in poverty for Africans and coloureds when measured at the low poverty line (R91) but fairly large increases in poverty for these two groups and the Indian/Asian group when the higher poverty line (R250) is used.

25. An analysis of poverty shares shows why the poverty rankings are so robust. At either poverty line the African share of poverty is over 95 percent in both years. The coloured poverty share accounts for nearly all of the remaining poverty with 1 percent of poverty or less being attributed to the other two groups.

26. Leibbrandt *et al.* (2006) complete their discussion of income poverty by comparing rural and urban poverty. In both periods, rural poverty rates are substantially higher than urban poverty rates (regardless of the poverty line chosen). The very name Apartheid indicates the importance of race-based geography and race-based policy. Although formal policies of spatial separation by race are long gone, a lingering rural-urban legacy remains. From a policy point of view, the inheritance of a huge group of marginalized rural poor has greatly increased the difficulty and the costs of social delivery. However, poverty rates increased unambiguously in urban areas between 1992 and 2001. Moreover, while a much higher proportion of the rural population are poor, the proportion of the poor who are in rural areas is declining. Using the higher poverty line, 38 per cent of the poor were in urban areas in 1996, whereas 44 per cent of the poor were in urban areas in 2001. This is to be expected, given that a significant amount of rural to urban migration occurred over the period.

1.2 Evidence about post-Apartheid inequality and poverty trends from national household survey data

27. In order to give a longer-run perspective on changes in inequality and poverty, the previous section made use of census data going back to 1970. While aggregate descriptions of poverty and inequality provide important context, they do little more than hint at the forces driving socio-economic development and the complex relationship between poverty and inequality. Even under high Apartheid with job reservation explicitly widening racial inequality by rationing high-skill and high wage jobs to whites and low wage and low skill jobs to non-whites, in periods of strong economic growth there was dissent about whether this unequal growth path was improving or worsening poverty (Seekings & Nattrass (2005). Two key mechanisms were at issue and still continue to dominate debates over the relationship between inequality and poverty. The first is the employment and remuneration behaviour of the labour market. Strong positive employment and real wage responses to economic growth are the major poverty alleviating mechanisms of the private sector economy. The second mechanism is the fiscal resources that growth puts in the hands of the state for active social policy and poverty alleviation.

28. Since 1993, researchers have been able to access information from a number of national sample surveys and have used these to complement census-based analyses and to provide alternative estimates of inequality and poverty. The result is a substantial literature which is very useful in updating the census-based picture to the present. There has been some debate in this literature over the magnitudes of measured inequality and poverty implied by the different surveys and even over whether poverty has increased or decreased over the post-Apartheid period.

29. The inequality picture can be quickly dealt with as all of this work (Simkins, 2005; Fedderke *et al.*, 2003; Hoogeveen & Özler, 2006; van der Berg *et al.*, 2006; van der Berg *et al.*, 2008) supports the picture coming out of the census data; namely that both aggregate inequality and inequality within each

race group has continued to increase through the 1990s and into the 2000s. Van der Berg and Louw (2004) summarise this corpus as follows:

> Rising black per capita incomes over the past three decades have narrowed the inter-racial income gap, although increasing inequality within the black population seems to have prevented a significant decline in aggregate inequality …. (p. 568-9).

30. The inequality analysis of chapter 2 interrogates this picture more carefully by producing a consistent set of inequality estimates using national survey data sets from 1993, 2000 and 2008[3]. For now, Table 1.2 presents a set of South African Gini coefficients based on expenditure data from the 2004 General Household Survey. They show that South African inequality remains very high by international standards. The results also confirm that the greatest inequality is within the African population and lowest within the White population. The table holds a useful caution. The actual magnitudes of the inequality measures that come from household sample surveys are much lower than the census estimates presented in the previous section of this paper and it is inequality measures such as these expenditure based estimates that are used in order to compare South African inequality in the post 2000 period to other countries.

Table 1.2: Gini coefficients by race and location, 2004

	African	Coloured	Indian/Asian	White	Total
Rural	0.43	0.38	-	0.37	0.51
Urban	0.53	0.45	0.43	0.36	0.56
Overall	0.51	0.47	0.43	0.36	0.59

Source: Own calculations on 2004 General Household Survey, Statistics South Africa.

[3] Annex I provides a summary description of the micro data used in the remainder of this end subsequent chapters.

Box 1. A range of South African poverty lines at 2008 Rand and PPP Dollar Values

In reviewing the poverty literature, one is confronted by a bewildering array of poverty lines. For orientation, the table below introduces a range of per capita monthly poverty lines at their 2008 South African values. It also records them at their purchasing power parity dollar values using a parity exchange rate of 4.25 rands to the dollar. The year is selected because all of the poverty analysis in chapter 2 is undertaken using poverty lines calculated at real 2008 values. The two major poverty lines that are used in the analysis of chapter 2 are two absolute poverty lines called South African Upper and Lower in the table. Then a range of dollar a day lines are presented at their rand per capita per month values. Finally, two median related relative poverty lines that are in common usage in the OECD literature (OECD, 2008) are presented. It is noteworthy that due to the skewed distribution of income, these median lines are lower than the $2/day line.

A range of South African monthly poverty lines at 2008 Rand and PPP Dollar values

Poverty Line	2008 Rand Values	2008 Purchasing Power Parity Dollar Values
South African Upper	949	223
South African Lower	515	121
$1/day	130	31
$1.25/day	163	38
$2/day	260	62
$2.5/day	325	76
50% Median per capita income	233	55
40% Median per capita income	154	36

Source: Own calculations on 2008 National Income Dynamics Survey

31. The poverty trends are more contentious than the inequality trends. It is useful to structure the discussion around two sub-periods; 1994 to 2000 and then the post-2000 period. Regarding the first sub-period a series of studies have found evidence for an increase in poverty over this time. Statistics South Africa (2002) and Hoogeveen & Özler (2006) found that poverty increased between 1995 and 2000. Hoogeveen & Özler (2006) estimate that 12.6 million South Africans were living on less than PPP$1 per day in 1995 compared to 14.4 million in 2000 and that 22.9 million South Africans were living on less than PPP$2 per day in 1995 rising to 25.2m in 2000. The direction of these findings accords with the census based analysis presented earlier. However, the measured increase in poverty is more acute than that found using the Census. Simkins (2005) performed analysis on the 1995 and 2000 IES surveys as well as the 1996 and 2001 censuses. Using a poverty line set at household income of R800 per household per month, he finds that poverty worsened slightly over the period, rising from 29% in 1995 to 34% in 2000.

32. On the other hand, the UNDP (2004), Van der Berg & Louw (2004) and Van der Berg *et al.* (2006) find that poverty stabilized or declined over this period. However none of this work argues for a notable improvement in poverty over this sub-period. UNDP reports that while the extent of poverty appears to have declined slightly, the depth of poverty (measured by the poverty gap) increased, particularly when using lower poverty lines. Van der Berg & Louw (2004) note that current household income as seen in the national accounts rose over the sub-period and that this is inconsistent with the decline in household incomes observed by using the IES 1995 and 2000 survey data. After adjustments to mean incomes for each race group in line with the national accounts and other sources of data, they find that the poverty headcount ratio stabilised or even declined slightly between 1995 and 2000, although the number of people living in poverty increased due to population growth.

33. Van der Berg *et al.* (2006) use the same technique with the All Media and Products Survey (AMPS) data in order to extend their analysis to 2004. As shown in Table 1.3 they find that the poverty rate rose between 1993 and 2000 and then fell quite dramatically between 2000 and 2004. They estimate that there were 18.5 million poor in 2000 and this fell to 15.4 million in 2004. Van der Berg *et al.* (2008) repeat this exercise at the R250 per capita per month poverty line. They confirm the same trends with poverty headcount ratios for 1993, 1995, 2000 and 2004 being 50.1%, 51.7%, 50.8% and 46.9% respectively. In addition per capita real incomes of individuals in the poorest two quintiles rose by more than 30 per cent during 2000-2004. While the magnitude of this rise may be debatable, it should be borne in mind that this period coincides with a large increase in social grants. Van der Berg *et al.* (2006) point out that the total income received by the poorest two quintiles in 2000 amounted to R27 billion and that government subsequently increased its annual social grant payment bill by R22 billion (in constant 2000 Rand terms). Most of these grant payments would have been received by individuals in the bottom two quintiles of the income distribution which provides a strong expectation of some improvement in the incomes of the poor.

Table 1.3: Selected indicators of poverty, assuming poverty line of R3000 per capita per year (in constant 2000 prices)

	1993	**2000**	**2004**
Average per capita income in quintile 1	R855	R866	R1 185
Average per capita income in quintile 2	R2 162	R2 086	R2 770
% of population that is poor	40.6	41.3	33.2
Number of poor (million)	16.2	18.5	15.4

Source: Van der Berg *et al.* (2006).

34. The methodology and therefore the findings of the papers by van der Berg and co-authors are contentious. Meth (2006 and 2007) has been most strident in arguing against the methodology and has derived an alternative set of post-2000 poverty estimates using an income variable constructed from the information in the 2004 General Household Survey and the Labour Force Survey. Despite his opposition, his work supports a finding that the poverty rate declined between 2000 and 2004 and that this was driven by social grant payments. However, his estimates place 18 to 20 million South Africans in poverty in 2004. This is a much smaller decline and a less clear sign of success for anti-poverty policies in the post-Apartheid era than that shown by van der Berg and co-authors.

35. In sum, there is something of a consensus around the direction of post-Apartheid inequality and poverty trends even if there are disagreements about the precise levels at any point in time. Aggregate inequality has remained stubbornly high and perhaps even increased. This is being driven by increasing intra-race inequality. In the adjustments to South African society accompanying the advent of democracy, such dynamism is not unexpected and not necessarily bad. However, the fact that the post-Apartheid society started off with such a high level of inequality certainly adds an ominous note to this trend. Given the skewed distribution of human and physical assets that undergirds these trends, it is unsurprising that there has not been a dramatic improvement in money-metric poverty over the early years of the post-Apartheid period. More recent years have witnessed stronger gains against poverty. Indeed, one of the useful features of the interchange between Meth and Van der Berg *et al.* is that it has highlighted the importance of the social grant system as a social safety net in South Africa. The importance of the state old age pension has been recognized from the outset of the post-Apartheid period and the demonstrable impact

of the child support grant in the last six years is notable. This takes the aggregate empirical picture a little closer to the real application of post-Apartheid policy in South Africa.

36. However, there is very little literature that has attempted to show this formally or, more generally to move beyond description to attempt to explain changes in poverty and inequality over the post-Apartheid period. The next section of this chapter briefly reviews the decomposition exercises that have been done in this regard.

1.3 Explaining Changes in Post-Apartheid Inequality

37. The dominant decomposition exercise that has been undertaken on post-Apartheid national survey data follow Shorrocks (1984) in partitioning aggregate income inequality (as measured by the Gini coefficient) into contributions from various income sources (Leibbrandt *et al.*, 2000, Bhorat *et al.* 2000, Leibbrandt *et al.* 2009). Such exercises are important in formally establishing the importance of the labour market and social grants in understanding South African inequality. In the next chapter, we undertake such income source decompositions exercises using consistent data for 1993, 2000 and 2008 in order to compare the results over time. Thus, we will be brief here.

38. In the South African context it makes sense to decompose income into four sources; namely, remittances, wage income (including self-employment), social assistance ("grants") and capital income (such as dividends, interest, rent income, imputed rent from residing in own dwelling and private pensions). All of the decomposition analyses find that wage income (including self-employment income) has a dominant share of income (around 70%) but makes an even larger contribution to inequality (around 85%). The reason for this is the high correlation between wage income and total household income (a rank correlation of over 0.9), implying that a household's rank in the distribution of wage income is strongly correlated with that households rank in the distribution of total income. All in all, the labour market is shown to sit centre-stage as the driver of South African income inequality.

39. A useful extension to this decomposition, derived by Lerman and Yitzhaki (1994), has been applied in South Africa. This extension allows the inequality contribution of wage income (or any income source) to be further decomposed into a contribution due to inequality among those earning income from that source and the proportion of households who have *no access* to a particular income source. Thus, this takes the analysis part of the way to apportioning the "blame" for Gini inequality into two parts; the inequality amongst earners and the inequality driven by those with some wage income and those with none. From such exercises it appears that at least one-third of dominant contribution of "wage inequality" is attributable to the large percentage of households with zero wage income. Thus, low labour force participation and lack of access to employment are an important component of the dominance of the labour market in driving South African inequality.

40. In contrast to wages, state transfers are shown to account for up to 10% of income but to make almost no contribution to inequality. This very low contribution arises because of the low correlation between the rank ordering of transfer income as well as the low Gini coefficient for state transfers. In 1993 and even more so by 2000, state transfers were heavily concentrated in the middle of the distribution as access to a State Old Age Pension or Disability Grant was sufficient to lift most households out of the bottom quintile, while the means tests for these grants excluded households at the upper end of the income distribution. This is a promising outcome in that it seems to suggest that such transfers make a significant contribution and are well targeted.

41. In order to better understand the mechanism whereby employment affects inequality, Leibbrandt *et al.* (2009) make use of a second decomposition technique which breaks the log-variance of household labour market earnings per capita into these three components:

$$\frac{W}{hhsize} = \frac{L_p}{hhsize} \bullet \frac{L_w}{L_p} \bullet \frac{W}{L_w}$$

where W is labour market income from both wage and self-employment (for simplicity we call it merely 'wage income'), *hhsize* is household size, L_p is the potential number of workers (defined here as the number of persons aged 15-64) and L_W is the number of people actually employed.

42. As detailed in annex II, taking the natural logarithm of both sides of the equation above and calculating the variance gives one a decomposition for the log variance of labour market income per capita into the sum of the log variance of the three terms on the right hand side of the above expression plus three covariance terms. The contribution of each of the three log variance terms can be thought of as the contribution of household composition (the number of persons of working age), access to employment and wage inequality, respectively to the inequality of shared household earnings. Table A.1.5 in the annex II reveals that most of the inequality in shared household earnings is the result of unequal wage incomes, rather than the fraction of household members that are of working age or who are actually working. Nevertheless, joblessness has a significant effect on household wage inequality. This is particularly true in African households. While this decomposition tackles the issue from a different perspective to that of the income source decomposition above, the results support a general conclusion of high wage inequality being a product of a considerable wage dispersion coupled with unequal access to employment opportunities.

1.4 Alternatives to the money-metric picture

43. There is a sense in which the inequality and poverty review in this chapter up to this point has been unfair to the mechanisms and achievements of post-Apartheid policy. We have focussed on money metric poverty and inequality and largely ignored a literature (Leibbrandt *et al.*, 2006; Bhorat *et al.,* 2006; and Woolard & Woolard, 2007) showing substantial improvements in access to services such as housing, water and electricity over the post Apartheid period. For example, Leibbrandt et al 2006 use census data from the 1996 and 2001 to show that access to type of dwelling, water, energy for lighting, energy for cooking, sanitation and refuse removal all improved significantly over this period. The proportion of households occupying traditional dwellings has decreased while the proportion of households occupying formal dwellings has risen slightly (approximately two-thirds of households occupy formal dwellings). Access to all basic services has improved, especially with regard to access to electricity for lighting and access to telephones.

44. Table 1.4 below shows another example from Bhorat *et al.* (2006). This study uses household survey data from 1993, 1999 and 2004 and, as can be seen in the table, it shows that access to basic services increased from 1993 to 1999 to 2004 and also that the growth in services was stronger for the poorer quintiles. In this sense they argue that the increase in services has been pro-poor.

Table 1.4: Changes in access to housing, water, electricity and sanitation over the post Apartheid period

	Formal Dwelling	Piped Water	Electricity for Lighting	Electricity for Cooking	Flush/Chemical Toilets
1993	68.3%	59.3%	51.9%	45.2%	52.6%
1999	74.2%	65.7%	69.5%	52.7%	55.5%
2004	73.6%	67.8%	80.2%	59.4%	57.2%

Source: Bhorat et al. (2006), own calculations.

45. Aside from this literature on access to services, there is also a literature looking at assets and asset indices. For the purposes of this review, Bhorat *et al.* (2006) is the most useful of these studies. This study pools asset data from the 1993 SALDRU survey, the 1999 October Household Survey and the 2004 General Household Survey and uses factor analysis to derive a single cross-survey asset index. This assets used in the derivation of the index include all of the services listed in table 1.4 above (public assets) and then telephones, motor vehicles and televisions (private assets). This enables the authors to make robust comparisons of asset well-being over time. They apply conventional poverty and inequality measures to this asset index to show that asset poverty and inequality declined from 1993 to 1999 and then to 2004. Given this, it is not surprising that they are able to define the asset growth over this period as being pro-poor.

46. Collectively then, this literature on changes in access to services and assets provides a more positive situation than the one that comes out of the preceding review of changes to money-metric well-being.

1.5 Conclusion

47. This chapter began by showing that the long-run development trajectory in South Africa generated a society defined by very high inequality with a strong racial component. Historically this was the result of direct racial privileging in state policy; spanning direct racial interventions in the labour market as well as racial biases in determining where people were allowed to live and in education, health and social services expenditures. The intersections between these policies and a growing private sector economy serve as a prototypical model of inequality-perpetuating growth. Unfortunately such spatial and human capital inequities leave very long-run legacies and these processes are hard to reverse.

48. Clearly, 15 years of post-Apartheid transition has not been not enough time for these factors to work their ways out of South African society. South Africa's high aggregate inequality has not fallen. Indeed, going into the future, South Africa's socio-economic dynamics still contain considerable inequality generating momentum despite a post-Apartheid policy milieu that has explicitly taken on the task of addressing this legacy. A demographic trend that will have a bearing on these dynamics going into the future is the fact that the African group accounts for 80% of the population now and this share is rising. Thus, intra-African inequality and poverty trends are already and will increasingly dominate aggregate inequality and poverty trends. This is not to say that the country's racial footprint has gone. Indeed, we showed earlier that the between-race component of income inequality remains remarkably high by international norms and its decline has slowed since the mid 1990s. Moreover, the bottom deciles of the income distribution and the poverty profile are still dominated by Africans and racial income shares are far from proportionate with population shares. Nonetheless, South Africa's changing population shares imply that a policy focus on race-based redistribution will become increasingly limited in the future as the foundation for further broad-based social development. Rather, it would seem that a more dynamically sustainable direction lies in addressing seriously the increasing inequality within each race group.

49. In Chapter 3 we come back to these policy issues by taking a closer look at social assistance grants and the state's social policy. However, before we proceed to this discussion of social spending, Chapter 2 interrogates and adds to the review of post-Apartheid inequality and poverty of this first chapter by comparing the empirical picture of poverty and inequality from three national household survey data sets from 1993, 2000 and 2008. Careful attention is given to making these data sets as consistent as possible.

CHAPTER 2: AN EMPIRICAL DESCRIPTION OF INEQUALITY AND POVERTY OVER THE POST-APARTHEID PERIOD

50. This chapter examines the evolution of inequality and poverty in South Africa over the period 1993 to 2008, using comparable and latest available household micro data. The focus of the chapter is on measuring the patterns and extent of changes over this 15 year period. We use data from the Project for Statistics on Living Standards and Development (PSLSD) for 1993; the Labour Force Survey (LFS) and Income and Expenditure Survey (IES) for 2000; and the National Income Dynamics Study (NIDS) for 2008. It also looks at possible drivers for changes in poverty and inequality patterns.

2.1 Data and Methods

51. When attempting to compare changes over time through the lens of separate cross-sectional datasets, there are obviously going to be differences in methodology that at least partially confound comparison. This section analyses the various sources of bias that may be found in the content of this report by virtue of this problem. We focus specifically on the differences in measurement of income, which is the variable upon which the analysis of poverty and inequality rests.

52. There are many minor differences in measurement methodology across the three sources of data. While some of these have only a small impact, others are more serious sources of bias. Some of the more influential problems with comparison of the income aggregates are discussed below. A complete table listing all of the variables included in the income aggregates is available in the annex III (Table A.3.1) of this report. Inspection of these tables (and the actual questionnaires to which they are linked) shows clearly the extent to which these instruments differ, particularly the IES/LFS from the other two.

53. All of the income variables in the 2000 data are annual, whereas the 1993 and 2008 data focus mostly on the last 30 days. The latter methodology aims to mitigate recall bias at the expense of creating some lumpiness, due to incomes that are received over longer time periods than months (e.g. a remittance payment that is received every 2 months). It is difficult to tell exactly what effect this will have. In 1993 and 2008, questions on remittances were asked in both annual and monthly format. Comparing the results of these two, we get substantially lower estimates from the annual figures (converted to monthly), which tells us that at least in some cases it makes a difference. This particular example is also relevant because the 1993 income aggregates used the annual estimate whereas the 2008 made use of the monthly.

54. The differences between the questions used to measure income in 1993 and 2008 are much smaller than those between these instruments and that of 2000. However, there is one major methodological disparity between the 1993 and 2008 instruments. In 1993, one respondent answered a survey for the entire household[4]. In contrast, the 2008 survey had questionnaires for all of the members of the household. Clearly the 2008 data will be less prone to measurement error on income. This is particularly problematic because it is not entirely clear how the bias from this type of questioning will be manifested in the data.

[4] Individual level income questions were asked, but one person in the household provided all of this information for the rest.

55. Differences in the treatment of implied rental income have the potential to distort comparisons over time. People who do not pay rent for the homes they inhabit nevertheless derive some of their welfare from living in these dwellings. Implied rental income aims to measure this flow of welfare so that income figures do not understate the income of people who own their own homes. Unfortunately implied rental income is excluded from the income figures for all three datasets. The 2000 data does not include any values from which implied rentals can be calculated or imputed, so it is impossible to compare this data to the other two without excluding it. The 1993 dataset does include an implied rental income figure which is calculated from house prices, and which can be improved with some careful imputation. The 1993 data applied a set rate of return which is problematic in the tails of the distribution where there are likely to be non-linearities in the relationship. The 2008 implied rental income data, in contrast, is far more nuanced, based on several variables that attempt to measure the opportunity cost of living in their homes.

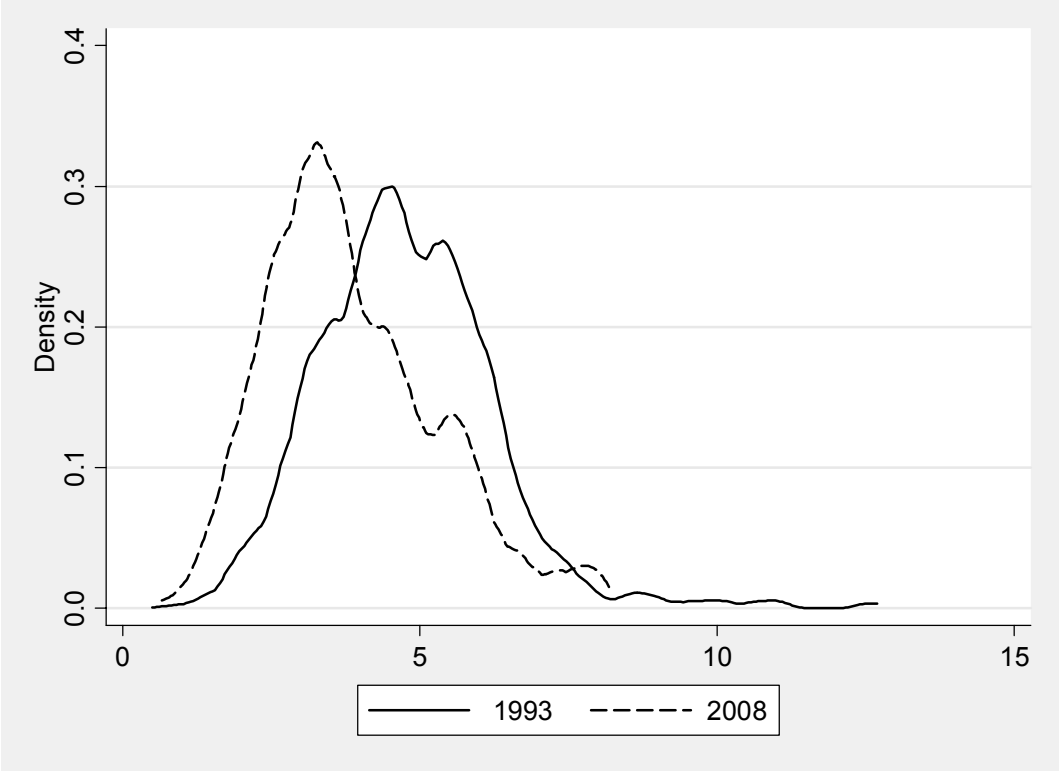
56. The distributions of the implied rental income variables from the two datasets are very different and their inclusion for the purposes of comparison is likely to create large differences driven by measurement error rather than real changes. This is not ideal because the housing market in South Africa has experienced substantial growth over the past 15 years and we are excluding this from the analysis. In defence of this move, it is not clear that the massive changes in housing prices really reflect a growth in welfare of the inhabitants to the same extent. It is quite possible that even if we had comparable data for all three points in time we would have to exclude implied rentals due to the distortionary effect they may have on our figures.

57. Another potential source of distortions in comparisons over time is differences in the measurement of agricultural income. Agricultural income has been excluded from the household income figures for the purpose of this analysis due to problems in comparability. While agricultural production data was collected in 2000, the monetary value of this income is not available. Between 2008 and 1993 there are some significant differences in the measurement of agricultural income, which complicates comparison. Below we give some brief descriptive information about the differences in the agricultural income data from 1993 and 2008, as they do have some ramifications for our overall results.

58. The 1993 agriculture data have a few very high values which clearly belong to commercial farmers. Commercial farmers were excluded from the module on agricultural income in the 2008 survey. The result is that the mean per capita household agricultural income in 1993 is very much inflated and not comparable to the mean from 2008. The median (which is much less affected by these outliers) per capita household agriculture (among those who received agricultural income) in 1993 was measured at around R14 compared to 2008 at about R2 (both in 2008 Rands). Figure 2.1 below shows the differences in distribution between the two datasets.

59. Including agricultural income in the 2008 data has almost no impact on poverty counts at all. In contrast, in 1993, poverty incidence rates fall by around 1% when agricultural income is included. So certainly the exclusion of this from both datasets does result in a slightly overstated decline in poverty over the period.

Figure 2.1: Kernel density of household per capita agriculture income, 1993, 2008

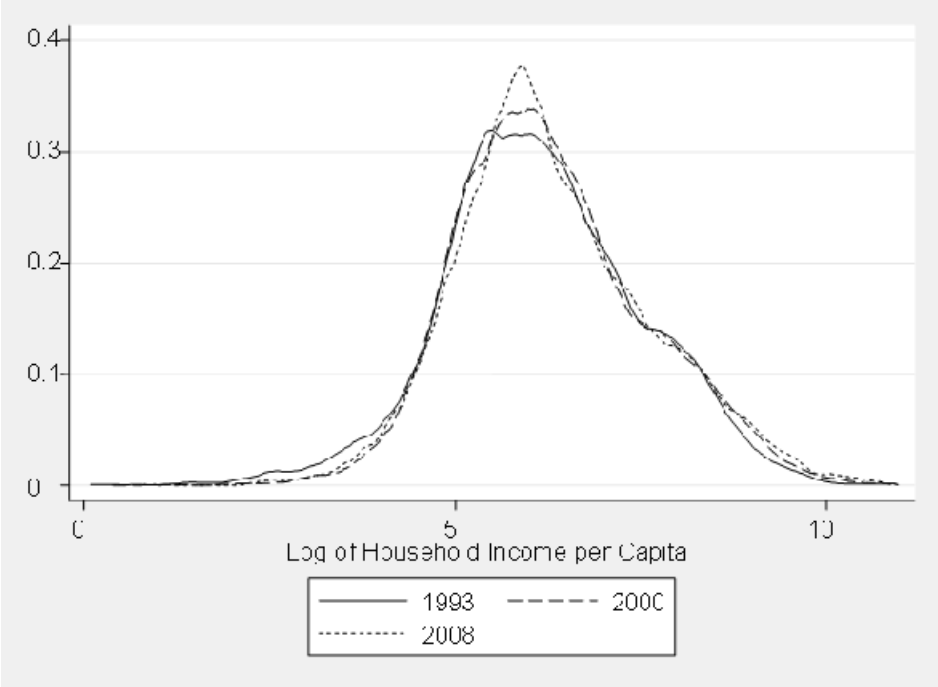


2.2 Trends in Inequality

60. The purpose of this section of the report is to provide an overview of how the distribution of income in South Africa changed between 1993 and 2008. Broad measures of income distribution will be complemented by a close look at the role of the labour market in determining income and inequality in the country. The income variable in all cases refers to household income per capita and is given in real terms with 2008 as the base year. The income variable is the sum of all labour market earnings, remittances received, income of a capital nature, government grants and all "other" income. As discussed above, imputed rent and income from subsistence agriculture have been omitted in order to make the 1993 and 2008 data closely comparable with that of 2000.

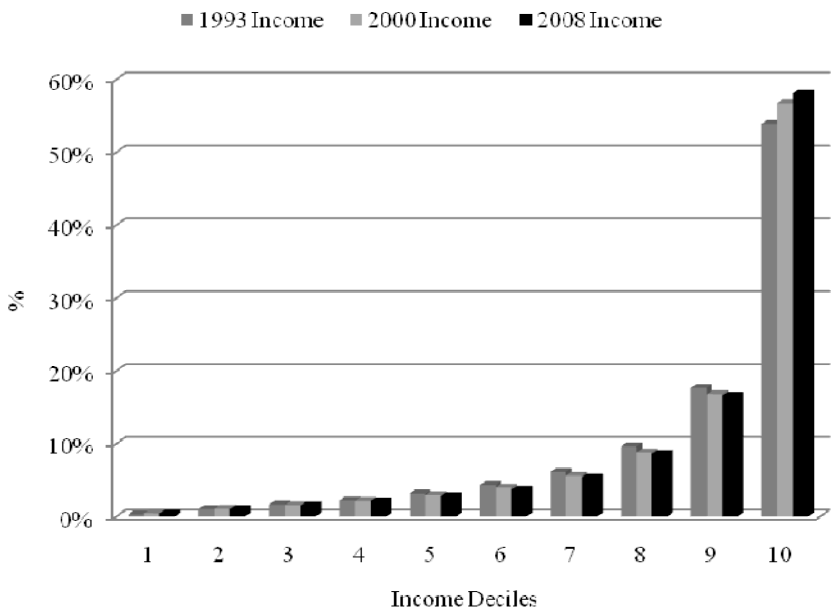
61. Starting with some central tendencies, the overall mean figures for real household income per capita have trended upwards over the fifteen years and stand at R1 147, R1 349 and R1 456 for 1993, 2000 and 2008 respectively. The comparative real medians are R419, R453 and R450. Table A.3.2 in the annex III shows how deeply the racial income disparities run in South Africa with African mean per capita incomes rising from R539 in 1993 to R816 in 2008 compared to the comparative figures for Whites which stand at R4 632 and R6 275. The income share divided by the population share for Africans increased marginally over the 15 years from 0.47 to 0.56. There were small increases in this ratio for the White and Coloured population as well, and a large increase for Asians/Indians.

Figure 2.2: Overlaid kernel densities of log real household income per capita, 1993, 2000 and 2008



62. Figure 2.2, above, is a representation of the income distributions across the three years of analysis. The most striking feature of the figure is the fact that there has been very little shifting in the overall distribution of income. There has been some rightward movement at the lower and upper extremes of the distributions between 1993 and 2008, but the kernel densities are very similar overall.

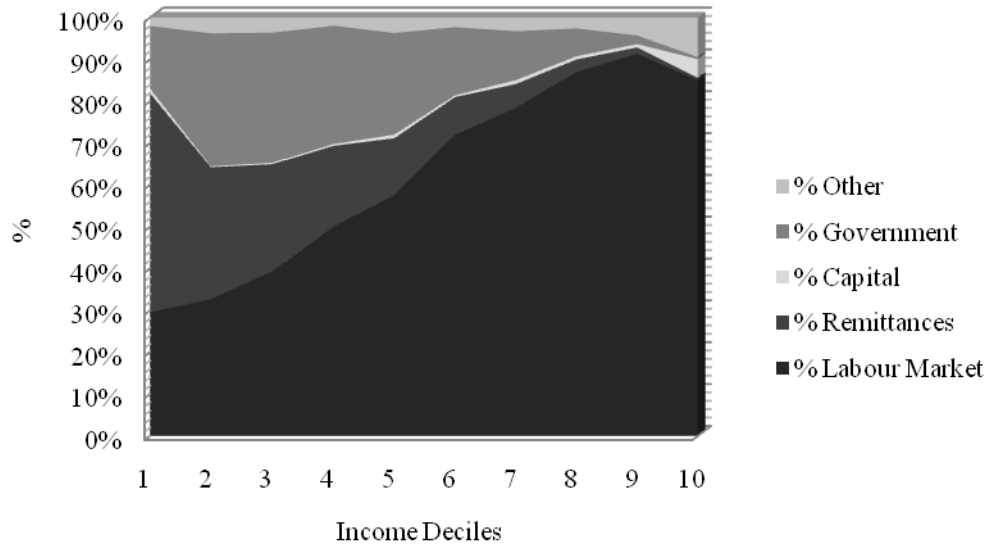
Figure 2.3: Shares of total income by decile, 1993, 2000, 2008



63. Figure 2.3, above, shows that income has become increasingly concentrated in the top decile. Across the three years the richest 10% accounted for 54%, 57% and 58% of total income respectively (see annex III, Table A.3.3). Detailed interrogation of ventile shares shows that the increase in the top decile has been driven by a sharply rising share of the top 5% of the distribution. This share increased from 38.2% to 41.1% to 42.6% across the three years. These increased shares at the top end of the distribution came at the expense of all other income deciles. The cumulative share of income accruing to the first five deciles decreased from 8.32% in 1993 to 7.79% in 2008 (see annex III, Table A.3.4).

64. Figures 2.4, 2.5 and 2.6 below illustrate the changing importance of the different components of income from 1993 to 2008.[5] As expected, earnings from the labour market make up the bulk of total income for the higher deciles, while the contribution of government grants is particularly important for poor households. It is interesting to note the growing contribution of government grants to these households – for the bottom decile the figures grow from 15% to 29% to 73% and this reflects the increasing number of state grants that were rolled out over the 15 years, especially in the latest period. The contribution of remittances to total income has steadily decreased for the lower deciles and has been replaced by an increasing share of government grants. Income generated from household capital is small for all except the top decile where its contribution rose from 4% in 1993 to 11% in 2008.

Figure 2.4: Income components by decile, 1993



[5] Table A.2.22 in the annex III presents full percentages for the income components.

Figure 2.5: Income components by decile, 2000

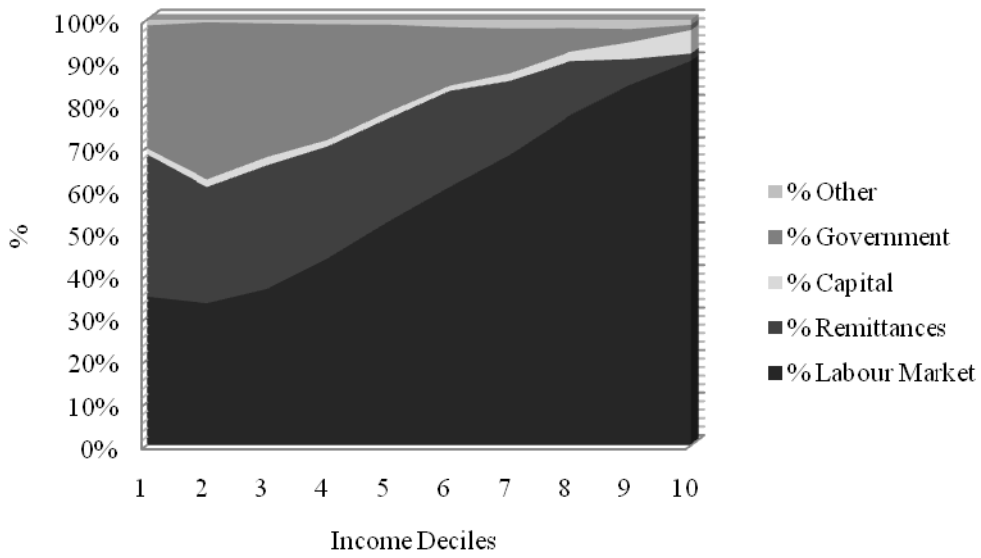
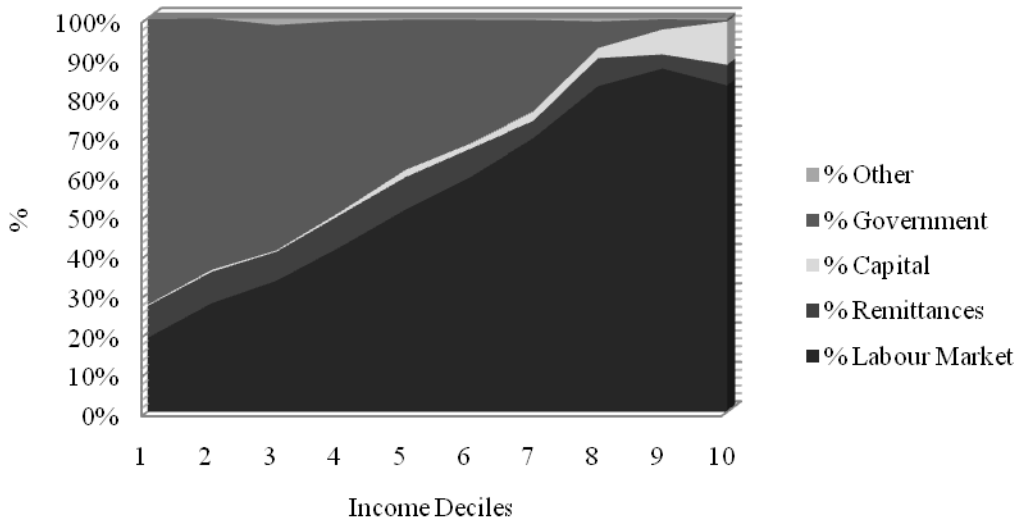


Figure 2.6: Income components by decile, 2008



65. Table 2.1 shows trends in household structure by decile.[6] The percentage of single adult households is highest at the extreme ends of the income spectrum. While the number in the bottom decile is inflated by the zero incomes, the same basic trend is observed in the tables where zeroes are excluded. It makes some sense that many of the wealthiest households are in fact single professionals living alone. This would explain a fairly high proportion of wealthy households being single adult households. It also makes sense that single parents are likely to be poorer, as they have to support a family on a single income. The fact that poorer households experience higher rates of mortality also means that people that are poor already are more likely to experience the loss of an adult. So the shock of becoming a single parent could be a cause of poverty, but being poor makes this more likely. It is clear from examples such as these that understanding the role of changes in household structure on welfare is confounded by the difficulty of discerning between correlation and causation. It is unclear which way causation runs in these types of comparisons. Being a single adult household is not in itself a clear predictor of affluence or poverty.

66. The trend in child presence across deciles is much clearer. The percentage of households in the upper deciles having no children is much higher than in the lower deciles. The slight uptick in percentage of childless households in the bottom decile is once again exaggerated by the presence of zeroes, but still exists in more muted form without them. One could speculate that this may be due to the poorest of the poor being unable to afford children. Differences in child presence are certainly caused in part by different strategies among the rich and poor. However there is also an obvious effect of reproductive choices on economic status.

67. The patterns of worker attachment against income deciles are clearly illustrated across all three waves in the way we would a priori expect. The proportion of households with multiple workers attached to them increases almost monotonically up the income deciles. A similar pattern is observed in the proportion of single worker households, except this proportion drops off slightly in the very top decile.

6 Because of the inclusion of many zero income households where it is unclear whether these are true zeros or results of the measurement process, we check all of our conclusions against tables that exclude the zero incomes. These results are presented in Table A.2.23 in the annex III.

Table 2.1: Household structure by decile

	Number of adults		Children present		Number of workers		
2008							
Decile	Single	Two+	None	One+	None	One	Two+
1	44%	56%	30%	70%	80%	17%	3%
2	32%	68%	11%	89%	57%	35%	8%
3	28%	72%	19%	81%	53%	33%	13%
4	24%	76%	20%	80%	42%	45%	13%
5	20%	80%	22%	78%	40%	45%	15%
6	26%	74%	35%	65%	36%	44%	20%
7	33%	67%	52%	48%	30%	45%	24%
8	36%	64%	55%	45%	12%	62%	26%
9	39%	61%	61%	39%	12%	60%	28%
10	41%	59%	68%	32%	10%	57%	33%
Overall	34%	66%	43%	57%	32%	47%	21%
2000							
	Number of adults		Children present		Number of workers		
Decile	Single	Two+	None	One+	None	One	Two+
1	29%	71%	24%	76%	50%	33%	17%
2	21%	79%	13%	87%	49%	36%	15%
3	21%	79%	15%	85%	47%	35%	18%
4	23%	77%	18%	82%	41%	40%	19%
5	24%	76%	26%	74%	37%	41%	22%
6	25%	75%	34%	66%	26%	50%	25%
7	35%	65%	47%	53%	27%	50%	24%
8	33%	67%	52%	48%	16%	56%	28%
9	38%	62%	58%	42%	12%	57%	31%
10	36%	64%	65%	35%	9%	48%	43%
Overall	30%	70%	41%	59%	27%	47%	27%
1993							
	Number of adults		Children present		Number of workers		
Decile	Single	Two+	None	One+	None	One	Two+
1	25%	75%	21%	79%	72%	22%	6%
2	19%	81%	6%	94%	58%	33%	9%
3	15%	85%	7%	93%	50%	34%	15%
4	16%	84%	10%	90%	40%	42%	18%
5	17%	83%	16%	84%	35%	44%	22%
6	16%	84%	21%	79%	24%	47%	28%
7	19%	81%	30%	70%	17%	53%	30%
8	25%	75%	43%	57%	12%	53%	34%
9	35%	65%	56%	44%	5%	57%	37%
10	30%	70%	69%	31%	8%	42%	51%
Overall	24%	76%	35%	65%	26%	45%	29%

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

68. This leaves no-worker households, which decrease as a proportion of households as we move up the deciles. The relative dominance of single worker households remains across all three datasets with approximately 44% and 47% of households in this category.

69. While the patterns are the same across all three datasets, the levels are not. The data suggest that there has been a dramatic increase in single adult households over the last 15 years from 23% in 1993 up to 33% in 2008 (from 30% in 2000). Coupled with this is a large increase in childless households from 35% to 41% to 43% across 1993, 2000 and 2008 respectively. There has also been a steady decline in multiple worker households, a slight decline in single worker households and a large increase in workerless households. The distribution of these three changed from (29%, 45%, 26%) in 1993 to (32%, 47%, 21%) in 2008. While many forces are involved in driving demographic changes of these types (AIDS for example must have a significant impact), it seems unlikely that these changes are unrelated to the evolution of poverty and inequality over this 15 year period.

Table 2.2: Average age of household head and the household by decile

	1993		2000		2008	
Decile	Mean Age (Head)	Mean Age (All)	Mean Age (Head)	Mean Age (All)	Mean Age (Head)	Mean Age (All)
1	47.5	21.2	44.4	20.8	41.8	21.6
2	50.9	20.7	48.8	21.5	44.9	20.4
3	52.0	22.1	48.4	22.5	48.4	22.7
4	51.6	23.4	48.7	23.9	48.8	24.6
5	50.8	24.9	47.7	24.4	47.6	25.1
6	50.1	25.9	45.3	25.2	46.3	27.7
7	47.8	26.8	45.2	27.0	48.4	31.2
8	45.7	28.0	42.8	27.5	41.1	28.7
9	41.9	29.7	42.6	29.5	41.3	30.2
10	43.0	33.4	43.3	32.3	44.8	34.7
Overall	47.0	25.6	45.1	25.4	45.1	26.7

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

70. Table 2.2 shows the mean age of the household head and all members of households across deciles for the three datasets. Over the 15 year period the mean age of the household head has declined by approximately 2 years. The decline in age of household heads is stronger for the households of the lower deciles. The lowest deciles experienced mean drops of up to 5 years. The top decile in contrast experienced mean increases, although the median still declined, suggesting that the distribution has become more skewed to the right, for these deciles.[7] In contrast to this picture of the age of the household head, the figures on the mean age of the household as a whole make it clear that households in the bottom three deciles are younger on average than other deciles. The average age of households in these bottom deciles did not decline over time and even increased marginally. Within all deciles the average age did not change markedly over time.

[7] The same table, excluding households with zero incomes, can be found in the annex III (table A.2.24) but reflects no major differences from the table above.

71. Overall, this table does not suggest major changes to the age structure across time and across deciles. The bottom deciles remain younger and their heads have become younger over time.

Table 2.3: Labour force participation rates by decile

Decile	1993	2000	2008
1	23.7%	46.3%	37.5%
2	23.5%	44.1%	39.4%
3	28.4%	44.8%	47.9%
4	33.7%	49.4%	50.7%
5	39.3%	51.2%	48.4%
6	47.6%	58.5%	59.6%
7	51.6%	61.3%	64.3%
8	59.8%	68.0%	75.1%
9	70.6%	71.5%	77.4%
10	80.4%	77.6%	81.1%
Overall	48.9%	58.7%	59.7%

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

72. In Table 2.3, above, the labour force participation rates by decile show a generally increasing trend for all deciles from 1993 to 2008. Amongst some of the low income deciles there is a peak in the rate of labour force participation in 2000 followed by a drop-off in 2008. As expected, the top income deciles display the highest rates of labour force participation, reaching over three quarters for deciles eight, nine and ten in 2008.

Table 2.4: Labour absorption rates by decile

Decile	1993	2000	2008
1	11.8%	25.7%	10.2%
2	14.9%	24.2%	18.5%
3	20.3%	25.9%	21.3%
4	25.5%	29.5%	26.2%
5	29.5%	33.2%	25.6%
6	37.6%	39.2%	34.6%
7	43.2%	44.9%	41.5%
8	52.9%	53.8%	50.5%
9	65.9%	62.5%	58.6%
10	78.2%	74.3%	63.2%
Overall	41.1%	43.3%	37.2%

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

73. Table 2.4 shows that the labour absorption rate (the percentage of the working age population who are employed) has trended differently for different deciles. Amongst the poorest 10%, the labour absorption rate peaked at about 25% in 2000 before falling to just above 10% in 2008. The top decile had a labour absorption rate that peaked at 78% in 1993 before falling to 63% in 2008.

Table 2.5: Unemployment rates by decile

Decile	1993	2000	2008
1	49.1%	44.17%	69.4%
2	33.6%	44.24%	46.0%
3	26.8%	41.32%	46.7%
4	22.0%	39.21%	36.9%
5	23.4%	34.39%	30.3%
6	18.7%	32.55%	26.1%
7	14.5%	26.30%	20.1%
8	9.4%	20.67%	16.4%
9	4.3%	12.53%	9.0%
10	1.5%	4.11%	4.5%
Overall	13.7%	25.7%	24.4%

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

74. In Table 2.5, above, the unemployment rate by income decile is presented. In South Africa two unemployment rates enjoy wide usage; a narrow rate that requires active job search in the last 14 days and a broad definition that includes individuals who say that they want a job but who have not actively searched for work in the last 14 days. We use the narrow definition here and this unemployment rate is shown to be decreasing as we move up the income deciles. The unemployment rate is higher for every decile in 2008 than in 1993 and is particularly severe amongst the bottom five deciles.

75. The previous three tables show clearly that, in the initial post-Apartheid period, participation rates increased faster than absorption rates with a consequent increase in unemployment rates across all deciles. Since 2000 the aggregate unemployment rate declined marginally driven by increased absorption of those individuals in the top six deciles. In the lower deciles the early post-Apartheid trend continued to 2008. Indeed, this lack of successful integration into the labour market is the reason that many of these households find themselves at the bottom of the income distribution. However, the unemployment rates plus the evidence from Table 2.1 on employed household members per decile also show that having a job on its own is not a guarantee that a household will move into the top deciles. This appears to have something to do with the quality of employment too. Unfortunately, our data sets do not allow for consistent comparison of formal versus informal employment shares across time. However, evidence from other data sets (Leibbrandt, Woolard, McEwen 2009) shows clearly that there was an increase informal employment and in self employment over this period.

Table 2.6: Gini coefficients for per capita income by race and geotype

	1993	2000	2008
African	0.54	0.60	0.62
Coloured	0.44	0.53	0.54
Asian/Indian	0.47	0.51	0.61
White	0.43	0.47	0.50
Rural	0.58	0.62	0.56
Urban	0.61	0.64	0.67
Overall	0.66	0.68	0.70

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

76. Moving now to the overall measurement of income inequality, Table 2.6 shows that the Gini coefficient in South Africa rose from 0.66 in 1993 to 0.68 in 2000 and further to 0.70 in 2008.[8] Inequality by racial group also increased monotonically across the time period, with the Gini coefficient being particularly high for Africans and Asian/Indians. There is also stark inequality difference by geotype, with inequality in urban and rural areas being measured at 0.56 and 0.67 respectively in 2008, although it appears that rural inequality decreased from 1993 to 2008. The high level of inequality is further confirmed by the ratios of the income accruing to the 90th percentile to that accruing to the 10th percentile. These disparity indices stand at close to 30 for the three years under consideration (see Table A.3.8 of the annex III).

77. Another indication of the path of income inequality in South Africa between 1993 and 2008 is given by the generalised entropy measures of inequality (see Annex III, Table A.3.9). The GE(0) and GE(1) measures across the country as a whole increased monotonically from 1993 to 2000 to 2008 and the same trend as with the Gini coefficient is displayed when disaggregating by racial group. There have been significant changes in the composition of racial inequality in that income inequality within racial groups has become increasingly more significant than inequality between racial groups. According to the GE(1) measure, inequality within racial groups contributed 48% to overall inequality in 1993. By 2008 this figure had risen to almost 62%.

78. In an article in which the conventional interpretation of the between-group measures of the general entropy decomposition of inequality is challenged and extended, (Elbers, Lanjouw, Mistiaen, & Özler, 2008) it is posited that it may be instructive to view between-group inequality as a percentage of the maximum possible level of between-group inequality that can be counterfactually constructed from the data while retaining the same number of groups and their relative sizes as well as the same income distribution. A key idea behind this assertion is the fact that total inequality is effectively "a measure of between-group inequality that would be observed if every household in the population constituted a separate group" (Elbers, Lanjouw, Mistiaen, & Özler, 2008). The method of calculating this new measure involves "replacing total inequality in the denominator of the conventional ratio with the maximum between-group inequality [that can be obtained, given the criteria above]" (Elbers, Lanjouw, Mistiaen, & Özler, 2008). This has the added advantage of allowing for a more natural comparison of inequality across different times and settings because the measure itself is normalised by parameters present in the data.

79. Calculating the achieved between-group inequality as a percentage of the maximum possible between-group inequality yields some very interesting results (see annex III, Table A.3.10). According to the GE(1) measure of inequality in 1993, South African inequality between racial groups stood at almost 69% of its maximum possible level while maintaining the same underlying population structure and distribution of income. By 2000 this figure had fallen to about 50% and the measure stood at 48% in 2008. The change in the racial dynamics of inequality was thus most significant in the period between the democratic transition and 2000 while the changes between 2000 and 2008 were more muted.

80. Tables 2.7, 2.8 and 2.9, below, provide a more detailed analysis of the factors influencing inequality by decomposing the contributions of the various income sources to overall inequality in any given year. It is important to be clear that such decompositions are comparative static exercises; explaining factor contributions in each of the three years rather than exploring the role of changes in factors on changes across years. Thus, they do not explain changes over time but are helpful in showing whether changes have happened over time by comparing the situation in each of the three years.

[8] This measure enables us to confirm that inequality worsened in South Africa between 1993 and 2008, and confirm what is directly observable through Lorenz Curve analysis (see annex III, Figure 2.12).

81. Starting with the labour market it can be seen that the proportion of households receiving income from the labour market remained steady at just above 70% in each year. Moreover, this labour market income dominates the inequality of household income in each year with a contribution between 85% and 90%. There are two reasons for this high contribution. First, labour market income is so highly correlated with total household income. Then, labour market earnings are very unequally distributed amongst those who have such earnings. It is the net impact of these two forces that results in labour market income being the major driver of household income inequality in each year.

82. The growing importance of income from state transfers is highlighted by the fact that in 1993 about one fifth of households received income from this source whereas in 2008 the figure was almost one half. Although the real mean of household monthly income changed very little (between R5 044 and R5 372) the mean of household monthly income from state transfers grew significantly in real terms. The inequality decompositions suggest that these state transfers make very little contribution to inequality in any year. This is because they are weakly correlated with total income and the inequality of transfer income for those who receive it is not wide. The fact that these grants are not correlated with total income implies good targeting at the needy. However, within this decomposition framework, they would need to be negatively correlated in order to be seen to play an equalising role on the distribution of household income. It seems that grant income is situating a mass of South African households in the lower-middle part of income distribution and this leads to the weak but non-negative correlation with the distribution of total household income.[9]

83. In the decomposition framework reflected in Tables 2.7, 2.8 and 2.9, remittances make a negative or low contribution to inequality. Indeed, it is interesting to note that the proportion of households receiving remittances grew from 24% in 1993 to 36% in 2000 before falling sharply to 14% in 2008.

84. Overall, the labour market is shown to play a dominant role in driving inequality. State transfers have increased their importance as an income source but in a neutral way rather than as a driver of inequality or decreased inequality. In the period since 2000 these increased state transfers are shown to have replaced or compensated for remittances; which have shown both a falling average share and a slightly less equalising role.

Table 2.7: Inequality decomposition by income source 1993

Income Source	% of Households receiving income source	Mean household monthly income from source	% Share in total income	Gini for income source for households receiving such income	Gini for income source for all households	Gini correlation with total income rankings	Contribution to Gini coefficient of total income	% share in overall Gini
Remittances	24.2	157	3.1	0.52	0.88	-0.1	0.00	-0.5
Capital Income	9.7	437	8.7	0.72	0.97	0.8	0.07	11.6
State transfers	21.9	273	5.4	0.28	0.84	0.0	0.00	0.2
Labour market	73.4	4156	82.4	0.56	0.68	1.0	0.53	88.3
Other	1.4	21	0.4	0.58	0.99	0.5	0.00	0.3
Total		5044	100.0		0.60		0.60	100.0

Source: Own calculations using data from SALDRU 1993 data set

[9] To some extent this decomposition framework understates the impact of grants. Section 3.5 below assesses the impact of grants by comparing the situation in each year with and without grants. This shows quite clearly that grant income is shifting a substantial number of poor households up towards the poverty line and therefore has to be equalizing the distribution of income.

Table 2.8: Inequality decomposition by income source 2000

Income Source	% of Households receiving income source	Mean household monthly income from source	% Share in total income	Gini for income source for households receiving such income	Gini for income source for all household	Gini correlation with total income rankings	Contribution to Gini coefficient of total income	% share in overall Gini
Remittances	36.4	370	6.9	0.60	0.85	0.23	0.01	2.1
Capital Income	5.6	233	4.3	0.65	0.98	0.74	0.03	4.8
State transfers	24.7	259	4.7	0.35	0.85	0.12	0.00	0.7
Labour market	71.8	4438	82.6	0.65	0.75	0.95	0.59	90.9
Other	4.6	80	1.5	0.70	0.99	0.66	0.01	1.5
Total		5372	100.0		0.65		0.65	100.0

Source: Own calculations using data from the IES 2000 data set

Table 2.9: Inequality Decomposition by Income Source 2008

Income Source	% of Households receiving income source	Mean household monthly income from source	% Share in total income	Gini for income source for households receiving such income	Gini for income source for all households	Gini correlation with total income rankings	Contribution to Gini coefficient of total income	% share in overall Gini
Remittances	14.0	282	5.4	0.75	0.96	0.64	0.03	5.1
Capital Income	7.8	414	7.9	0.61	0.97	0.83	0.06	9.7
State transfers	47.8	412	7.9	0.44	0.73	0.03	0.00	0.3
Labour market	71.9	4128	78.8	0.64	0.74	0.95	0.56	85.0
Total		5236	100.0		0.66		0.66	100.0

Source: Own calculations using data from the NIDS 2008 data set

2.3 Trends in Poverty

85. Analysis of absolute poverty involves drawing a poverty line and concerning ourselves only with the welfare of those that fall below the line. Obviously this understanding of poverty renders analyses sensitive to the choice of poverty line, and the welfare measure. We can work around the former problem by considering a broad range of poverty lines rather than a single one. In the body of this report we make use of lower and upper bound poverty lines as recommended by Hoogeveen and Özler (2006). However, we assess sensitivity to these choice of lines by using a fairly standard set of international (absolute and relative) poverty lines; namely, the $1/day class, 40% median per capita income and 50% median per capita income. The dollar value of all these lines (in purchasing power terms) was presented earlier in Box 1 in Chapter 1. In the annex III (Table A.3.11) we present a set of poverty tables across a whole set of poverty lines for 2008. The problem of the choice of the income measure is equally difficult to deal with. We adopt net household per capita income as the income measure, as it is most easily comparable across

the datasets available. Tables that use an adjustment for household size[10] are available but are not discussed in the text.

Table 2.10: Poverty measures from 1993-2008

		Poverty line = R949			Poverty line = R515		
	Population	p0	p1	p2	p0	p1	p2
1993	40 147 932	0.72	0.47	0.36	0.56	0.32	0.22
2000	42 357 140	0.71	0.45	0.33	0.54	0.29	0.19
2008	48 687 000	0.70	0.44	0.32	0.54	0.28	0.19

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

86. Table 2.10 shows the Foster-Greer-Thorbecke (FGT) poverty indices for the upper and lower bound poverty lines previously mentioned across the three datasets. P0 is the poverty headcount ratio; P1 the mean poverty gap (as a percentage of the poverty line); and P2 the squared mean poverty gap. These measures put increasing emphasis on the poorest of the poor. Looking at the headcount ratio for both poverty lines it seems clear that poverty has fallen slightly over the 15 year period. The changes in the mean poverty gap and the squared mean poverty gap ratios suggest that when taking the depth and severity of poverty into account, the gains over the period have been slightly higher than indicated by the headcount ratio.

87. After this review of the aggregate picture we now look at the decompositions of poverty across a few standard categorical variables. We report poverty headcount ratios and the associated poverty shares of each of the various groups in tables. For this we show the figures using the lower bound poverty line as this is where the trends are clearest. All tables also include population estimates across the categorical groups. Tables that use alternative poverty lines mentioned in section 1 and include the mean poverty gap ratio and its square are available in the annex III. The dominance analysis that follows shows how the conclusions of this type of analysis can be extended across a continuous range of poverty lines, without the limitation of a number of discrete choices.

10 Dividing by the square root of household size, rather than the unadjusted size. This will obviously have the effect of increasing the size of the welfare measure for larger households relative to smaller households. Given that household size is generally decreasing in wealth, the adjustment will result in an increase (on average) of the welfare of poorer households relative to wealthier households.

Table 2.11: Individual level poverty by race and gender (Poverty line R515 per capita per month)

	Population			Head count			Poverty share		
	1993	2000	2008	1993	2000	2008	1993	2000	2008
African female	0.40	0.41	0.42	0.72	0.66	0.68	0.51	0.50	0.52
African male	0.36	0.38	0.38	0.66	0.61	0.60	0.42	0.43	0.41
Coloured female	0.04	0.05	0.05	0.32	0.32	0.36	0.02	0.03	0.03
Coloured male	0.04	0.04	0.04	0.29	0.30	0.35	0.02	0.02	0.03
Indian/Asian female	0.01	0.01	0.01	0.12	0.11	0.11	0.00	0.00	0.00
Indian/Asian male	0.01	0.01	0.01	0.12	0.09	0.19	0.00	0.00	0.00
White female	0.06	0.05	0.05	0.05	0.06	0.04	0.01	0.01	0.00
White male	0.06	0.05	0.04	0.06	0.08	0.03	0.01	0.01	0.00

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

88. Table 2.11 shows the poverty decomposition across race and gender using the lower bound poverty line. We can see very clearly from the table that the decline in poverty incidence is made up mostly of the decline in poverty incidence among the African population, particularly males. However, the increase in the population share of the African group together with only muted changes in poverty among the other groups, results in a mere 1% change in poverty share, upwards for African women, and downwards for African men. Coloured poverty incidence, both male and female actually increases over the period, although this does not have a large effect on overall poverty due to their combined shares of the population being only about 9%.

Table 2.12: Individual level poverty by geotype (Poverty line R515 per capita per month)

	Population			Head count			Poverty share		
	1993	2000	2008	1993	2000	2008	1993	2000	2008
Rural	0.51	0.45	0.40	0.77	0.74	0.77	0.70	0.62	0.57
Urban	0.49	0.55	0.60	0.34	0.37	0.39	0.30	0.38	0.43

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

89. Table 2.12 shows the poverty incidence across urban and rural areas. As is clear from the population figures, the influence of demographic shifts over time complicates the analysis of the evolution of poverty significantly. Over the period poverty incidence barely changed in rural areas, while it increased in urban areas. However, due to the large urbanization of the period from the high poverty rural areas to lower poverty urban areas, overall poverty incidence declined. This is shown in the change in poverty incidence shares, with the share of urban areas in poverty increasing dramatically over the period.

Table 2.13: Poverty by education of household head (Poverty line R515 per capita per month)

	Population			Head count			Poverty share		
	1993	2000	2008	1993	2000	2008	1993	2000	2008
No schooling	0.26	0.21	0.18	0.81	0.80	0.80	0.38	0.31	0.27
Grade 1-3	0.06	0.07	0.06	0.77	0.76	0.77	0.09	0.10	0.09
Grade 4-6	0.17	0.16	0.14	0.69	0.67	0.75	0.21	0.20	0.19
Grade 7-9	0.22	0.23	0.19	0.53	0.55	0.59	0.21	0.23	0.21
Grade 10/12	0.19	0.21	0.31	0.25	0.30	0.37	0.08	0.12	0.21
Diploma or certificate, without Grade 12	0.01	0.02	0.01	0.05	0.14	0.11	0.00	0.00	0.00
Diploma or certificate, with Grade 12	0.05	0.04	0.05	0.07	0.09	0.05	0.01	0.01	0.01
Degree	0.02	0.04	0.03	0.04	0.06	0.02	0.00	0.00	0.00
Other/Missing	0.01	0.01	0.02	0.56	0.48	0.55	0.02	0.01	0.02

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

90. In a departure from looking at the individual level poverty, Table 2.13 shows poverty by educational attainment of household head. In the South African schooling system, grades 1 through 7 constitute primary schooling (ISCED level 1), grades 8 and 9 constitute lower secondary (ISCED level 2), grades 10 to 12 constitute upper secondary (ISCED level 3) with a national school-leaving examination at the end of grade 12. Then, with regard to the post-schooling levels, a diploma or certificate without complete schooling would be at ISCED level 4 (post-secondary, non-tertiary) and diploma with grade 12 or degree would be at ISCED level 5 and, in a few cases, ISCED level 6.

91. Once again we have substantial changes in the distribution of the population of household heads. A significant decrease in the number of household heads with no schooling or little schooling is clearly linked to the increase in the number of household heads with grades 10-12. There have been only slight changes in the number of household heads with degrees and other types of tertiary education.

92. The poverty incidence in households headed by people with education below grade 10 has generally risen, although this is most notable in the categories that have decreased in size substantially. The change in poverty incidence among households where the household head has education of grades 10-12 is quite striking. One might venture to conjecture that this is due to the distribution within these grades shifting downwards. However, over the period the mean grade attainment within this group actually increased. It would seem that either the average quality of this schooling has declined over the period, or there has been a decline in the labour market demand for people with this level of education. The large shift in poverty incidence in the other/missing category in 2000 raises some questions about data quality here.

Table 2.14: Individual level of poverty by household structure (Poverty line R515 per capita per month)

	Population			p0			p0share		
	1993	2000	2008	1993	2000	2008	1993	2000	2008
Single adult	0.10	0.13	0.16	0.56	0.50	0.53	0.10	0.12	0.16
Two or more adults	0.90	0.87	0.84	0.56	0.55	0.55	0.90	0.88	0.84
No children	0.15	0.18	0.21	0.18	0.24	0.25	0.05	0.08	0.09
One or more children	0.85	0.82	0.79	0.63	0.61	0.62	0.95	0.92	0.91

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

93. Table 2.14 shows poverty incidence and poverty share by household structure. Looking at the number of adults in households, we can see that the poverty shares follow the changes in household structure almost exactly. Over the period, there was a substantial increase in the number of single adult households, from 10% in 1993 to 13% and then 16% in 2000 and 2008 respectively. The decomposition of the incidence of poverty followed this shift exactly, with both groups maintaining the same rate of poverty and thus maintaining their shares of the period.

Table 2.15: Individual level of poverty by age structure (Poverty line R515 per capita per month)

Age Cohorts	Population			Poverty Incidence (Head Count Ratio)			Poverty Share		
	1993	2000	2008	1993	2000	2008	1993	2000	2008
0 to 10	0.25	0.26	0.23	0.68	0.64	0.67	0.31	0.31	0.29
11 to 15	0.12	0.11	0.11	0.66	0.64	0.67	0.14	0.13	0.13
16 to 20	0.11	0.10	0.11	0.64	0.62	0.63	0.13	0.12	0.13
21 to 30	0.17	0.18	0.18	0.49	0.49	0.49	0.15	0.16	0.16
31 to 59	0.27	0.28	0.30	0.42	0.42	0.41	0.20	0.22	0.23
60 to 70	0.05	0.04	0.05	0.51	0.49	0.42	0.05	0.04	0.04
71+	0.02	0.02	0.02	0.51	0.50	0.46	0.02	0.02	0.02
Overall	1.00	1.00	1.00	0.56	0.54	0.54	1.00	1.00	1.00

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

94. Table 2.15 interrogates changes in poverty incidence and poverty shares by age cohorts. The cohorts are chosen in order to give a sense of changes in child poverty, changes in working age poverty and changes in the poverty of the aged. The population shares of the cohorts show a stable picture. The

only notable shift is a decrease in the share of the youngest group that is counterbalanced by a slight increase in the 31-59 cohort. Given this stability, the changes in the poverty shares will be driven predominantly by changes in poverty incidence within the cohorts.

95. Generally, poverty incidence is the highest for the three child cohorts and for the two oldest cohorts. Indeed, the one dramatic change in incidence over time is the decline in poverty over time for the two older cohorts. Given that these cohorts are outside of the labour market, this is an indication of the increasing support that these older groups are receiving through the state old age pension. Given this clear evidence of the impact of government support and the fact that the government has rolled out a huge child support grant programme in the post 2000 period (see Chapter 3 for details), it is disappointing to see that the incidence of child poverty remained high and declined only marginally over time. Within the working age population, poverty incidence in the 21-30 cohort is significantly higher than in the 31-59 cohort. This highlights the importance of youth unemployment and the difficulty that the young working age population have in successfully integrating into the labour market. This situation has not worsened over time.

96. This labour market connection to poverty is further explored in Table 2.16 below. The table looks at the relationship between the poverty status of individuals given the labour market status of their household's. No worker households are seen to have grown from 28% of the population to 31% of the population over time. Their poverty incidence, at 80% or more, is by far the highest of all the groups; reflecting clearly that the deleterious consequences to individuals of their household's having no access to the labour market. Such circumstances are almost a guarantee that one will be poor. From 1993 to 2000 this incidence fell but then rose again from 2000 to 2008. The consequence of the extremely high poverty incidence is that such individuals make up a much larger share of the poor than their share of the population.

97. Individuals living in one worker households make up an increasing share of the population over time; rising from 38% to 41% from 1993 to 2008. Around 50% of such individuals are poor in all periods although this has declined from 54% to 48% over the three snapshots. This incidence is still very high, clearly emphasising the point that having an employed member in one's household is not a guarantee that an individual will not be poor. Indeed, the poverty incidence of those individuals living in households with two employed household members or more is close to 35% over the post-Apartheid period. Clearly the quality of employment and the quality of support coming from the labour market are important poverty issues alongside the major importance of the lack of employment. This is not to deny that this two or more worker group is the best off by a long way. However, the fact the population share of this group has declined markedly over time is worrying as it indicates an increased vulnerability to a job loss over time. Unfortunately, as noted earlier in the discussion of inequality, these three data sets do not allow for a nuanced discussion of the impact of the changing sectoral composition of employment and quality of employment over time.

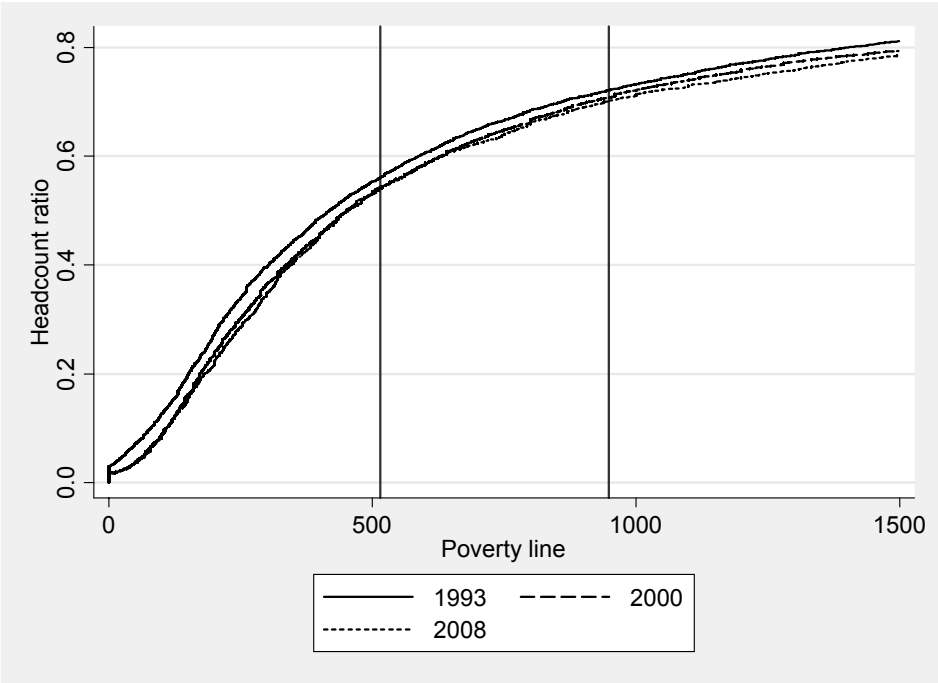
Table 2.16: Individual level of poverty by household labour market status (Poverty line R515 per capita per month)

	Population			Poverty Incidence (Head Count Ratio)			Poverty Share		
	1993	2000	2008	1993	2000	2008	1993	2000	2008
No workers	0.28	0.28	0.31	0.89	0.78	0.81	0.44	0.40	0.46
One worker	0.38	0.39	0.41	0.54	0.50	0.48	0.36	0.36	0.36
Two or more workers	0.34	0.33	0.28	0.32	0.39	0.34	0.20	0.24	0.17

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

98. A cumulative distribution function (CDF) which plots the poverty headcount ratio against household per capita income allows us to illustrate poverty incidence for all possible poverty lines. Certainly we are not interested in all poverty lines[11], but by restricting our concern to a broad interval of possible poverty lines we present a more general analysis and avoid pinning our conclusions on the arbitrary choice of poverty line. Using CDF's to compare poverty over time allows us a more robust defence of poverty rankings, and easily highlights cases that require more attention (*i.e.* when the CDF's cross). Where CDF's cross, the use of second order and third order poverty dominance analysis can be conclusive in the rankings of poverty.

Figure 2.7: CDF's for 1993, 2000 and 2008



Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

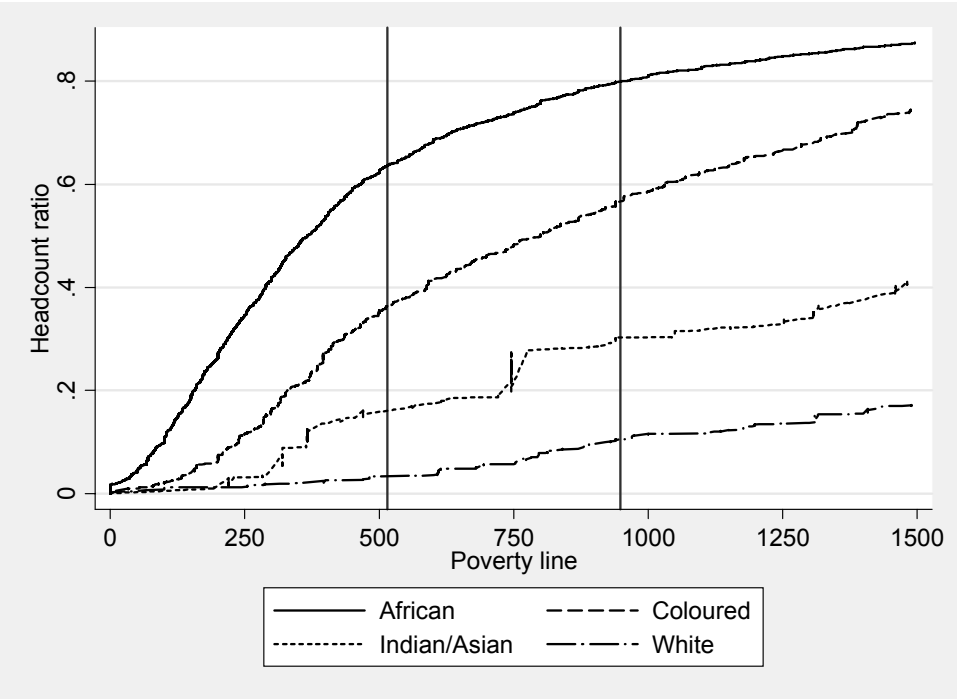
99. The graph above shows the CDF's of household per capita incomes across the three datasets from 1993 to 2008. The influence of zero incomes can be clearly seen in the bottom left corner. Excluding zeroes does not substantially alter this graph. However, a version excluding zeroes is included in the annex III (Figure A.3.2). We can clearly see that for all poverty lines below R1 500 per capita per month[12], there is clear first order poverty dominance of 1993 over 2000 and 2008. Since the CDF's of the 2008 and 2000 data cross, we cannot say which has greater poverty in general; the answer will depend on the measure we use and the poverty line. We can conclude from this that poverty has fallen on average since 1993, but it is not clear if poverty has increased or fallen since 2000. Second and third order dominance analysis may result in a clear ranking of poverty between 2000 and 2008, but this is beyond the scope of this report.

11 Where none of the CDF's cross each other at any point there is no need to consider any particular sections of the CDF in order to categorically rank poverty across the groups.

12 It should be kept in mind that 81%, 80% and 78% of the 1993, 2000 and 2008 household per capita incomes are below this respectively.

100. Figure 2.8 illustrates the restricted[13] CDFs of South Africa across racial groups in 2008. Similar figures for 1993 and 2000 can be found in the annex III (Figures A.3.3 and A.3.4). These are not shown here because there are no changes in poverty ranking across the three. The two vertical lines mark the South African lower and upper bound poverty lines from left to right respectively. The far left end of the CDF (left of the lower bound line) is distorted by the effect of zero's in the datasets, particularly the 1993 and 2000 data as mentioned previously and results from poverty lines that are much lower than the lower bound line should thus be treated with caution. Across the rest of the x-axis, the poverty ranking of the racial groups is very clear. We see clear poverty dominance across population groups in the order of African, Coloured, Indian/Asian and White. This shows that the legacy of Apartheid is strongly persistent even in 2008.

Figure 2.8: CDF's across racial groups in 2008

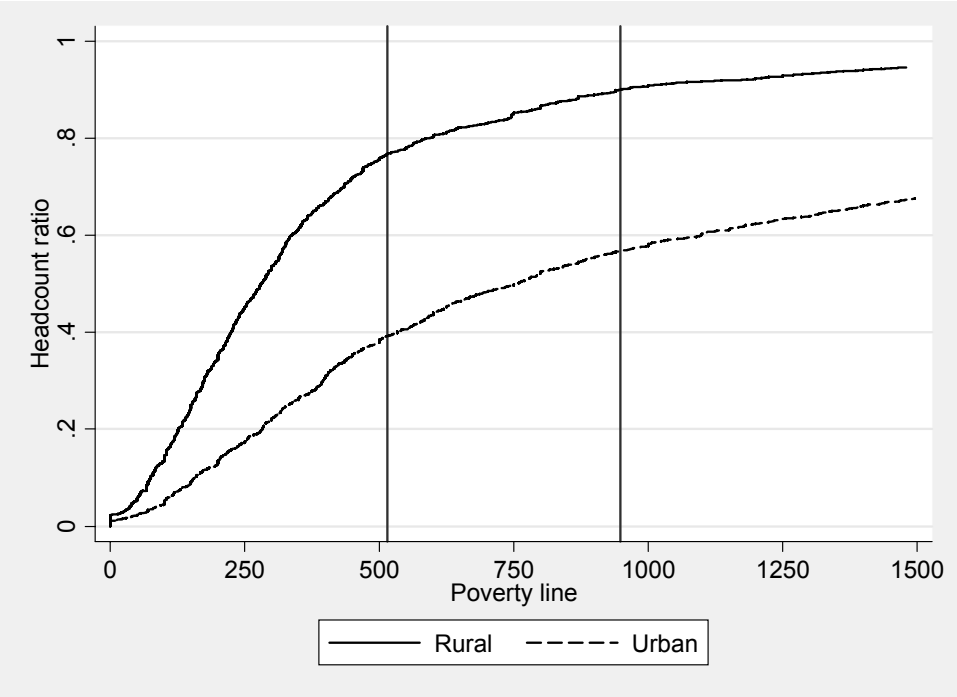


Source: Own calculations using the NIDS 2008 data set

101. Figure 2.9 shows CDF's across geotypes. The figure reveals very clear first order poverty dominance of urban areas over rural areas. Changes in poverty incidence from a special perspective are negligible (as can be seen from the CDF's from 1993 and 2000 in the annex III (Figures A.3.5 and A.3.6). However as previously noted, there has been quite a significant amount of urbanization which has driven a big increase in the urban share of poverty.

[13] This is restricted to per capita income below R1500 per month

Figure 2.9: CDF's across geotypes in 2008



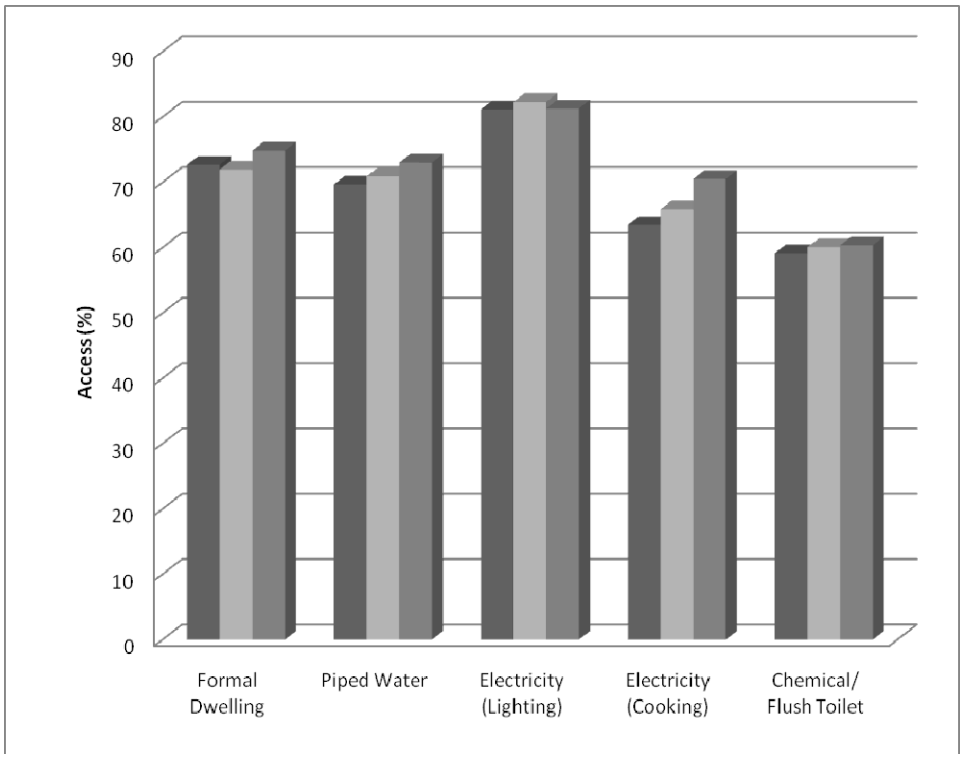
Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

2.4 Evidence from NIDS on non-money-metric poverty

102. The final piece of empirical evidence in this chapter seeks to update the discussion of non money-metric well-being that ended chapter 1. This discussion is important because, evidence from a number of data sets showed that the improvement in access to services and to assets over the post-Apartheid years had been much stronger than the improvements in money-metric poverty and inequality. Given that the analysis of income poverty and inequality in this chapter has confirmed a picture of positive but modest gains in poverty and a worsening of inequality in the 2008 NIDS data, it becomes important to ascertain whether this dissonance between income and non-money metric wellbeing follows through in the latest NIDS data too.

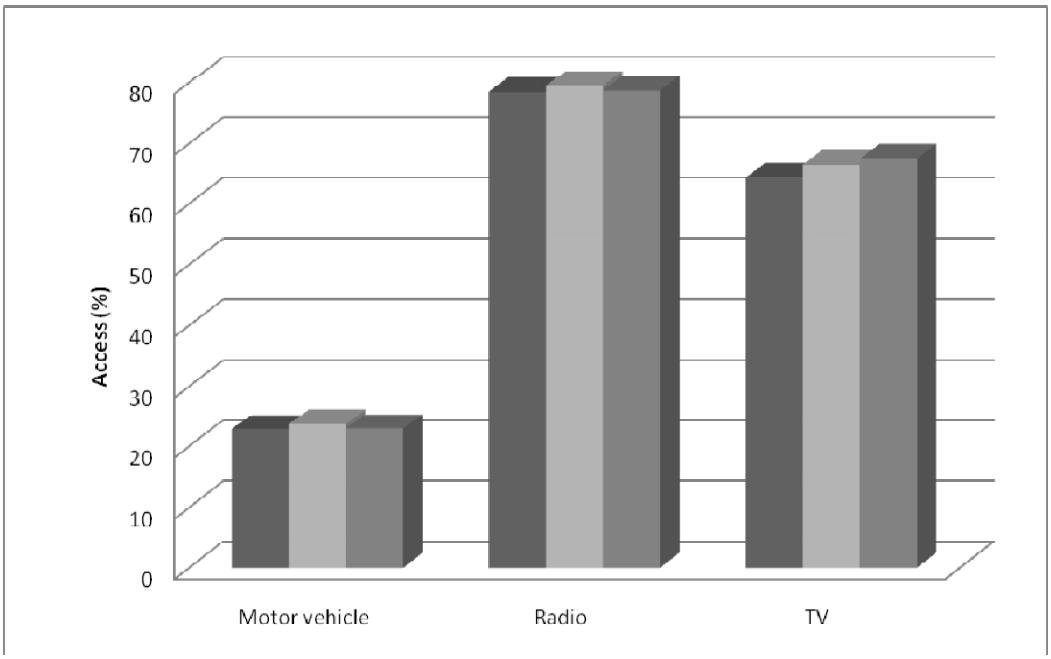
103. Figures 2.9 and 2.10 compare the NIDS data on access to services and assets to comparable data from the General Household Survey (GHS) of 2006 and 2007. The tables are taken from Bhorat *et* al (2009) and it is clear that the NIDS data on services and on assets matches up well with the GHS data. For most assets and services the NIDS figures are slightly higher than the GHS figures. In chapter 1 we reported on the work of Bhorat et al (2006) that compared access to services and assets were compared between 1993, 1999 and 2004 with improvements over time. The 2004 data was from the 2004 GHS. Thus, it is not hard to extrapolate from there to 2006, 2007 and 2008. This extrapolation reveals that the improvements in non money-metric wellbeing continued through to 2008.

Figure 2.10: Access to services



Source: Bhorat *et al.* (2009), own calculations

Figure 2.11: Access to assets



Source: Bhorat *et al.* (2009), own calculations.

2.5 Conclusion

104. We end off this chapter by looking across the pieces of evidence about inequality and poverty in order to ascertain whether they suggest obvious drivers of inequality and poverty and of poverty alleviation. Measured inequality increased consistently between 1993 and 2008. In this regard, our empirical work on inequality confirms and updates the findings of others that we reviewed in Chapter 1. With regard to poverty, we showed that aggregate poverty improved marginally between 1993 and 2008. This trend accords with the analysis of others, although other data sets suggest a more marked improvement in poverty. Our non-money-metric picture of access to services (public assets) and to private assets is in line with other research which suggests large and continuing improvements in these dimensions of well-being since 1993. Poverty, when measured in terms of these dimensions has improved strongly.

105. Within the aggregate inequality picture, our analysis of the changing racial dynamics of inequality showed that the between racial group contribution to inequality fell markedly in the period between the democratic transition and 2000 while the changes between 2000 and 2008 were more muted. This is true even one uses benchmarks against a maximum possible between-group inequality in any time period. The decompositions of inequality by income source show that the labour market plays a dominant role in driving inequality and that we should look to labour market dynamics to understand both the increased aggregate inequality and the changing racial shares. State transfers have increased their importance as an income source but not in a way that has narrowed the distribution of per capita income. They have, however compensated for the decreasing share of remittance income.

106. The income source decompositions suggest that the dominance of the labour market as a driver of inequality is due both to the large percentage of households with no access to the labour market and to the high inequality of household labour market earnings for those households with access to such earnings. Indeed, this latter effect seems to be stronger. The analysis of participation, absorption and unemployment by deciles in this chapter assists in unpacking this further. It shows clearly that, in the initial post-Apartheid period, participation rates increased faster than absorption rates with a consequent increase in unemployment rates across all deciles. Since 2000 the aggregate unemployment rate declined marginally driven by increased absorption of those individuals in the top six deciles. In the lower deciles the early post-Apartheid trend continued to 2008. Indeed, this lack of successful integration into the labour market is the reason that many of these households find themselves at the bottom of the income distribution. However, unemployment rates remain high into the higher deciles. This, plus the evidence on employed household members per decile show that having a job on its own is not a guarantee that a household will move into the top deciles. The quality of employment must be considered too.

107. Moving onto the details of our poverty analysis, the aggregate stability of money-metric poverty is reflected in rankings and shares by race that barely changed at all from 1993 to 2008. However, within this situation, there were some notable changes. We documented sizeable increases in urban poverty shares. While a part of this increased share is driven by the increase in the incidence of urban poverty, the bulk of this increased share is driven by the sharply rising share of the population living in urban areas over the post-Apartheid period. There is also an increased share of poverty attributable to those with a level of education between grade 10 to grade 12 (corresponding to ISCED level 3, *i.e.* upper secondary education). This increased share was attributable to both the increased share of the population that falls in this educational band and to the increased incidence of poverty for this group.

108. It is the younger South Africans who are coming out of school with higher levels of education than their parents that are pushing up the average years of education of the population. In this chapter we document the fact that the younger age cohorts have the highest incidence and shares of poverty and that this has not improved notably over time. The fact that these better-educated young people remain poor suggests that the labour market has not been playing a strongly virtuous role as a driver of poverty

alleviation over the post-Apartheid period. There is some evidence from labour economists (Woolard and Woolard (2007) and Lam and Leibbrandt (2009)) that those who successfully complete their secondary schooling (completion of Grade 12) get strong returns on their education. However, the returns to those with less than Grade 12 have fallen.

109. Even this is uneven though. While the incidence of poverty is very high for those with no schooling or with very low levels of schooling, it has not increased over time. This accords with the findings of Bhorat and van der Westhuizen (2009) showing that, although growth between 1995 and 2005 has been pro-poor on aggregate, it is the bottom decile that has benefitted and is driving this. The rest of the poor did not benefit strongly from the strong economic growth of the period.

110. If the labour market is not driving the improvements in poverty then what is? Our descriptive pictures flag the fact that individuals with very low levels of education and with no workers in the household have the highest poverty incidence but they have not become poorer over time. Rather those with no children have become poorer. This seems to be flagging the importance of social assistance. Add to this our findings that the incidence and share of poverty of those aged 60 and older has fallen markedly since 1993. As this group is not economically active, this can only be due to the support that they receive through the state old age pension. This policy and other assistance policies are explored at length in Chapter 3. However, as a transition into this chapter, we explore the importance of government grants in Table 2.17 by looking at changes in poverty over time, with and without accounting for government grants. These grants include the State Old Age Pension, the Disability Grant, the Child Support Grant and the Foster Care Grant. It can be seen from the table that government grant income does not change the headcount (p0) substantially. This accords with our analysis of child poverty in this chapter. However, when p1 and p2 measures that are more sensitive to the depth of poverty are used, then poverty is seen to improve markedly due to government grants. Moreover, this effect has become stronger between 1993 and 2008 and especially between 2000 and 2008. This time period accords with the substantial roll-out of the child support grant. Without government grants poverty would worsen over time rather than improve.

Table 2.17: Poverty with and without government grants

Poverty when income includes government grants						
Year	**Poverty line=R949**			**Poverty line=R515**		
	p0	**p1**	**p2**	**p0**	**p1**	**p2**
1993	0.72	0.47	0.36	0.56	0.32	0.22
2000	0.71	0.45	0.33	0.54	0.29	0.19
2008	0.70	0.44	0.32	0.54	0.28	0.18
Poverty when income excludes government grants						
Year	**Poverty line=R949**			**Poverty line=R515**		
	p0	**p1**	**p2**	**p0**	**p1**	**p2**
1993	0.73	0.53	0.43	0.60	0.4	0.32
2000	0.72	0.5	0.4	0.57	0.37	0.29
2008	0.71	0.54	0.46	0.60	0.44	0.37

Source: Own calculations using data from SALDRU 1993, IES 2000 and NIDS 2008 data sets

CHAPTER 3: THE IMPACT OF SOCIAL ASSISTANCE GRANTS IN REDUCING POVERTY AND INEQUALITY

111. There are broadly two concepts of social security in South Africa: the insurance concept and the redistribution concept. The insurance concept focuses on insuring workers against the risk of income loss and hence it increases lifetime income smoothening. Most programmes based on this concept are financed out of premiums and contributions and benefits depend on earnings. In South Africa, there exists an Unemployment Insurance Fund which serves this function. "Redistribution" programmes, on the other hand, do not focus on workers alone and the key element is poverty relief. In South Africa, the term "social assistance grants" refers to non-contributory and income-tested benefits provided by the state to vulnerable groups unable to provide for their own minimum needs, such as the disabled, the elderly and young children in poor households. Benefits are financed out of general tax revenues and hence there is no link between contributions and benefits.

112. While we briefly describe unemployment insurance, the focus of this chapter is on social assistance grants as these play a particularly important role in reducing poverty and inequality in South Africa. The chapter also touches on one particular form of active labour market policy that has a clear link to poverty reduction, namely public works programmes.

113. We deal first with the Unemployment Insurance Fund and the Expanded Public Works Programme before giving much more detailed attention to the significant system of social assistance grants.

3.1 The Unemployment Insurance Fund

114. Contributory social security funds provide conditional income support or compensation for defined-risk events. The present social security schemes in South Africa include the Unemployment Insurance Fund (UIF), the Compensation Funds and the Road Accident Fund. They are financed through mandatory levies and taxes.

115. The Compensation Funds provide medical care and income benefits to workers who are injured while at work or who develop occupational diseases. The Compensation Funds also pay survivor benefits to the families of workers that are fatally injured while on the job. The Road Accident Fund provides compensation for the loss of earnings, loss of support and compensation for general damages, medical and funeral costs to victims of road accidents caused by the negligent or wrongful driving of another motor vehicle. We do not consider either of these Funds further as they provide very specific risk benefits that are not directly related to poverty alleviation.

116. The UIF provides short-term income support to individuals that are not currently working because they became unemployed or ill or went on maternity leave. Benefits are only paid in the period immediately following the cessation of work and the person must have been contributing to the UIF at the time the event related to the cessation of work occurred. The UIF pays benefits to contributors in cases of unemployment, illness, maternity or adoption of a child. It pays benefits to the worker's dependants if the worker dies. (This survivor benefit is of the same value as the unemployment benefit would have been had the worker become unemployed instead of dying.)

117. With the exception of public servants, any worker that is employed for at least 24 hours a month by a single employer must contribute to the UIF. The worker and the employer each contribute an amount equal to 1% of monthly salary, capped at R124.78 (*i.e.* if the worker earns more than R12478 per month, the employee and employee will still each contribute R124.78 per month). The employer is responsible for paying over the contributions on behalf of both the employer and the employee. While we were unable to get accurate figures on contributors from the Department of Labour, we estimate that approximately 8 million workers (and their employers) contribute to the Fund.

118. If a worker has been contributing to the Fund for four years or more, then benefits can be received for up to 238 days. If the worker has been contributing for a shorter period, then he/she can claim 1 day for every 6 days worked while contributing to the Fund. In the case of maternity leave, a worker can only claim up to 121 days. The UIF pays a percentage of the wage that was being earned at the time that the worker was contributing to the Fund. The highest amount that can be paid is 58% of what was being earned per day.

119. As shown in Table 3.1, expenditure by the UIF was approximately R4.5 billion in the 2008/09 fiscal year while revenues exceeded R12 billion. The Fund is currently running a large surplus and there are various policy proposals circulating about possible reforms to the system. One possibility would be to extend the claim period; another would be to provide a "workseeker's allowance" once benefits have expired.

Table 3.1: UIF revenues and expenditures

	2005/06	2006/07	2007/08	2008/09
Revenue	7 841	9 467	11 324	12 023
Expenditure	3 635	3 578	3 592	4 460

Source: National Treasury, 2009

120. As shown in Table 3.2, 442 000 people claimed unemployment benefits in 2008/09. (Given that the maximum claim period is 238 days and many claimants will receive benefits for a shorter time, this implies that significantly less than 442 000 people were in receipt of unemployment benefits at any given time.) This figure is in stark contrast to the number of unemployed, which currently stands at 4 125 000 according to the strict (narrow, official) definition or 5 642 000 according to the expanded (broad) definition (Stats SA, 2009). An amount of R2 341 million was paid out in benefits in 2008/09 which implies that the average beneficiary received a total amount of R5 296.

Table 3.2: UIF benefits and recipient numbers

	2005/06	2006/07	2007/08	2008/09
Benefits (R million)				
Unemployment benefits	2 065	1 991	2 031	2 341
Illness benefits	187	180	187	211
Maternity/adoption benefits	353	418	460	492
Survivor's benefits	283	248	243	292
Beneficiaries (thousand)				
Unemployment	451	421	397	442
Illness	26	30	25	28
Maternity/adoption	81	96	89	99
Survivor's benefits	31	25	16	18

Source: National Treasury, 2009

121. Table 3.3 shows the previous incomes of those who made application for unemployment benefits during the 2006 calendar year. As far as unemployment benefit claimants are concerned, women are congregated at the lower end of the wage spectrum, almost one third of them (31.5%) having earned less than R1000 per month before they lost their jobs, as opposed to about 11 per cent for the men.

Table 3.3: Previous incomes of unemployment benefit claimants, 2006

Income category (R/month)	Men	Women
R1-299 (column %)	0.1	0.6
R300-599	0.9	4.2
R600-999	10.9	26.7
R1000-1999	37.7	34.3
R2000-3999	30.7	22.8
R4000-5999	9.3	5.2
R6000-7999	3.8	2.4
R8000-9999	3.1	1.9
R10000-12747	3.5	1.9
Number of claimants	221 415	138 878

Source: Meth (unpublished)

122. Given that the UIF receives contributions from approximately 8 million workers and pays benefits for up to 238 days, it may seem surprising that less than 10% of the (strictly) unemployed are in receipt of unemployment benefits at any given time. Part of the explanation lies in the fact that slightly more than half (55%) of the unemployed report that they have never worked (Stats SA, 2007) and thus have not had the opportunity to have contributed to the UIF. Of those that have worked before, 44% have been unemployed for more than a year and would have exhausted their benefits if they were ever eligible for them. Thus, while the UIF clearly has an important role to play in providing replacement income to the short-term unemployed with work experience, the vast majority of the unemployed fall outside of this system.

3.2 Public Works Programmes

123. The "Expanded Public Works Programme" (EPWP) was installed in 2004. Public Works Programmes did, however, exist in South Africa prior to this. During the early 1990s, negotiations took place between organized labour, the construction industry and government over the use of labour intensive construction methods. These engagements resulted in the signing of a temporary Framework Agreement for labour intensive construction. The principles in this Framework Agreement were later written into a Code of Good Practice for Special Public Works Programmes which was formally gazetted by the Department of Labour in 2002. The Code of Good Practice sets targets for the employment of youth, women and people living with disabilities on Public Works Programmes. It also requires that relevant community-based organisations be consulted regarding the selection of workers to be employed on projects. The Code also allows for special conditions of employment for workers employed by contractors on labour intensive projects, including the use of task-based payment systems, and the setting of payments for tasks based on consideration of the local going rate for unskilled labour. It limits the duration of employment under these special conditions and provides PWP workers with an entitlement to training. The Code of Good Practice therefore establishes a PWP employment framework based on a concept of PWPs as a mechanism for providing unemployed people with a combination of work experience and training.

124. The national government has also initiated a range of environmental PWPs since 1994, including, for example, Working for Water and the Land Care and Coastal Care programmes. A number of provinces and municipalities have also initiated their own PWPs.

125. EPWP was implemented in 2004. Under this scheme, all government bodies and state corporations are required to make a concerted effort to assist the unskilled unemployed population. Through the use of public expenditure, temporary, generally unskilled employment is created for the jobless. Such temporary employment is coupled with on the job skills development and training. The intention was that this would provide the participants leaving the programme with a better chance of finding employment outside of the temporary job structure.

126. Over the past four years EPWP has grown steadily. It has provided more than 1 million work opportunities in 2008. It should be noted that a "work opportunity" is a short-term job, *i.e.* these figures have not been converted to full-time equivalents.

Table 3.4: Work opportunities and budget for EPWP, 2004/05-2008/09

	2004/05	2005/06	2006/07	2007/08	2008/09
Net number of work opportunities created	393 441	503 843	592 990	1 107 162	1 449 806
Total expenditure (including professional fees) in billions	R7.8	R6.1	R11.2	R30.2	R54.2

Source: Department of Public Works, Republic of South Africa (available: www.epwp.gov.za)

127. It is important to note, however, that only a small proportion of the expenditure figures above represent wages paid to EPWP participants. As shown in Table 3.5, in 2006/07, the EPWP wage bill was less than R1 billion which should be seen in comparison to the Unemployment Insurance Fund that paid out R2.8 billion that year or the value of Social Assistance Grants which was R57 billion that same year (National Treasury, 2009).

Table 3.5: Wage bill for all EPWP sectors

Fiscal year	Wage bill (current prices)	Wage bill (constant R2000 prices)
2004/05	R 823,202,981	R 823,202,981
2005/06	R 635,652,856	R 608,955,436
2006/07	R 917,520,088	R 846,871,041

Source: Hemson, 2007

128. Poverty reduction, addressing unemployment, skills development, and service delivery are stated objectives of the EPWP, although various documents and stakeholders articulate and emphasize these differently. In the EPWP foundation documents there is no explicit mention of social protection, rather it is projected that providing temporary employment and training will lead on to further gainful economic activities. This series of activities – short term employment, training, and successful exit strategies leading to more permanent employment – is designed to achieve the alleviation of poverty.

129. In June 2008, Cabinet gave approval for proceeding with the development of a second phase of the Expanded Public Works Programme (EPWP) which began in early 2009. This five-year expansion of the programme is known as EPWP II, and there are plans in place for improved administrative arrangements and new targets to lengthen the duration of jobs created and improve its environmental,

social and developmental impact. Extension of the programme aims to increase the number of full-year equivalent job opportunities to over 400 000 over the next five years.

130. EPWP II will concentrate on three areas:

- Longer-term public-sector employment, such as in home-based care and community health services, directly funded by departments and supported by targeted training and skills development.

- Project-based employment in construction, rehabilitation and environmental programmes, supported through performance-based incentive allocations to cover basic wages in activities with scope for increased labour-intensity, implemented by national and provincial departments and municipalities.

- A new component of programmes funded or co-funded by government, but managed by non-state actors such as non-profit organisations, religious and community-based organisations.

131. We performed some empirical analysis of EPWP beneficiaries based on the Labour Force Surveys. The September 2007 Labour Force Survey included a specific module on EPWP. From this data, we were able to conclude that almost one-third of adults had heard of EPWP, yet more than twice this amount were unaware of the government programme. In addition, the data indicated that EPWP awareness did not differ significantly by age, with the exception of the age group 45 to 49 who were more likely to know about the programme. Also, women were slightly more likely to have heard of the EPWP than men, except in the age group 45 to 49.

132. According to Table 3.6, just over a quarter of a million people report that they had participated in an EPWP programme in the six months prior to the survey. This estimate seems too low given that more than 1 million work opportunities were provided by EPWP in the 2007/08 fiscal year (and thus one would expect about half a million people to have participated in EPWP in the six months prior to the survey).

Table 3.6: Weighted number and percentage of respondents of working age that report that they have participated in an EPWP programme in the previous six months

	Freq.	Percent
Yes	258,675	0.8
No	9,321,715	28.5
Do not know	755	0.0
Not applicable	22,795,891	69.8
Unspecified	284,119	0.9
Total	32,661,155	100.00

Source: own calculations on September 2007 Labour Force Survey, Statistics South Africa

133. In Table 3.7, we break this down by age and gender. Almost 1% of working age men in comparison with only 0.7% of working age women report that they had participated in an EPWP project in the previous six months. In keeping with the stated objective of targeting the youth (which in South Africa has come to mean persons under 35), the highest male participation rate was among the 30 to 34 year old group. Interestingly, for women the highest participation rate was among women aged 50 to 54. In the absence of panel data, it is impossible to know whether EPWP has an effect on subsequent labour market outcomes.

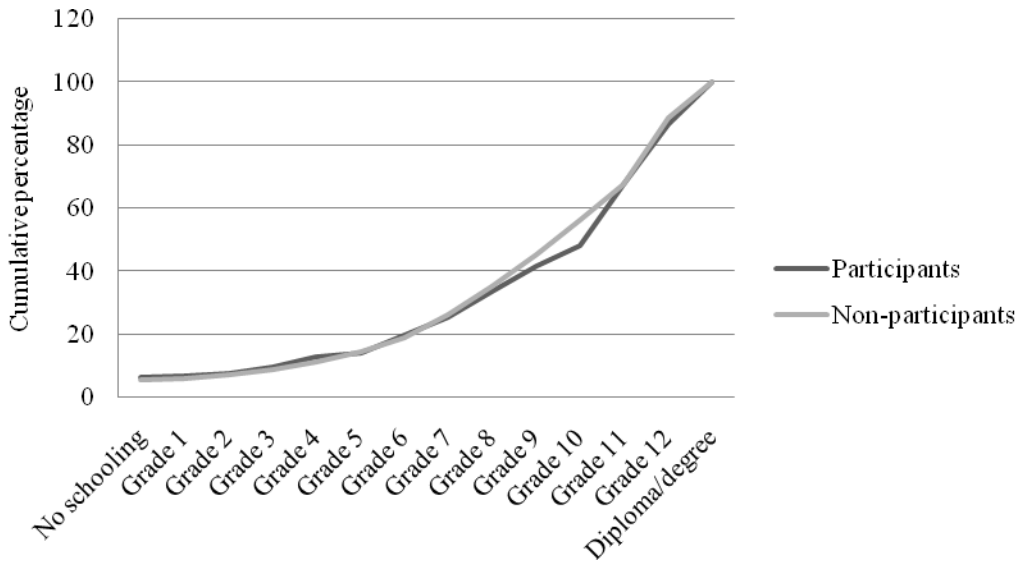
Table 3.7: Percentage of respondents of working age that report that they have participated in an EPWP programme in the previous six months, by age and gender

Age group	Male	Female	All
15-19	0.15	0.13	0.14
20-24	0.64	0.55	0.60
25-29	0.98	0.67	0.82
30-34	2.54	0.96	1.74
35-39	0.58	1.14	0.87
40-44	1.31	0.82	1.05
45-49	1.28	0.80	1.02
50-54	0.53	1.38	1.01
55-59	0.79	0.89	0.84
60-64	0.99	0.45	0.68
All	0.95	0.72	0.84

Source: own calculations on September 2007 Labour Force Survey, Statistics South Africa

134. The September 2007 Labour Force Survey did not collect any household income or consumption data. Consequently, we are unable to assess whether EPWP is reaching poor households. Instead, we look at whether EPWP is reaching the less educated as a weak proxy for socio-economic status.

Figure 3.1: Educational attainment of recent EPWP participants and non-participants



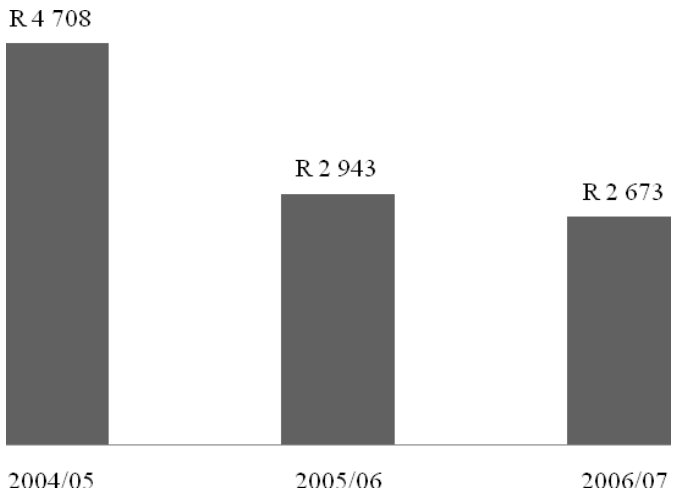
Source: own calculations on September 2007 Labour Force Survey, Statistics South Africa

135. Unexpectedly, we find that 33% of recent EPWP participants have completed high school (Grade 12 or higher), which is the same proportion as in the non-participant population. This runs counter to the stated objective a strategic EPWP document which identifies unskilled unemployed individuals who lack secondary education as the target group for temporary work and skills training (DPW EPWP Unit, 2006, cited in Hemson, 2007).

136. The high uptake among the more educated is particularly surprising given the low wage rates of R30 to R50 per day that are typically offered by EPWP projects. While work opportunities have been

increasing annually, the total wage bill has not kept pace. Under these conditions the income received per work opportunity has declined. Figure 3.2 shows that the total wage earned per "work opportunity" between 2004/05 and 2006/07 declined by 43% in real terms.

Figure 3.2: Average total remuneration per "work opportunity" (in constant 2000 prices)



Source: Hemson, 2007

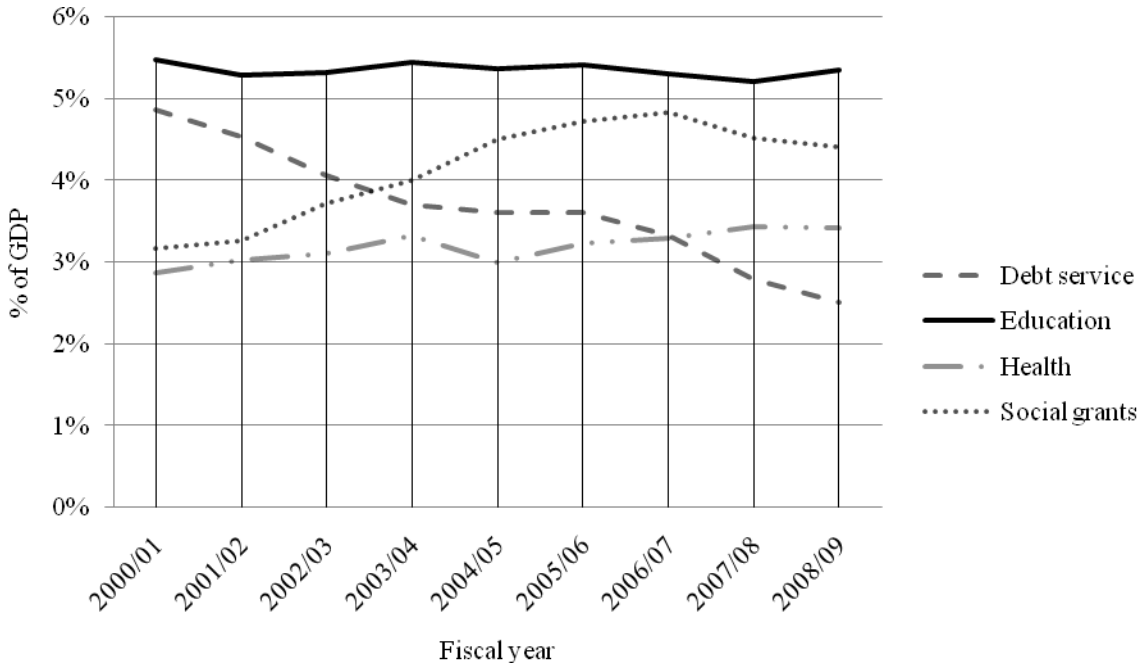
137. In summary, then, the current EPWP transfers fairly modest amounts of income into a relatively small number of households. The EPWP II, however, aims to increase employment in labour-based initiatives to the equivalent of more than 400 000 jobs a year over the medium term (National Treasury, 2009). If the state has the capacity to implement the programme at this level of intensity, it has the potential to make a significant contribution to employment creation and poverty alleviation. This will be particularly true if the programme is targeted via a mechanism other than a low wage rate.

3.3 Social Assistance Grants

138. Our discussion in Chapter 2 of money metric poverty and our income source decompositions highlighted the importance of social assistance grants as a source of income for many households in South Africa. The extensive network of social grants is central to anti-poverty policy in South Africa. Some aspects of this system were inherited from the pre-democratic era; however, the post-Apartheid state has been very active in reforming and adding to this system. There has been a rapid expansion in spending on social assistance over the last between 2000/01 and 2006/07. While spending on most budget items (e.g. education and health) have remained fairly constant in real terms, consolidated expenditure on welfare and social assistance has increased from R30.1 billion (3.2 per cent of GDP) in 2000/01 to R101.4 billion (4.4 per cent of GDP) in 2008/09 (National Treasury, 1998 and 2009).[14] This is shown in Figure 3.3 below. By April 2009, 13.4 million people were benefiting from social grants. Of these, 2.3 million were receiving old age pensions, 1.4 million were receiving disability grants and 9.1 million children were benefiting from Child Support Grants. Social assistance as a percentage of GDP declined very slightly between 2006/07 and 2008/09. While expenditure on this item grew by 21% in nominal terms, this was a period of strong growth with GDP increasing by 32% in nominal terms. The number of grant beneficiaries has been growing slowly and the size of payments has not been increased much beyond inflation.

[14] This figure includes social grants administration and welfare services such as old-age homes and drug treatment centres. If only direct cash transfers to households are considered, these account for an estimated 3.5% of GDP in 2009/10.

Figure 3.3: Expenditure items as percentage of GDP



Source: National Treasury, various years

139. At the time of the transition to democracy, the South African social security system was already notably well developed for a middle income country (Lund, 1993, Van der Berg, 1997; Case & Deaton, 1996) and the system has expanded markedly since then. At 4.4 per cent of GDP, spending on social assistance is three times higher than the median spending of 1.4 per cent of GDP across developing and transition economies (World Bank, 2009).

140. The major grant types consist of the State Old Age Pension, the Disability Grant, the Child Support Grant and the Foster Care Grant. In this chapter we briefly describe the grants and the extent of their coverage before going on to illustrate their significance in reducing poverty. The main data source in this chapter is the 2008 NIDS data.

3.3.1 Child grants

141. The Child Support Grant (CSG) was introduced in 1998. Prior to this, there was a State Maintenance Grant which was available to a parent or guardian living with a child under eighteen years of age if the applicant was unmarried, widowed or separated; had been deserted by their spouse for more than six months; had a spouse who received a social grant or had been declared unfit to work for more than six months; or had a spouse who was in prison, a drug treatment centre or similar institution for more than six months. Applicants had to prove that they had made efforts to apply for private maintenance from the other parent but been unsuccessful in doing so. There were several conditions attached to receipt of the grant, including ensuring that school-age children were in school. There were limitations not only on non-parents' receipt of the grant, but also on eligibility in respect of children born outside of marriage. As a result of significant differences in both rules and how the rules were applied, very few African children and their caregivers received the grant. In 1990, only 0.2% of African children were in receipt of State Maintenance Grants, while 1.5% of white children, 4.0% of Indian children and 4.8% of Coloured children received the grant (Kruger, 1998) It became apparent in the mid-1990s that providing equal access to State

Maintenance Grant benefits would have severe fiscal implications given poverty levels and household structures, with simulations based on household survey data predicting a more than twenty-fold increase in expenditures (Haarman and Haarman, 1996).

142. In December of 1995, the democratically elected government of South Africa established the Lund Committee in order to evaluate the existing system of state support and to explore new alternative policy options targeting children and families. The report of the Committee recommended a new strategy to replace the existing State Maintenance Grant. This strategy included a child-linked grant with a lower monetary value than that of the State Maintenance Grant, but targeted at a wider group of beneficiaries, particularly those living in the most disadvantaged areas: rural areas and informal settlements.

143. The Child Support Grant was introduced in April 1998, at a level of R100 per month for each child younger than seven years of age. The money was to be paid to the primary caregiver of the child. Applicants for the grant were required to pass a means test (based on household income), produce certain documents, and demonstrate efforts to secure funds from other sources. The strict nature of the requirements prevented many genuine caregivers of in-need children from applying for the grant, and in June 1999 the rules were changed. The means test was changed to make use of "personal income" (see below) rather than household income and the requirements to produce documents and other evidence became less onerous.

144. When the Child Support Grant was introduced it was intended to cover the poorest 30% of children and was means-tested, *i.e.* the child had to be residing in a household with a household income below a certain threshold. The threshold was set at R800 per month for households living in urban areas and at R1100 per month for those living in rural areas or in informal settlements. In 1999, due to a low take-up rate, the (then) Department of Welfare altered the income test from a household based measure to one which considered only the income of the primary caregiver plus that of his/her spouse (net of other state transfers). The means test remained unchanged in nominal terms between 1998 and 2008. In October 2008, the means test was changed to be ten times the value of the grant and will thus automatically increase as the grant amount rises. At the time of writing, the value of the Child Support Grant is R240 per month and thus the means test threshold is R2400 per month. [15]

145. The government has increased the age limit for eligibility in recent years. In April 2003 the age limit was raised to nine years old and a year later this was increased to eleven years. In April 2005 the age limit was raised to fourteen and in January 2008 to fifteen (*i.e.* children between the ages of zero and fourteen are eligible – a child becomes ineligible on her fifteenth birthday).

146. When the Child Support Grant was introduced, it included several conditionalities. Applicants were initially expected to participate in "development programmes" and to have proof that the children for whom they were applying were immunised. The requirement in respect of development programmes was dropped after it became obvious that such programmes simply did not exist in many areas. The requirement in respect of immunisation was dropped out of recognition that it often discriminated against children who were already disadvantaged in terms of access to services.

3.3.2 Other child grants

147. There are two other child grants which have been in existence since before the Child Support Grant was established. Both have seen marked increases in take-up over recent years. This can be partly

[15] Means testing for married caregivers doubles the mean test threshold and adds the spouse's income to the caregiver's income. Before October 2008, the mean test level was not adjusted for married couples.

attributed to an increase in general awareness of grants, but is also related to the HIV/AIDS pandemic as both grants are used in some cases to provide for children affected or infected by AIDS.

148. The foster child grant (FCG) is paid to those who have gone through a court process to become registered as foster parents of the child. The grant is intended for children up to the age of 18 years that are "in need of care" and who are not receiving such care from their biological parents. This includes children who are abused as well as children in trouble with the law. The grant is not primarily intended to deal with poverty, and thus has no means test. The value of the grant, R680 per month, is more than double the size of the Child Support Grant.

149. The care dependency grant (CDG) is given to caregivers of children who are severely disabled to the extent that they need full-time care, *i.e.* if such care were not available in the home, the child would need to be institutionalised. The grant is available for children from one to 18 years. Officially, any child who attends a school, even if the school is for disabled children, is disqualified from receiving the grant. In practice, in at least one province this condition is not observed (Budlender & Woolard, 2006). The grant is sometimes awarded in respect of children who are ill with AIDS.

3.3.3 Profile of recipients of child grants

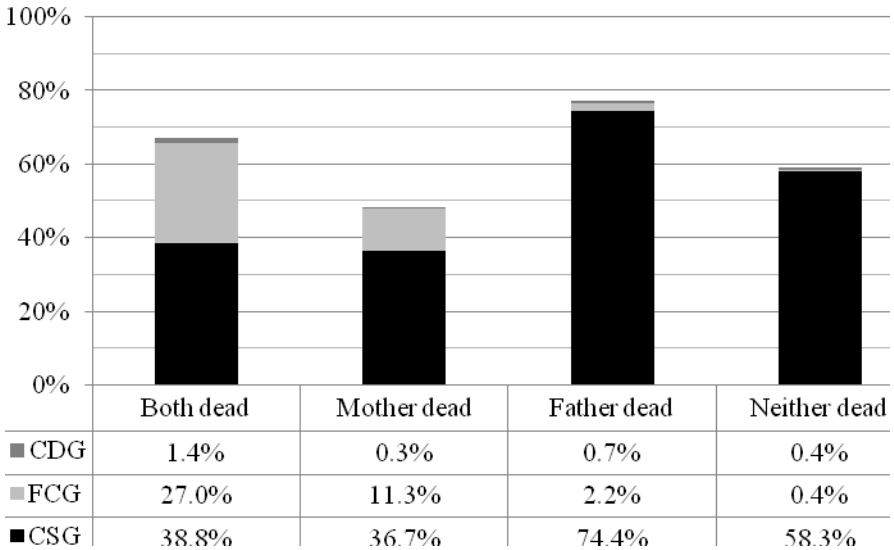
150. Administrative data (SASSA, special request) indicates that as at April 2009, 9.5 million of the 14 million children under the age of 15 in South Africa were in receipt of the Child Support Grant, Foster Care Grant of Care Dependency Grant. The estimate of the number of children benefiting from child grants in the 2008 NIDS data is 8.6 million which is very slightly lower than the actual number of recipients in April 2008, namely 8.7 million.

151. The purpose of child social assistance is to reach children in need, and one of the most at risk segments of the child population is orphans. Figure 3.4 below indicates how many orphans under the age of 15 are currently receiving social assistance according to the NIDS data.[16] What is most striking is the high number of paternal orphans receiving grants, particularly the Child Support Grant, and the low number of maternal orphans receiving grants. This concurs with evidence found in Case, Hosegood and Lund (2004) that the probability of a child receiving a grant decreases when the mother is absent. The same conclusion is drawn by Woolard et al. (2005) using the KwaZulu-Natal Income Dynamic Study (KIDS) data.

152. Children living with their widowed fathers are the least likely to be receiving grants. Unsurprisingly, orphans who have lost both parents are the most likely to be receiving the foster care grant. What is unexpected though is the fact that, aside from paternal orphans, orphans are less likely to be receiving the Child Support Grant than children with both parents. This may be a result of the more complex documentation required without the child's mother as caregiver.

[16] Unfortunately there is no information on grant receipt in children over the age of 15.

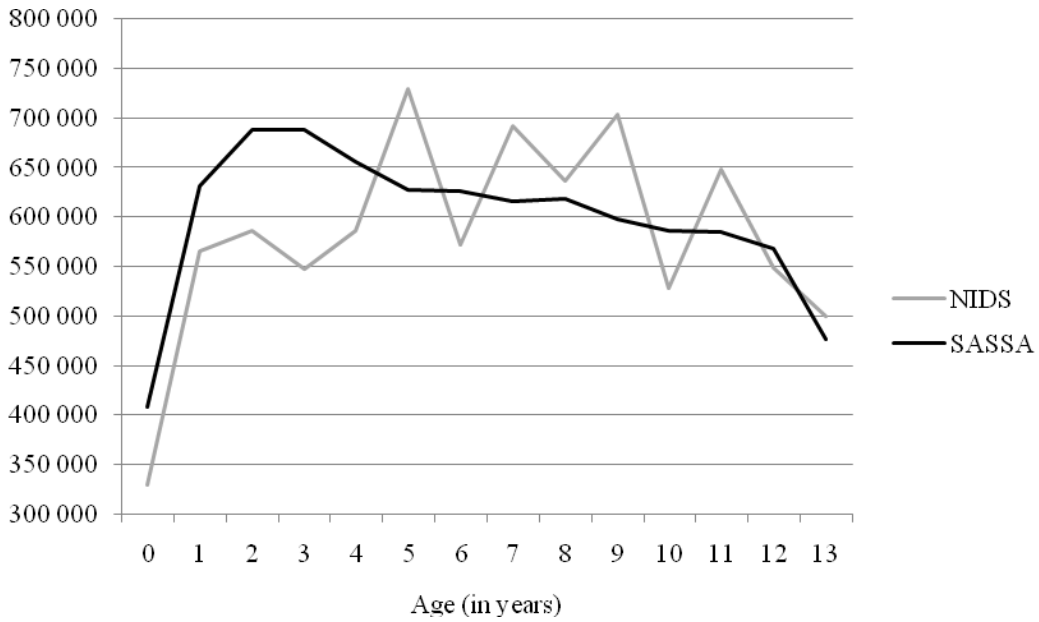
Figure 3.4: Percentage of children receiving social assistance, by orphanhood status



Source: own calculations on NIDS data, 2008

153. Two main issues for the effectiveness of the Child Support Grant remain children in need who are not receiving it and ineligible children/adults who are receiving it in error. Figure 3.5 below illustrates the difference by age between the number of children reported by the South African Social Security Agency (SASSA) and by NIDS. The two trend lines show broadly similar trends across ages.

Figure 3.5: Number of children receiving Child Support Grants



Source: NIDS, 2008 and SASSA, special request

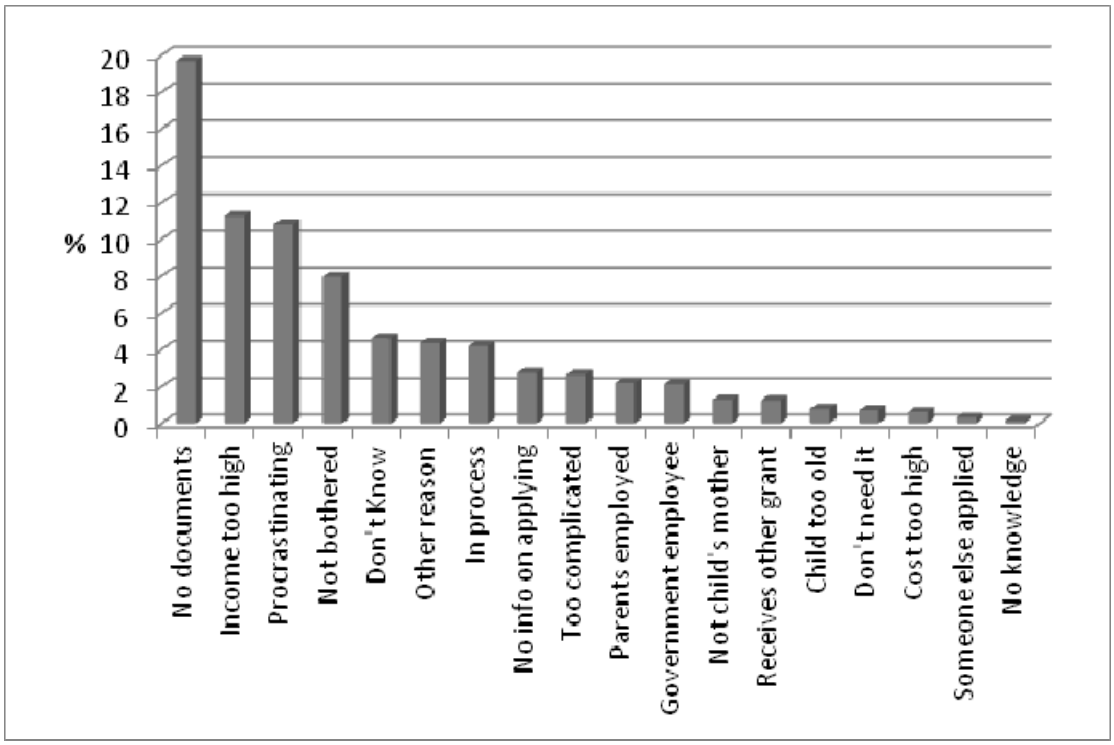
154. Among those reporting receipt of a grant there could also be children who should not be receiving it. We did a simple simulation to estimate how many children were eligible to receive the Child Support Grant (CSG) based on the means test and the age eligibility criteria. Table 3.8 below compares our estimates of CSG-eligibility with the number of respondents reporting receipt of any form of child grant. The simulation suggests that a surprisingly small number of children who are not eligible are receiving the grant.

Table 3.8: Comparison of eligibility and self-reported receipt of the grant

	Grant reported					
Eligible for CSG (simulation)	**CSG**	**FCG**	**CDG**	**No grant reported**	**Unknown**	**Total**
Yes	6 526 566	200 428	49 937	2 535 556	360 822	9 673 309
No	142 454	31 264	861	1 727 001	155 455	2 057 035
Unknown	1 175 756	25 000	6 879	698 483	115 486	2 021 604
Total	7 844 776	256 692	57 677	4 961 040	631 763	13 751 948

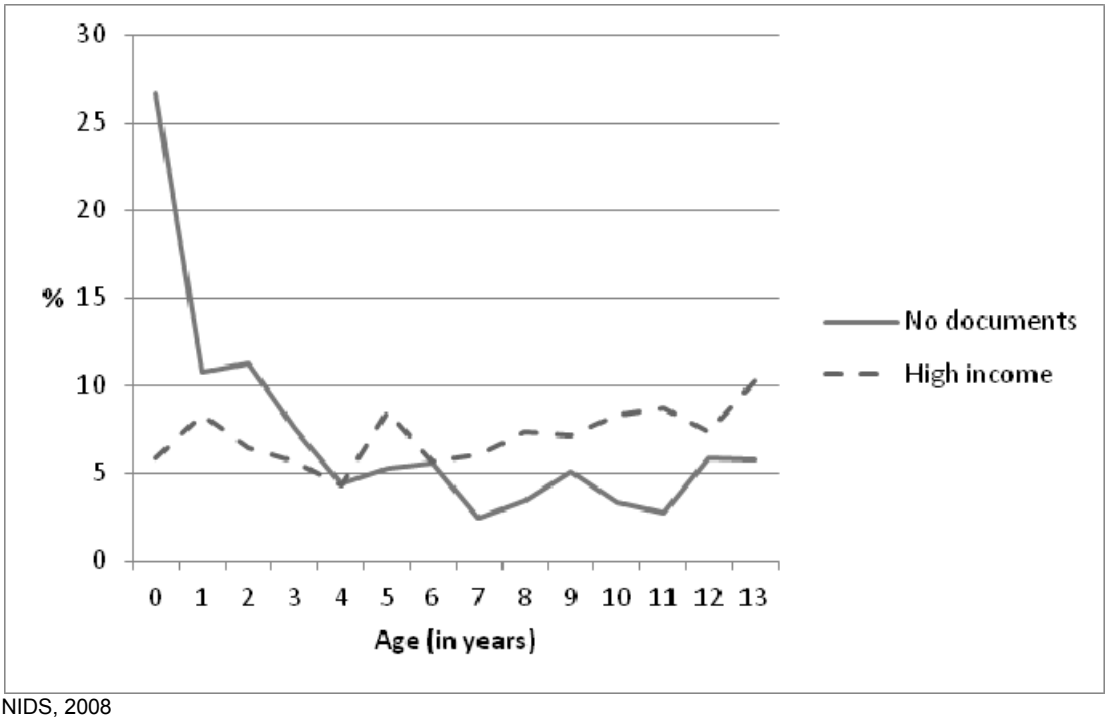
155. Of greater concern, there appear to be 2.5 million children in need who are not receiving the grant. Of these, 1.9 million have never applied for a grant. The reasons given for not having applied are listed in Figure 3.6 below. The most common reason for not applying when eligible was stated as a lack of correct documentation. This has been a problem throughout the history of the Child Support Grant and was cited as the most common cause of non-application in the KwaZulu-Natal Income Dynamics Study (KIDS) survey of 2004, although the percentage of respondents citing this problem has decreased a lot. Figure 3.7 below illustrates the prevalence of the two most cited reasons for non-application by age. It is apparent that documentation is the most pressing issue in the younger ages and high income in the older ages. This is to be expected as caregivers often delay document application when a child is born or have to wait many months to receive it when they do. This suggests that poverty alleviation efforts would be enhanced by increased ease of documentation. The Department of Home Affairs and the Department of Social Development have recognized this and are trying to implement enhanced processes. For example, if an applicant can prove that she has attempted (and failed) to get an identity document for herself and/or an birth certificate for the child, it is now possible for the grant to be processed in the interim. Under these circumstances, the South African Social Security Agency (SASSA) will then liaise with Home Affairs to provide the necessary documentation. According to DSD officials, about 8000 people have availed themselves of this process to date (personal communication, Thabo Rakoloti, 4 March 2010).

Figure 3.6: Main reason grant was not applied for



Source: NIDS, 2008

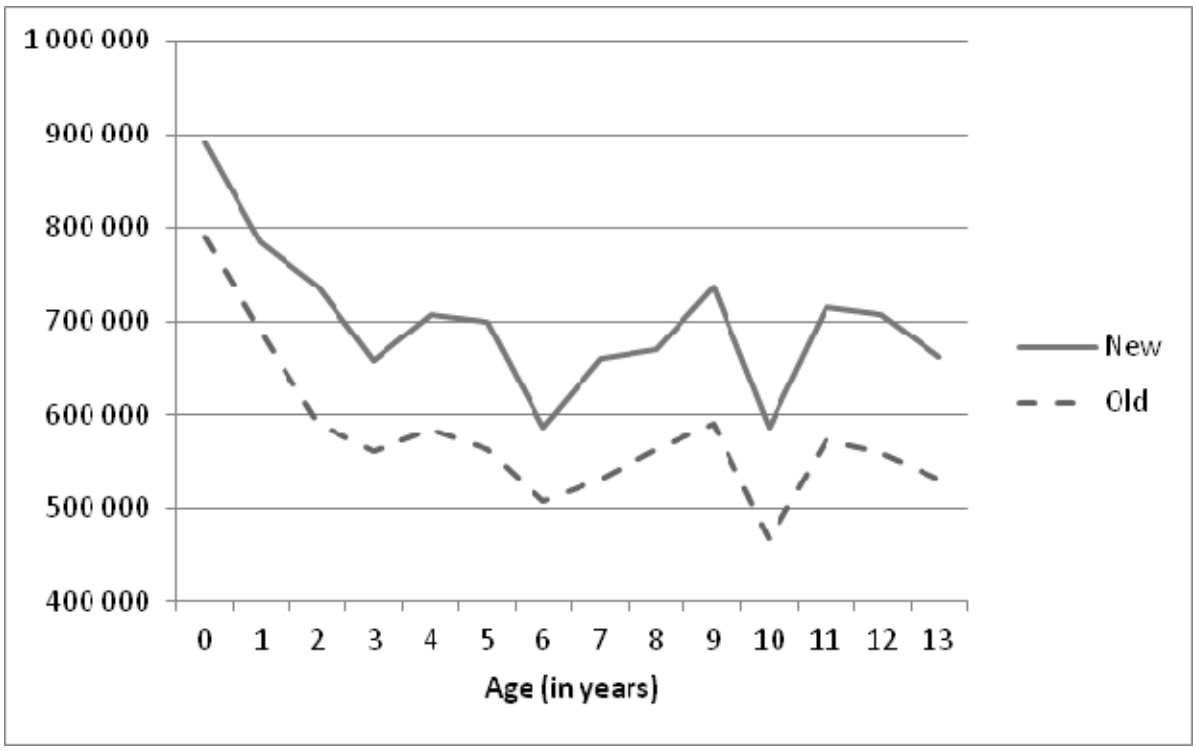
Figure 3.7: Main reason grant was not applied for by age



Source: NIDS, 2008

156. As discussed above, the means test income threshold was adjusted substantially upwards in October 2008. Figure 3.8 below illustrates the number of children eligible under the new and old means test levels by age. Under the new means test, we estimate that there are an additional 1.7 million children now considered eligible for the grant, an increase of 21%.

Figure 3.8: Simulated number of eligible children under the different means tests



Source: NIDS, 2008

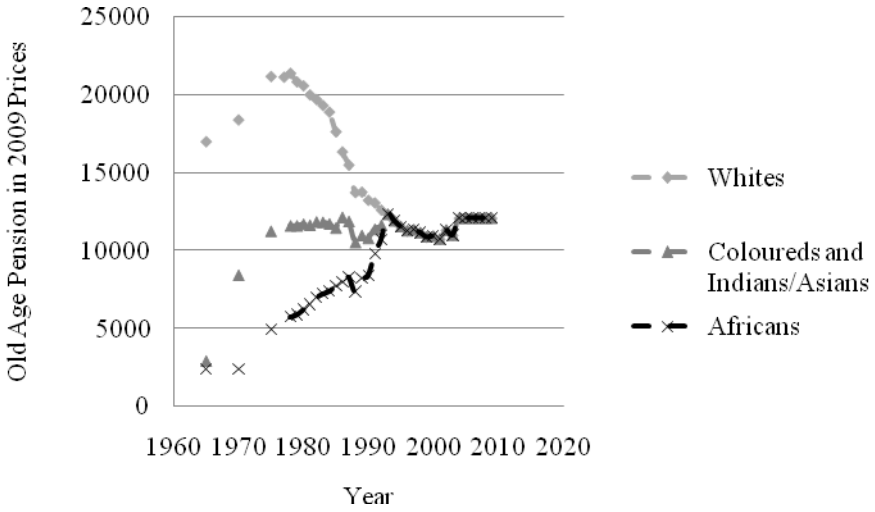
157. In the NIDS data, the majority (82%) of the recipients of the Child Support Grant are reported as the child's parents. Another 12% are reported as the child's grandparents. Roughly 16% of caregivers receiving social assistance for children are not co-resident with them, which is in contravention of the regulations[17]. The vast majority of these non-resident grant recipients are the child's parents. This figure is similar to that derived from KIDS 2004 which estimated the incidence of non-resident Child Support Grant recipients at 10% (Woolard, Carter & Aguero, 2005).

3.3.4 Social assistance for the elderly

158. The State Old Age Pension was originally introduced in South Africa in 1928 to address poverty among elderly white people, but was gradually extended to other population groups. During the Apartheid years both the size of the grant and some of the conditions discriminated on the basis of race. Figure 3.9 shows how the value of the State Old Age Pension has changed over time. In 1970, the size of the State Old Age Pension for a white person was more than seven times the value of the pension for an African. This gap narrowed rapidly to a ratio of just over three in 1980, partly through a reduction in the real value of a white pension, but also through real increases in the size of the pension to Africans. The 1992 Social Assistance Act finally did away with all racially discriminatory provisions.

[17] In order to be deemed co-resident a caregiver must reside in the same household as the child for at least 4 nights a week.

Figure 3.9 Annual value of the State Old Age Pension in constant 2009 prices, by race



Source: Data prior to 1995 from Servaas van der Berg (personal communication); data from 1995 to 2008 from National Treasury (various years)

159. The State Old Age Pension is available to women at the age of 60 years and to men at the age of 61 years. (Until 2007, men only qualified for the Old Age Pension at age 65 but this gender discrimination has been gradually phased out. From April 2010, the ages will be equalised at age 60). The State Old Age Pension is subject to a means test which is based on the income and assets of the applicant and his/her spouse (if the applicant is married). Unlike the Child Support Grant, which is paid at a flat rate, the State Old Age Pension and disability grant have a sliding scale at the upper end of income eligibility where the amount of the grant is progressively reduced for each additional rand of income. At the time of writing the maximum amount of the grant was R1010 which is slightly more than double the per capita income of the African population. More than 80 percent of the elderly receive the pension. According to our estimates based on survey data, more than two-thirds of the recipients are women because they go into payment slightly earlier than men, are more likely to be eligible (as are less likely to have private employer-based pensions) and have a longer life expectancy.

3.3.5 The impact of the grants on poverty

160. Given this extensive reach and the importance of these grants in the budget, it is important to establish whether the grants have strong anti-poverty impacts. Table 3.9 shows the percentage of households that report that social grants are their main source of income. Prior to the introduction of the Child Support Grant, the major sources of grant income were the Old Age Pension and the Disability Grant. Because the value of these grants is large, access to either of these grants was sufficient to raise the per capita income of all but the largest households out of the bottom quintile. Consequently, in the 2002 data it can be observed that grants were twice as likely to be the main source of income in the second and third quintile than in the bottom quintile. By 2005, however, the Child Support Grant (of much lower monetary value than the Old Age Pension or Disability Grant) was reaching more than 5.5 million children in about 3.5 million households. In spite of the low value of this new grant, by 2005 we observe a substantial number of households in the bottom decile reporting some form of grant income as their main source of income.

161. The rapid roll-out of the Child Support Grant from 2000 onwards is clearly discerned in Table 3.10. Whereas in 1997 just under one-third of households were receiving a grant, by 2007 this proportion had risen to about one-half. Most significantly, the percentage of households in the bottom quintile with

access to social assistance rose from 16% to 69% between 1997 and 2006. (It should be noted that the 2007 data from which the quintiles are constructed is cruder than in previous years and thus the 2007 data is not strictly comparable with the earlier years).

Table 3.9: Percentage of households reporting grants as their main source of income, by quintile

Quintile	2002	2003	2004	2005	2006
1	16.1	16.9	21.4	39.6	47.7
2	31.4	36.1	44.0	49.5	51.0
3	31.1	34.0	42.2	38.1	34.5
4	18.1	19.5	16.7	14.3	16.0
5	4.4	4.2	3.5	2.8	2.5
Total	18.2	19.6	21.5	28.9	30.4

Source: Own calculations using 2002, 2003, 2004, 2005 and 2006 General Household Surveys, Statistics South Africa

Table 3.10: Percentage of households reporting any income from grants

Quintile	1997	2002	2003	2004	2005	2006
1	15.9	32.0	31.7	40.2	47.7	69.4
2	54.0	55.8	50.9	71.2	73.3	69.9
3	46.7	51.6	53.2	67.1	69.1	69.4
4	33.8	33.2	34.8	35.8	40.1	45.4
5	14.0	11.3	7.9	8.8	10.0	12.0
Total	32.9	36.8	32.0	38.6	45.5	55.2

Source: Own calculations using 1997 October Household Survey and 2002, 2003, 2004, 2005 and 2006 General Household Surveys, Statistics South Africa

162. Table 3.11 looks at the percentage of households in each income quintile that received income from specific social grants in 2008. More than half of households in the bottom quintile receive some income from the Child Support Grant, in comparison with only 9% of households in the top quintile. In keeping with the earlier finding that the size of the Old Age Pension is sufficient to lift many households out of the poorest quintile, households receiving the Old Age Pension are more likely to be in the second and third quintile rather than the very poorest quintile.

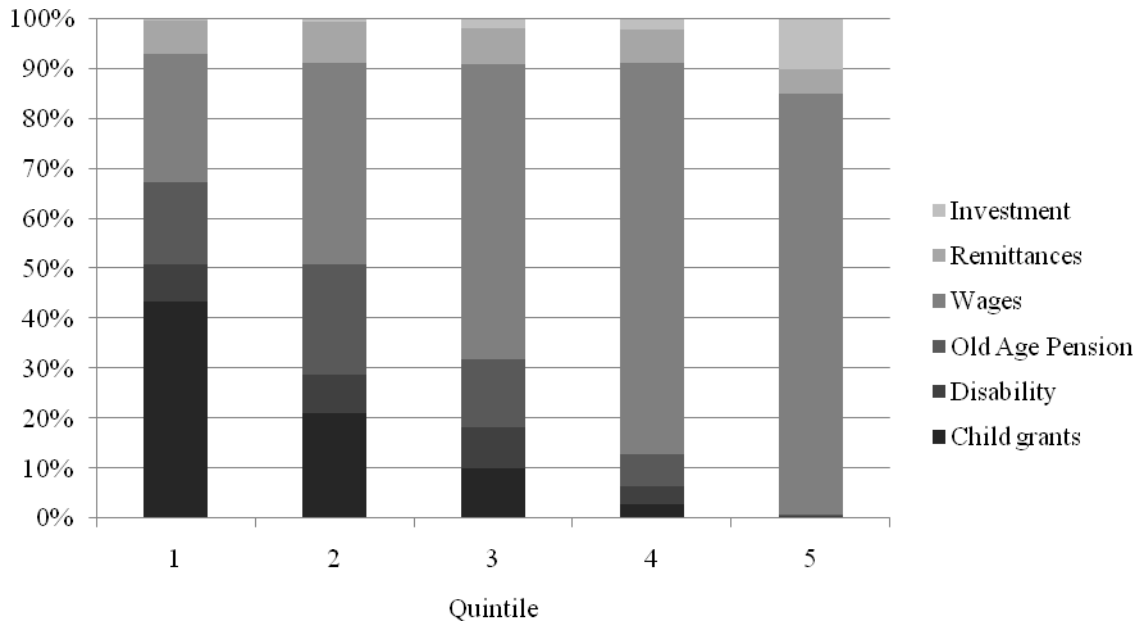
Table 3.11: Percentage of households reporting income from social grants, by quintile

Quintile	% reporting any income from Child Grants	% reporting any income from Disability Grant	% reporting any income from Old Age Pension
1	55.8%	5.7%	9.8%
2	57.9%	10.9%	27.1%
3	45.4%	14.7%	23.5%
4	26.5%	9.9%	17.7%
5	9.0%	2.8%	5.0%
All	33.6%	8.2%	15.3%

Source: NIDS, 2008

163. In Figure 3.10 we disaggregate household income sources by income quintile in order to highlight the role of social assistance grants in providing income support to the poorest households. It is striking that fully two-thirds of income to the bottom quintile comes from social assistance grants, with most of this income coming from child grants (Child Support Grant, Foster Care Grant and Care Dependency Grant combined). As households move up the income distribution, labour market income becomes increasingly important and reliance on social assistance is commensurately reduced.

Figure 3.10: Sources of cash income, by quintile



Source: NIDS, 2008

3.4 The impact of social assistance grants on education, health and labour supply

164. A number of studies have pointed to the importance of the grants beyond the direct monetary impact they have on poorer households. In this section we briefly review some of this evidence.

3.4.1 Impact on education

165. In a relatively early paper which described the functioning of the social welfare system in South Africa and the various homelands that existed at that time, Lund (1993) notes that the Old Age Pension was generally regarded as a household resource in the three-generational households that were common in rural areas. Pensions were thus reported to be used for educational expenses, among others. May *et al.* (1998), reporting on the findings of South Africa's participatory poverty assessment (PPA), found that the Pension was reported to be an important source of support for grandchildren, many of whom were living apart from their parents. Case and Deaton (1996), using data from the 1993 PSLSD, find that households with elderly members tend to spend less on transport and more on schooling than other households.

166. Samson *et al.* (2001) have as their primary focus the relationship between social security and school enrolment among children of school-going age. The paper argues that pension income can increase school enrolments in two ways. The first is by assisting with covering school-related costs. The second is by reducing the opportunity cost of having the child in school instead of contributing to household income

through child labour. The authors find a positive and statistically significant effect of the Old Age Pension on school attendance rates, especially for girls.

167. Case & Ardington (2006) investigate whether having a pensioner in the household reduces the negative impact of maternal orphanhood on schooling. They find that having a female pensioner mitigates the impact in respect of enrolment and progression, but does not do so in respect of school-related expenses. Having a male pensioner in the household has a significant negative effect on progression, and a negative, but not significant, effect on enrolment and school-related expenditure.

168. Case *et al.* (2005) use data collected through the longitudinal demographic surveillance system (DSS) of the Africa Centre for Health and Population Studies in the Umkhanyakude District of KwaZulu-Natal. Receipt of the Child Support Grant was found to result in an 8.1 percentage point increase in school enrolment among 6-year olds, and a 1.8 percentage point increase among 7 year olds. The authors suggest several possible reasons for this pattern. Firstly, the Child Support Grant may improve children's health and nutrition, and thus school-readiness. Secondly, the Child Support Grant, by increasing income, might allow the household to afford fees, uniform and other school-related expenses. Thirdly, it is possible that caregivers who are eager enough to apply for the Child Support Grant might also be those most eager to enrol their children in school (c.f. Agüero *et al.*, 2008). Case and Ardington test this possibility by using older maternal siblings as a control group. They find that these children are less likely than average to be enrolled, thus contradicting the hypothesis that higher enrolment simply reflects more eager (or "efficient") mothers.

169. Boler & Timaeus (2006) find that the Child Support Grant helps to mitigate the negative educational impact of orphanhood on older children (those aged 13-16) despite the fact that the grant was only available to children under ten years at the time their survey data was collected.

170. Hamoudi & Thomas' (2005) use the 1998 Demographic and Health Survey to examine the impact of the pension on educational attainment of children. They look at children aged 6-19, and estimate total years of schooling based on current or last grade. They find that pension income has a greater beneficial impact on girls' education than boys' education. This accords with results of earlier analyses (such as Duflo, 2000), but adds the nuance that for older children (aged 13-19), a male pension tends to increase education among boys and decrease education among girls, whereas a female pension has little effect on either. Among younger children (aged 6-12), female pension has a positive effect on girls and negative or zero effect on boys. Further analysis shows that overall boys aged 6-15 who are co-resident with their mothers are further ahead in school than those who are not. However, boys living in Pension-recipient households are likely to have gone less far in education if they are co-resident with mothers. The same pattern is found among girls, although not as marked. The authors then explore these patterns further using KwaZulu-Natal Income Dynamics Study (KIDS) data from 1993 and 1998. They find that, after controlling for age and sex, children aged 6-19 in 1993 who five years later were co-resident with a pension-eligible individual already in 1993 had a quarter of a year more schooling, on average, than those who would not be co-resident.

3.4.2 Impact on health

171. There are several studies which focus on the health impact of grants. Case (2001a) investigates the impact of Old Age Pensions on health status. Her analysis is based on a 1999 stratified random sample of 300 households in the Langeberg health district of the Western Cape. This district includes a mix of African, white and coloured households. The study finds that Old Age Pension income is pooled in 84% of households. Where income is not pooled, beneficial health impacts are experienced only by the pensioner. Where income is pooled, children's height is found to increase, suggesting a beneficial impact beyond the

pensioner. The study suggests that this impact works partly through improved sanitation, partly through improved nutritional status, and partly through reduction in psychosocial stress.

172. Case (2001b) - based on the same dataset - finds that the presence of a pensioner is associated with an increase of about five centimetres of children's height for age after controlling for a range of household and individual factors. This is equivalent to about half a year's growth for children aged zero to six.

173. Duflo (2000) examines the extent to which allocating resources to women rather than to men affects the distributional outcome and, in particular, investments in children. Her study uses the 1993 PSLSD data, and focuses on children aged 6-60 months. More than a quarter of African children of this age are found to live in the same household as an Old Age Pension recipient. The impact on children is measured through weight for height and height for age. The presence of a female pensioner results in an increase of both weight-for-age and health-for-age z-scores for girls but not for boys. There is also no significant effect on either girls or boys of having a male of eligible age in the household.

174. Agüero *et al.* (2008) use data from the KwaZulu-Natal Income Dynamics Study (KIDS) to test whether receipt of the Child Support Grant during the first 36 months of a child's life has an impact on child health as measured by height-for-age. This variable is considered of interest for its own value and also as a proxy for other positive outcomes for children. The authors find that children who have received the Child Support Grant during the first three years of their life are likely to have significantly higher height-for-age than those who have not.

175. Yamauchi (2005) uses data from all three rounds of the KwaZulu-Natal Income Dynamics Study (KIDS) to explore the effect of early childhood nutrition on schooling inputs and outcomes, using height-for-age z-score from the 1993 and 1998 rounds as a measure of health capital and nutritional status, and schooling decisions and outcome data from the 2004 round. The analysis suggests that an improvement in child health significantly lowers the age for starting school, increases the grade reached, and decreases grade repetition at the early stage of schooling.

3.4.3 Impact on labour force participation

176. Bertrand *et al.* (2000) investigate the impact of the Old Age Pension on the labour supply of other household members. Using the 1993 PSLSD data, the authors find a reduction in working hours of members of working age when another member of the household reaches pensionable age. The reduction is greater when the older person is a woman. Working age women tend to reduce their working hours less than working age men and eldest sons tends to reduce their working hours more than other members.

177. Klasen and Woolard (2009) argue that access to state transfers results in the unemployed basing their location decisions on the availability of economic support rather than on the best location for employment search. Because a lot of economic support (specifically that provided by the elderly) is based in rural areas, this leads to reduced opportunities for job matching.

178. Posel *et al.* (2004) use 1993 PSLSD data to examine the effect of receipt of the Old Age Pension on the labour supply of working-age African adults. Unlike Bertrand *et al.*, they include both resident and non-resident household members in the analysis. This modification brings with it significantly different results. Posel *et al.* use a simple variable of labour market participation rather than hours worked, as the latter information is not available for migrants. Analysis is restricted to rural households. Like Bertrand *et al.*, analysis is restricted to three-generation households. They find that rural African women are significantly more likely to be migrant workers when they are members of a household in receipt of a pension, especially when the pension recipient is female. Labour migrants in age-eligible households are

slightly more likely to be female, to be more educated, and to be older than those in non-age-eligible households. The authors hypothesise that the reasons for the relationship between pension income and migration could be that the pension provides the means to migrate, and/or that the pension provides the means for the older person to care for the child/children of the migrant.

3.5 Policy simulation exercise

179. For the purposes of the simulation exercise, we use the NIDS micro-data to generate a simple microsimulation model of the two biggest grants, *i.e.* the Old Age Pension and the Child Support Grant. We focus exclusively on these two grants as these are the only two grants that are specifically aimed at poverty alleviation (albeit for targeted age groups). The other grants – such as the Disability Grant and the Foster Care Grant – are targeted at individuals that have particular circumstances that extend beyond poverty. In addition, only the Old Age Pension and Child Support Grant can easily be modelled as the eligibility rules are clearly defined based on age and income criteria that we have available in our survey data.

180. For modelling purposes, we use two poverty lines (the R515 per capita lower line and R949 per capita upper line defined in the previous chapter) to identify the poor *before poverty-alleviating grants*, viz. The Old Age Pension and Child Support Grant. To calculate "before grant" income, we simply subtract the amount of Old Age Pension and Child Support Grant income that was reported by household members. We then simulate the impact of the Child Support Grant and Old Age Pension assuming that all those who are *eligible* for the grants are able to access the grant.

Table 3.12: The poverty reduction effect of the OAP and CSG, using the lower poverty line

Quintile (based on per capita income without OAP and CSG)	% of individuals below lower poverty line (R515 per month) before OAP & CSG	% of individuals below lower poverty line (R515 per month) after OAP & CSG (as reported)	% of individuals below lower poverty line (R515 per month) after OAP & CSG (simulated eligibility)
1	100%	97.0%	96.4%
2	100%	91.7%	89.9%
3	69.6%	51.2%	42.1%
4	0%	0%	0%
5	0%	0%	0%
All	53.9%	48.0%	45.7%

Source: NIDS, 2008

Table 3.13: The poverty reduction effect of the OAP and CSG, using the higher poverty line

Quintile (based on per capita income without of OAP and CSG)	% of individuals below upper poverty line (R949 per month) before OAP & CSG	% of individuals below upper poverty line (R949 per month) after OAP & CSG (as reported)	% of individuals below upper poverty line (R949 per month) after OAP & CSG (simulated eligibility)
1	100%	99.7%	99.5%
2	100%	99.0%	99.0%
3	100%	98.1%	97.4%
4	41.1%	35.5%	31.4%
5	0 %	0%	0%
All	68.2%	66.5%	65.4%

Source: NIDS, 2008

181. It is clear from Tables 3.12 and 3.13 that the simulation results are quite sensitive to the choice of poverty line. At the lower poverty line, income from the OAP and CSG is sufficient to lift even some of the very poorest households (in quintile 1) out of poverty. At the higher poverty line, the modest size of the social grants coupled with the dilution effect of sharing this across large households means that the impact is less marked.

182. These results are broadly consistent with the results reported in Table 2.15 which showed the impact of all grants and not just the Old Age Pension and Child Support Grant as is done here.

183. Not only do the grants have a significant impact on poverty (at the lower poverty line) but they also make a significant impact on inequality. We find that the Gini coefficient on "pre-grant" income is 0.03 higher than when calculated on either reported income or simulated income.

CHAPTER 4: CONCLUSION

184. Chapter 1 began by gathering the evidence to show that the long-run development trajectory in South Africa has been one that has generated a very high-inequality society with a strong racial component to this inequality. The bottom half of the income distribution was reserved for black South Africans and, at any of a wide range of poverty lines, poverty was dominated by black South Africans. Historically this was the result of active racial privileging and discrimination in state policy. Even without the direct racial interventions in the labour market such as the reservation of jobs that took place under Apartheid, the racial biases in determining where people were allowed to live and in the education, health and social services policy matrix would have created a workforce with racially skewed human capital and spatial characteristics. Such spatial and human capital legacies leave a very long-run footprint and these processes are hard to reverse. They should not have been expected to disappear at the dawning of democratic government in South Africa. In Chapter 2, we drew on the large pool of post-1993 survey data up to the just recently released data from 2008 to show that these factors have continued to exert an influence on South Africa's development path. It is not just the case that the 15 years since the democratic transition is not enough time for these factors to work their ways out of South African society: it is a much more dynamic and daunting process than this.

185. While we observe a decline in the importance of between-race inequality, within-race inequality has risen sharply and this has been strong enough to stop South Africa's aggregate inequality from falling. It should be noted that while the between-race component of inequality has fallen, it remains remarkably high by international norms and its decline has slowed since the mid 1990s. Moreover, the bottom deciles of the income distribution and the poverty profile are still dominated by Africans and racial income shares are far from proportionate with population shares. Nonetheless, South Africa's changing population shares imply that a policy focus on race-based redistribution will become increasingly limited in the future as the foundation for further broad-based social development.

186. South Africa has chosen to allocate significant resources to direct redistributive policies with the dual objectives of providing short-term income support to the poor and breaking the intergenerational transmission of poverty by encouraging households to invest in better health, education and nutrition for their children. Chapter 3 sketched out some of the key elements of South Africa's social safety net system, namely the existence of short-term unemployment insurance for those with formal labour market experience; a public works programme that seeks to provide income support and skills development to an increasing proportion of the long-term unemployed who are outside of the contributory unemployment insurance system; and an extensive arrangement of non-contributory social assistance grants that directly benefit more than one-quarter of South Africans. It needs to be emphasized however that the grants are specifically targeted at the elderly, the disabled and children. In our analysis of the Child Support Grant we highlighted the importance of improving the vital registration system in order to get children into payment sooner.

187. Most of the unemployed are unable to access unemployment benefits but are not provided for in the social assistance system which remains premised on the notion that unemployment is a temporary condition. Consequently there are many that argue that the social grant system should be extended to focus directly on the unemployed. While strong economic growth supported the growth in the grants in the first fifteen years of democracy, we would argue that it is imprudent to argue for permanent income support for the unemployed. Many of the unemployed are young school leavers and while they clearly need some sort

of social safety net or temporary social insurance, the longer term goal has to be directed at assimilation into the labour market. In section 3.4 of this chapter, we presented a brief review of the body of literature which shows that the existing grant system seems to be promoting desirable education and health behaviours. This is true even though these grants are unconditional. Yet, the ultimate return to these positive human capital outcomes is an ability to become a productive citizen in the country. Again this turns on a more virtuous interaction with the labour market than we currently witness.

ANNEX I: DESCRIPTION OF DATA

188. Three nationally representative sample surveys were used as the basis for the analysis in this report. These data sets present socio-economic snapshots of South Africa in 1993, 2000 and 2008. In this annex we describe these data sets. This complements the detailed discussion of the comparability of the income from the three data sets that is presented in section 2.1 of the report. The 1993 and 2000 data sets have been publicly available and widely used for a number of years. Therefore, our commentary on these data sets will be very brief. The 2008 data are new, having been released to the public at the end of July 2009. This is the first report to use these data for inequality and poverty comparisons over time. Therefore, our description of this data set is more extensive.

189. There is good baseline information to provide the data for monitoring changes in South Africa since the democratic transition. The empirical analysis in the report utilises a survey undertaken in late 1993 as part of the Project for Statistics on Living Standards and Development (PSLSD) by the Southern Africa Labour and Development Research Unit at the University of Cape Town with technical expertise given by the World Bank. The **1993 PSLSD survey** was intended to give a broad picture of living standards and poverty for the whole of South Africa. It made use of a detailed questionnaire covering various aspects of the household's economic activities and social attributes. Data were collected for 40 284 individuals in 8 848 households in 358 census enumerator districts countrywide. Of these, 73.8 % were classified as African, 7.8% as Coloured, 2.9% as Indian and 1367 13.5% as White. When weighted up to population totals this represents 38 118 616 individuals from 8 530 808 households with the respective racial percentages being 77.0%, 8.1%, 2.6% and 12.3%.

190. These data as well as questionnaires and all supporting documentation are available from http://www.datafirst.uct.ac.za/catalogue/catalog_overview.php?id=zaf-datafirst-pslsd-1993-v2.0

191. The Income and Expenditure Survey is conducted every five years, with the primary purpose of collecting the expenditure data required to calculate the weights for the Consumer Price Index. Data on expenditure on approximately 1000 goods and services is collected, in addition to detailed income data. **The 2000 Income and Expenditure Survey (IES)** was conducted concurrently with the September 2000 Labour Force Survey (LFS). The same sample was used for both surveys. The two surveys can thus be linked, thereby creating an extremely rich data-set. Ten dwelling units were sampled in each of 3000 Primary Sampling Units (usually an EA or a combination of EAs if the EA was too small). Out of this sample of 30 000 households, 26 265 households participated in the 2000 IES. There are some difficulties with this data-set (see Simkins, 2005). The data is available on request from Statistics South Africa (www.statssa.gov.za).

192. The analysis of the IES used in this report reflects data from 101 679 100 individuals in 25 973 households and from 2 959 census enumerator districts countrywide. Of these, 81.2 % were classified as African, 11.1% as Coloured, 2.0% as Indian and 5.7% as White. When weighted up to population totals this represents 42 237 374 individuals from 104 182 89 households with the respective racial percentages being 79.3%, 9.1%, 2.6% and 9.0%.

193. The **2008 National Income Dynamics Study (NIDS)** is the first national panel study of individuals of all ages in South Africa. Sampling was undertaken by Statistics South Africa. A two-stage cluster sample design was employed in drawing the sample. The target population for NIDS was private households in all nine provinces of South Africa, and residents in workers' hostels, convents and monasteries. In order to get a nationally representative sample for NIDS from the Master Sample of PSUs, the sample was allocated to the provinces with probability proportional to size. This allocation was applied to ensure that the sample was spread throughout the country and not concentrated in some provinces.

194. The fieldwork for Wave 1 commenced in the last week of January 2008 and ended in July 2008. Response rates at the end of this phase were disappointing, especially in traditionally high income areas. Given the importance of including households from across the income distribution in the base wave, it was decided to embark on additional fieldwork. The second phase was conducted from September 2008 until early December 2008.

195. In the combined Phase 1 and Phase 2 samples from Wave 1, 10368 dwellings were selected to be approached to take part in NIDS. Of those dwelling units, 491 (4.5%) were found to be multi-household dwellings. Of the 10859 eligible households, 7 305 agreed to participate. Within the participating households, 31 170 individuals were identified as household members. However, 2915 people were not resident members and were thus excluded from the study. All these sample members, including children, are continuing sample members and will be re-interviewed in 2010 and in subsequent waves. After the fieldwork, the NIDS sample weights were adjusted to reflect the age-sex-race and provincial distributions of the 2008 mid-year population estimates produced by Stats SA.

196. In sum then, the 2008 wave of the NIDS survey provides the baseline information on the wellbeing of 28 255 sample members in 7 305 households from 400 census enumeration districts. Of these 78.6% were classified as African, 14.8% as Coloured, 1.6% as Asian/Indian and 5.1% as white. When weighted up to population totals this represents 48 442 116 individuals from 13 722 918 households with the respective racial percentages being 79.4%, 8.9%, 2.6% and 9.1%.

197. The NIDS data as well as questionnaires and all supporting documentation are available off the NIDS website (http://www.nids.uct.ac.za/home/). A detailed description of the process of questionnaire design, sampling, fieldwork and data cleaning is provided in Leibbrandt, Woolard and De Villiers (2009). The technical details with regard to the derivation of the weights are provided in Wittenberg (2009).

198. A full description of the derivation of household per capita income variable is given in Argent (2009). This technical paper includes an analysis of response rates on income questions that, generally, records very low non-response. It then goes on to describe the methods used to impute missing individual incomes in order to aggregate individual incomes into total household income. Section 7 of Finn *et al.* (2009) compares this derived household per capita income variable to the equivalent derived household expenditure variable. A close correlation between income and expenditure is reported with household income generally exceeding household expenditure. Figure 3 of Finn, Leibbrandt and Woolard (2009) compares income and expenditure shares across population deciles and shows a near identical inequality picture.

199. A common criticism of existing South African datasets is that they do not include enough detail across multiple areas of interest to allow for certain types of analysis. For example, those with detailed information on labour do not include enough detail on income, or health, or education for some types of analysis to be possible. Since the linkages between these topics have proven to be important, a particular strength of the 2008 NIDS dataset is that it includes detailed information across many different areas. For example, information was collected on:

- Income and expenditures of the household and the individuals in the household;
- The assets owned by the household and the services to which the household has access;
- The level of education and health status of household members;
- Whether household members are still in school, working, looking for work or helping at home or retired; and
- The community groups to which members of the household belong, whether household members would like to remain within their current communities and how well-off they are relative to others in their community.

200. As the panel unfolds, it will reveal the dynamic structure of households in South Africa, and changes in the living conditions and well-being of household members. However, in this report, the NIDS data are used to provide a nationally representative picture of contemporary South Africa.

ANNEX II: A DECOMPOSITION OF HOUSEHOLD LABOUR MARKET INCOME

201. In order to better understand the mechanism whereby employment affects inequality, Leibbrandt, Woolard and Woolard (2009) make use of a decomposition technique to unpack the earned (*i.e.* wage and self-employment) income component of household income. They begin by recognizing that household labour market income depends on three factors, namely, the number of "potential workers" (that is, household members of working age), the number of household members that are actually employed and the earnings of these workers. They slightly modify Glewwe (1986) in order to decompose the log-variance of household labour market earnings into these three components:

$$\frac{W}{hhsize} = \frac{L_p}{hhsize} \bullet \frac{L_w}{L_p} \bullet \frac{W}{L_w}$$

where W is labour market income from both wage and self-employment (for simplicity we call it merely 'wage income'), *hhsize* is household size, L_p is the potential number of workers (defined here as the number of persons aged 15-64) and L_W is the number of people actually employed.

202. Taking the natural logarithm of both sides of the equation above and calculating the variance gives:

$$\mathrm{var}\left[\ln\left(\frac{W}{hhsize}\right)\right] = \mathrm{var}\left[\ln\left(\frac{L_p}{hhsize}\right)\right] + \mathrm{var}\left[\ln\left(\frac{L_w}{L_p}\right)\right] + \mathrm{var}\left[\ln\left(\frac{W}{L_w}\right)\right] + 2\times\mathrm{cov}\left[\ln\left(\frac{L_p}{hhsize}\right), \ln\left(\frac{L_w}{L_P}\right)\right]$$
$$+ 2\times\mathrm{cov}\left[\ln\left(\frac{L_p}{hhsize}\right), \ln\left(\frac{W}{L_w}\right)\right] + 2\times\mathrm{cov}\left[\ln\left(\frac{L_w}{L_P}\right), \ln\left(\frac{W}{L_w}\right)\right]$$

203. The contribution of each of the first three terms on the right-hand-side can be thought of as the contribution of household composition (the number of persons of working age), access to employment and wage inequality, respectively.

204. Table A.1.5 reveals that most of the inequality in shared household earnings is the result of unequal wage incomes, rather than the fraction of household members that are of working age or who are actually working. Nevertheless, joblessness has a significant effect on household wage inequality. This is particularly true in African households.

Table A.2.1: Decomposition of shared household earnings

	Variances			Covariances		
	$\ln\left(\frac{L_p}{hhsize}\right)$	$\ln\left(\frac{L_w}{L_p}\right)$	$\ln\left(\frac{W}{L_W}\right)$	$\left[\ln\left(\frac{L_p}{hhsize}\right),\ln\left(\frac{L_W}{L_P}\right)\right]$	$\left[\ln\left(\frac{L_p}{hhsize}\right),\ln\left(\frac{W}{L_W}\right)\right]$	$\left[\ln\left(\frac{L_W}{L_P}\right),\ln\left(\frac{W}{L_W}\right)\right]$
All Households	7.4%	12.6%	69.4%	2.4%	4.4%	3.6%
White Households	9.5%	12.6%	90.7%	-1.2%	-1.6%	-10.0%
African Households	8.7%	15.0%	64.8%	3.8%	5.2%	2.6%

Source: Own calculations based on September 2006 Labour Force Survey, Statistics South Africa. The percentage contribution to earnings inequality is shown in parentheses.

ANNEX III: ADDITIONAL TABLES AND FIGURES

Table A.3.1: Variables in the 2008 data

Variable	Explanation	Inclusion	Category
w1_fwag	Main and secondary job	yes	wages
w1_cwag	Casual wages	yes	wages
w1_swag	Self employment income	yes	wages
w1_cheq	13th Cheque	yes	wages
w1_bonu	Other bonus	yes	wages
w1_prof	Profit share	yes	wages
w1_help	'Helping friends' income	yes	wages
w1_extra	Extra piece-rate income	yes	wages
w1_spen	Old age pension	yes	government
w1_dis	Disability grant	yes	government
w1_chld	Child grant	yes	government
w1_fost	Foster care grant	yes	government
w1_care	Care dependency grant	yes	government
w1_uif	UIF income	yes	government
w1_comp	Workmen's compensation	yes	government
w1_indi	Interest/dividend income	yes	capital
w1_rnt	Rental income	yes	capital
w1_ppen	Private pensions and annuities	yes	capital
w1_inhe	Inheritance	no	
w1_retr	Retrenchment payments	no	
w1_brid	Lobola/bride wealth payments	no	
w1_gift	Gift income	no	
w1_loan	Repayment of loans	no	
w1_sale	Sale of household goods	no	
w1_othe	Other income	no	
w1_remt	Inter-household remittances	yes	remitt

Variables in the 2000 data

Variable	Explanation	Inclusion	Category
	ALL regular income (P2401Q)*		
P2401Q0101	Salaries and wages	Yes	wages
P2401Q0102	Bonuses and income	Yes	wages
P2401Q0103	Commission and director's fees	Yes	wages
P2401Q0104	Part-time work and cash allowances	Yes	wages
P2401Q02	Net profit	Yes	wages
P2401Q0301	Net income from letting of fixed property	Yes	capital
P2401Q0302	Other	Yes	other
P2401Q04	Royalties	Yes	capital
P2401Q05	Interest received	Yes	capital
P2401Q06	Dividends on shares	Yes	capital
P2401Q0701	Pension resulting from your employment	Yes	capital
P2401Q0702	Annuity and similar recurring receipts	Yes	capital
P2401Q070301	Social pension or allowances	Yes	government
P2401Q070302	Disability grants	Yes	government
P2401Q070303	Family and other allowances	Yes	government
P2401Q0704	From the workmen's compensation	Yes	government
P2401Q08	Alimony, maintenance and similar allowances	Yes	remitt
P2401Q09	Regular allowances from family members	Yes	remitt
	Other income (P2402Q)*		
P2402Q01	Net from hobbies, side-lines, part-time activities	Yes	wages
P2402Q0201	Sale of vehicles	No	
P2402Q0202	Sale of fixed property	No	
P2402Q0203)	Sale of other personal property, second hand goods	No	
P2402Q03	Payments from boarders and other hh members	Yes	other
P2402Q0401	Housing from empl (incl subsidy, red rent, red int)	Yes	wages
P2402Q0402	Transport from empl (incl red train/air fares...)	Yes	wages
P2402Q0403	Empl contrib - pension, provident, medical, annuity	No	
P2402Q0404	Other from empl	Yes	wages
P2402Q0501	Lump sums before retirement	No	
P2402Q0502	Endowment policies and other similar lump sums	No	
P2402Q0503	Lump sums from workmens compensation, UIF	No	
P2402Q0504	Life insure and inheritances received	No	
P2402Q0601	Funeral funds	No	
P2402Q0602	Damage to fixed property	No	
P2402Q0603	Road traffic collisions	No	
P2402Q0604	Other gratuities	No	
P2402Q07	Stokvel	No	
P2402Q0801	Withdrawal from savings	No	
P2402Q0802	Non-refundable bursaries	Yes*	other

P2402Q0803	Benefits, donations from welfare funds, the govt	No	
P2402Q0804	Cash (including bonuses from buying associations)	No	
P2402Q0805	Value of food received	Yes	remitt
P2402Q0806	Value of housing (other than employer)	Yes	remitt
P2402Q0807	Value of clothing (other than employer)	Yes	remitt
P2402Q0808)	Other benefits, donations, gifts etc	No	
P2402Q09	Lobola/dowry	No	
P2402Q10	All other income (e.g. From gambling, lotto…)	No	
P2402Q11	All other income not elsewhere specified	No	

Variables in the 1993 data

Variable	Explanation	Inclusion	Category
imprent	Implied rental income	no	
farmrent	Renting out farm land	yes	capital
liverent	Renting out grazing land for livestock	yes	capital
rentinc	Rental income	yes	capital
totm_rec	Remittance income	yes	remitt
hhnwage	Net wage income	yes	wages
travwage	Travel allowance	yes	wages
foodwage	Food allowance	yes	wages
homewage	Housing allowance	yes	wages
hhc1wage	Casual wage	yes	wages
foodcw1	Casual food allowance	yes	wages
bencw1	Casual benefits	yes	wages
hhc2wage	Casual wage 2	yes	wages
foodcw2	Casual food allowance 2	yes	wages
bencw2	Casual benefits 2	yes	wages
agincome	Agricultural income	no	
agsubsid	Agricultural subsidy	no	
profit31	Self-employment	yes	wages
	Other income (otherinc)		
spen	Old age pension	Yes	govt
ppen	Private pension	Yes	capital
gppen	Govt civil service pen	Yes	capital
dis	Disability grant	Yes	govt
pov	Government poor relief	Yes	govt
comp	Workmen's compensation	Yes	govt
indi	Interest and dividends	Yes	capital
uif	UIF	Yes	govt
ngo	ngo food or meal	Yes	other
ngo2	other ngo transfers	Yes	other
gsfs	govet supplementary food scheme	Yes	govt
othe	Other	Yes	other

Table A.3.2: Income overview

	1993 Income share/Pop. share	2000 Income share/Pop. Share	2008 Income share/Pop. share	1993 Mean	1993 Median	2000 Mean	2000 Median	2008 Mean	2008 Median
African	0.47	0.54	0.56	539	304	762	360	816	367
Coloured	0.92	1.03	0.94	1072	795	1443	816	1381	800
Indian	1.88	1.98	2.90	2148	1430	2625	1536	4288	1860
White	4.06	4.82	4.27	4632	3418	6005	4170	6275	4188
Overall	1	1	1	1147	419	1349	453	1456	450

Table A.3.3: Shares of income by decile

Deciles	1993 Income	2000 Income	2008 Income
1	0.27%	0.44%	0.40%
2	1.03%	1.07%	1.01%
3	1.66%	1.56%	1.52%
4	2.21%	2.15%	2.08%
5	3.15%	2.95%	2.78%
6	4.33%	3.96%	3.65%
7	6.16%	5.61%	5.35%
8	9.61%	8.76%	8.56%
9	17.69%	16.79%	16.57%
10	53.89%	56.71%	58.07%

Table A.3.4: Cumulative shares of income by decile

Deciles	1993 Income	2000 Income	2008 Income
1	0.27	0.44	0.4
2	1.30	1.51	1.41
3	2.96	3.07	2.93
4	5.17	5.22	5.01
5	8.32	8.17	7.79
6	12.65	12.13	11.44
7	18.81	17.74	16.79
8	28.42	26.50	25.35
9	46.11	43.29	41.92
10	100	100	100

Table A.3.5: Shares of income components by decile

			1993		
Income Deciles	% Labour Market	% Remittances	% Capital	% Government	% Other
1	29.57	52.27	1.15	15.02	1.99
2	32.65	31.56	0.24	31.77	3.78
3	39.24	25.70	0.35	31.11	3.61
4	50.03	19.29	0.45	28.28	1.95
5	57.54	13.60	0.86	24.31	3.69
6	71.99	8.98	0.46	16.28	2.29
7	78.41	5.68	0.95	11.70	3.26
8	86.98	3.00	0.77	6.66	2.59
9	91.31	1.56	0.78	2.08	4.28
10	85.03	0.59	4.42	0.50	9.46
			2000		
Income Deciles	% Labour Market	% Remittances	% Capital	% Government	% Other
1	34.90	33.45	1.39	28.92	1.34
2	33.33	27.32	1.78	36.97	0.60
3	36.72	29.07	1.96	31.38	0.87
4	43.97	26.29	1.50	27.16	1.08
5	52.59	24.23	1.56	20.46	1.17
6	60.65	22.60	1.21	13.79	1.75
7	68.24	17.38	1.78	10.54	2.07
8	77.52	12.73	2.21	5.54	2.00
9	84.71	6.04	3.97	3.09	2.19
10	90.33	1.72	5.51	1.23	1.21
			2008		
Income Deciles	% Labour Market	% Remittances	% Capital	% Government	% Other
1	18.75	8.14	0.29	72.70	0.10
2	27.61	7.99	0.52	63.88	0.00
3	33.31	7.41	0.32	57.31	1.65
4	42.00	8.20	0.75	48.37	0.68
5	51.40	8.26	1.83	38.23	0.28
6	59.63	7.22	1.31	31.54	0.29
7	69.57	4.42	2.39	23.26	0.36
8	82.77	7.13	2.57	6.79	0.74
9	87.26	3.60	6.34	2.62	0.18
10	82.97	5.26	11.00	0.41	0.36

Table A.3.6: Household structure by decile - no zero incomes

				NIDS			
	Number of adults		Children present		Number of workers		
Decile	Single	Two+	None	One+	None	One	Two+
1	32.80%	67.20%	14.38%	85.62%	72.19%	23.16%	4.65%
2	31.29%	68.71%	11.18%	88.82%	57.60%	34.60%	7.80%
3	28.60%	71.40%	19.18%	80.82%	51.33%	34.75%	13.93%
4	24.05%	75.95%	22.13%	77.87%	42.80%	44.10%	13.09%
5	19.27%	80.73%	21.79%	78.21%	38.72%	45.40%	15.88%
6	25.73%	74.27%	34.06%	65.94%	34.31%	44.63%	21.06%
7	33.73%	66.27%	54.05%	45.95%	30.81%	44.53%	24.67%
8	36.07%	63.93%	56.19%	43.81%	10.99%	62.62%	26.38%
9	39.48%	60.52%	60.23%	39.77%	12.18%	60.68%	27.14%
10	41.19%	58.81%	67.77%	32.23%	9.99%	57.02%	32.99%
				IES/LFS			
	Number of adults		Children present		Number of workers		
Decile	Single	Two+	None	One+	None	One	Two+
1	24.93%	75.07%	14.63%	85.37%	48.65%	36.71%	14.65%
2	19.92%	80.08%	12.36%	87.64%	48.41%	35.54%	16.05%
3	21.44%	78.56%	14.86%	85.14%	46.65%	35.55%	17.80%
4	22.73%	77.27%	19.15%	80.85%	40.84%	39.87%	19.29%
5	24.39%	75.61%	27.28%	72.72%	35.83%	42.28%	21.88%
6	28.10%	71.90%	36.43%	63.57%	25.92%	49.95%	24.13%
7	33.93%	66.07%	47.06%	52.94%	27.20%	49.26%	23.54%
8	34.04%	65.96%	53.00%	47.00%	15.37%	56.35%	28.28%
9	37.84%	62.16%	58.55%	41.45%	11.79%	56.54%	31.67%
10	35.74%	64.26%	65.05%	34.95%	9.33%	47.54%	43.13%
				SALDRU			
	Number of adults		Children present		Number of workers		
Decile	Single	Two+	None	One+	None	One	Two+
1	22.36%	77.64%	9.08%	90.92%	65.83%	28.38%	5.79%
2	17.89%	82.11%	5.64%	94.36%	56.87%	32.60%	10.53%
3	15.36%	84.64%	7.11%	92.89%	46.41%	36.74%	16.85%
4	15.37%	84.63%	11.00%	89.00%	39.25%	41.96%	18.80%
5	17.15%	82.85%	16.43%	83.57%	32.72%	44.42%	22.86%
6	16.19%	83.81%	22.85%	77.15%	23.79%	47.82%	28.38%
7	18.64%	81.36%	30.71%	69.29%	16.49%	52.74%	30.77%
8	25.41%	74.59%	45.08%	54.92%	11.88%	53.81%	34.31%
9	35.68%	64.32%	57.35%	42.65%	5.59%	57.42%	36.98%
10	29.88%	70.12%	68.58%	31.42%	7.73%	41.14%	51.12%

Table A.3.7: Age of household head by decile - no zero incomes

	1993		2000		2008	
Decile	Mean	Median	Mean	Median	Mean	Median
1	0.48	0.49	0.46	0.45	0.43	0.42
2	0.51	0.50	0.49	0.48	0.46	0.44
3	0.51	0.50	0.49	0.47	0.48	0.48
4	0.53	0.53	0.49	0.47	0.48	0.47
5	0.50	0.49	0.47	0.45	0.49	0.47
6	0.50	0.49	0.45	0.42	0.46	0.45
7	0.48	0.45	0.46	0.43	0.48	0.47
8	0.46	0.43	0.43	0.40	0.41	0.37
9	0.42	0.39	0.43	0.40	0.42	0.38
10	0.43	0.40	0.43	0.41	0.45	0.43

Table A.3.8: Disparity indices

1993		2000		2008	
90/10 ratio	90/50 ratio	90/10 ratio	90/50 ratio	90/10 ratio	90/50 ratio
28.929	6.696	27.152	7.052	29.306	7.612

Table A.3.9: Generalised entropy measures of inequality

	1993 GE(0)	2000 GE(0)	2008 GE(0)	1993 GE(1)	2000 GE(1)	2008 GE(1)
Overall	0.91	0.93	1.00	0.91	1.00	1.03
African	0.57	0.68	0.75	0.56	0.79	0.82
Coloured	0.36	0.52	0.53	0.34	0.52	0.57
Asian/Indian	0.42	0.47	0.75	0.49	0.50	0.70
White	0.35	0.43	0.47	0.37	0.43	0.44
Within	0.52	0.64	0.70	0.44	0.60	0.64
	57.33%	68.35%	70.06%	48.17%	60.47%	61.91%
Between	0.39	0.30	0.30	0.47	0.40	0.39
	42.67%	31.65%	29.94%	51.83%	39.53%	38.09%

Table A.3.10: Measured "between inequality" as a % of maximum possible

1993 GE(0)	2000 GE(0)	2008 GE(0)	1993 GE(1)	2000 GE(1)	2008 GE(1)
62.16%	44.68%	42.89%	68.61%	50.34%	47.80%

Table A.3.11: Poverty under different poverty lines using the NIDS 2008 data

Poverty line = Upper (R949/month)	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.80	0.52	0.38	0.90	0.92	0.93
Coloured	0.09	0.57	0.30	0.19	0.07	0.06	0.05
Indian/Asian	0.03	0.31	0.14	0.09	0.01	0.01	0.01
White	0.09	0.10	0.04	0.02	0.01	0.01	0.01
TOTAL		0.70	0.44	0.32			
Poverty line = Lower (R515/month)	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.64	0.34	0.22	0.93	0.94	0.95
Coloured	0.09	0.37	0.15	0.08	0.06	0.05	0.04
Indian/Asian	0.03	0.17	0.07	0.03	0.01	0.01	0.00
White	0.09	0.03	0.02	0.01	0.01	0.00	0.01
TOTAL		0.54	0.28	0.19			
Poverty line = $1/day (R130/month)	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.16	0.07	0.05	0.97	0.96	0.95
Coloured	0.09	0.03	0.02	0.01	0.02	0.02	0.03
Indian/Asian	0.03	0.02	0.00	0.00	0.00	0.00	0.00
White	0.09	0.01	0.01	0.01	0.01	0.01	0.02
TOTAL		0.13	0.06	0.04			
Poverty line = $1.25/day (R163/month)	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.21	0.09	0.06	0.96	0.96	0.96
Coloured	0.09	0.06	0.02	0.01	0.03	0.02	0.03
Indian/Asian	0.03	0.02	0.01	0.00	0.00	0.00	0.00
White	0.09	0.01	0.01	0.01	0.01	0.01	0.01
TOTAL		0.18	0.08	0.05			
Poverty line = $2/day (R260/month)	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.36	0.17	0.10	0.95	0.96	0.96
Coloured	0.09	0.12	0.04	0.03	0.04	0.03	0.03
Indian/Asian	0.03	0.05	0.02	0.01	0.00	0.00	0.00
White	0.09	0.01	0.01	0.01	0.00	0.01	0.01
TOTAL		0.30	0.14	0.08			
Poverty line = $2.5/day (R325/month)	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.45	0.21	0.13	0.94	0.96	0.96
Coloured	0.09	0.20	0.07	0.04	0.05	0.03	0.03
Indian/Asian	0.03	0.11	0.02	0.01	0.01	0.00	0.00
White	0.09	0.02	0.01	0.01	0.00	0.01	0.01
TOTAL		0.38	0.18	0.11			
Poverty line =50% median pcy	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.32	0.15	0.09	0.96	0.96	0.96
Coloured	0.09	0.10	0.04	0.02	0.03	0.03	0.03
Indian/Asian	0.03	0.03	0.01	0.00	0.00	0.00	0.00
White	0.09	0.01	0.01	0.01	0.00	0.01	0.01
TOTAL		0.27	0.12	0.07			
Poverty line =40% median pcy	pop	p0	p1	p2	p0share	p1share	p2share
African	0.79	0.20	0.09	0.05	0.97	0.96	0.96
Coloured	0.09	0.04	0.02	0.01	0.02	0.02	0.03
Indian/Asian	0.03	0.02	0.01	0.00	0.00	0.00	0.00
White	0.09	0.01	0.01	0.01	0.01	0.01	0.01
TOTAL		0.16	0.07	0.05			

Figure A.3.1: Overlaid Lorenz curves

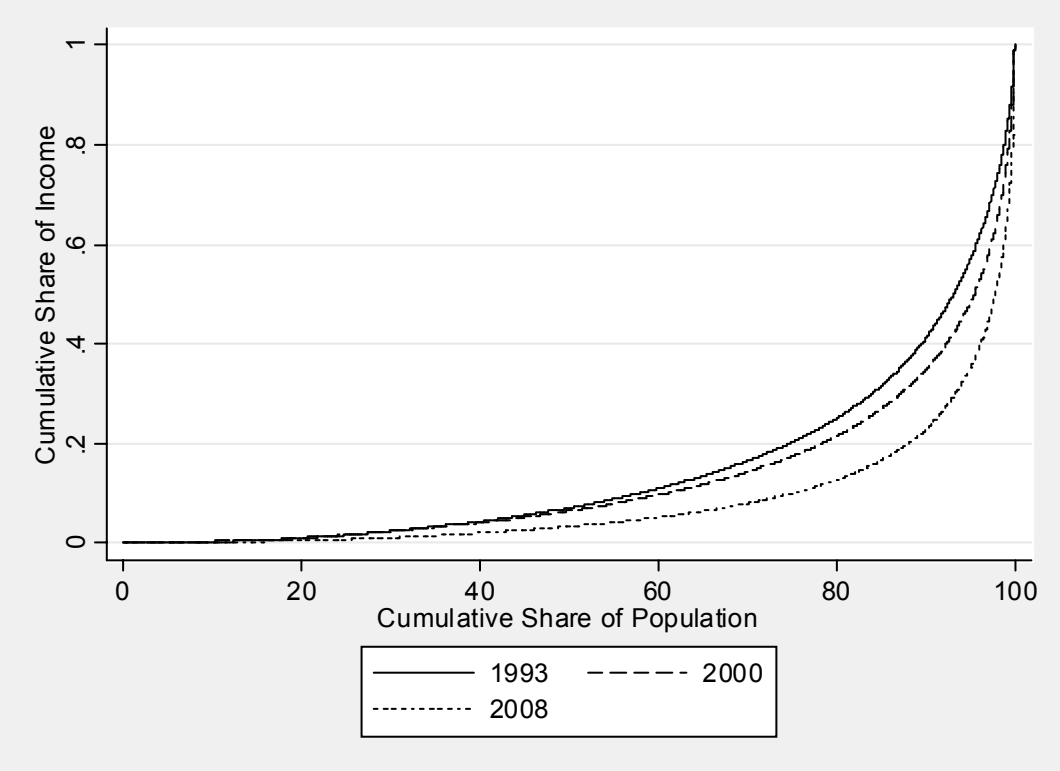


Figure A.3.2: CDF's from 1993-2008, without zero incomes

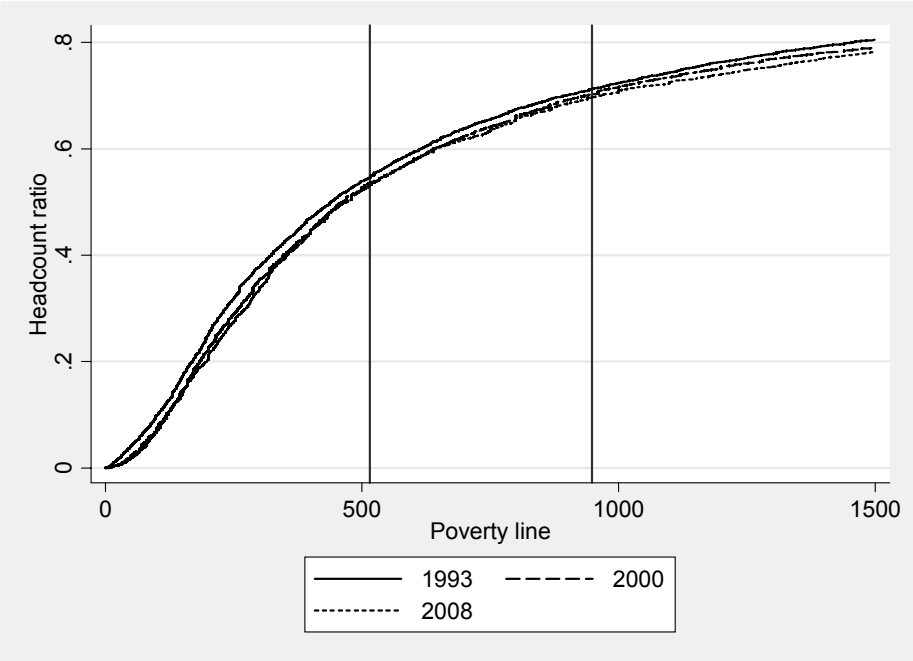


Figure A.3.3: CDF's from 1993-2008, without zero incomes

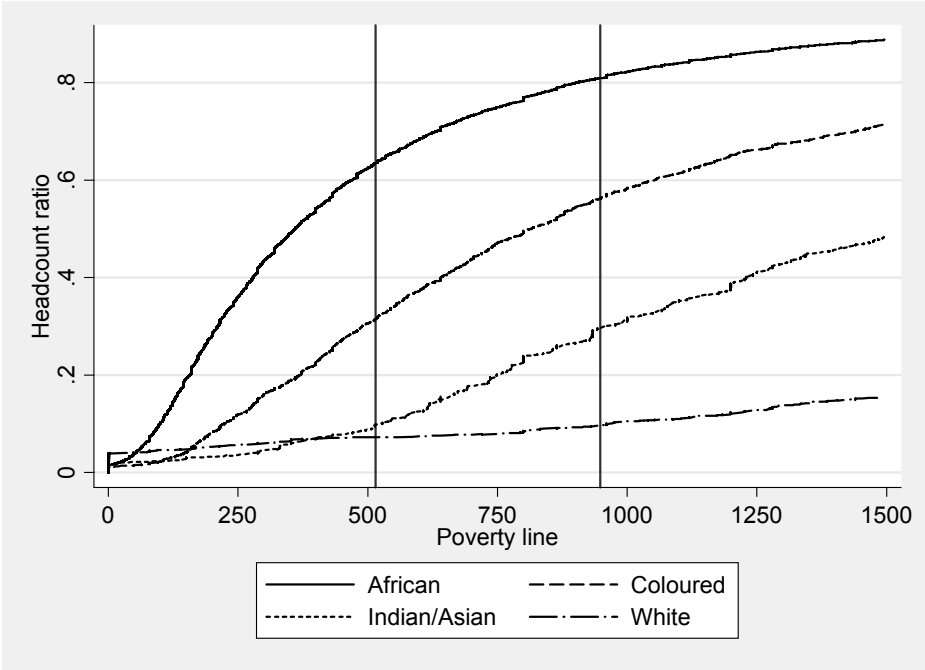


Figure A.3.4: CDF's by racial groups in 1993

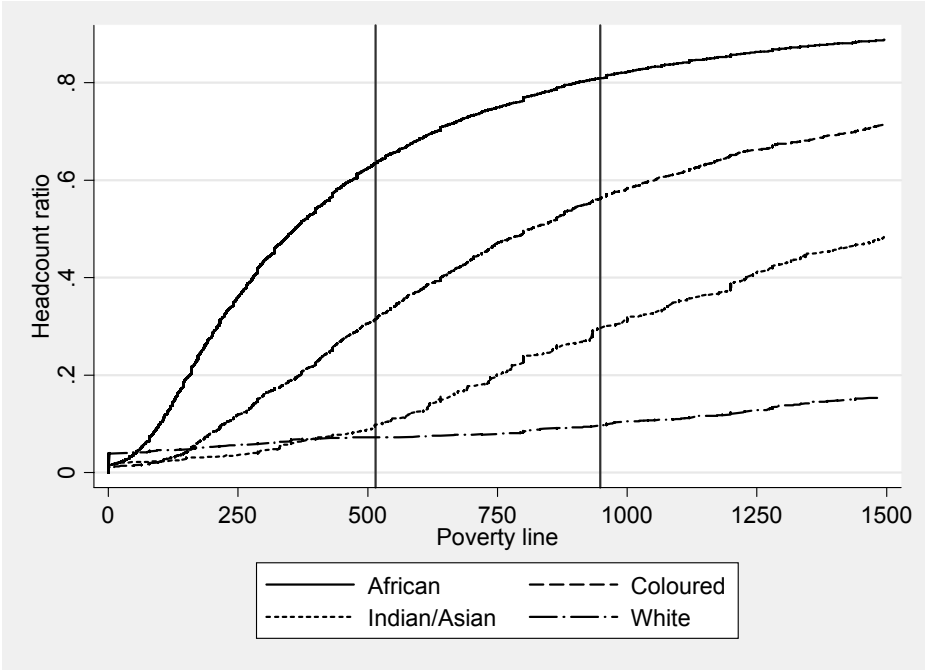


Figure A.3.5: CDF's by geotype in 2000

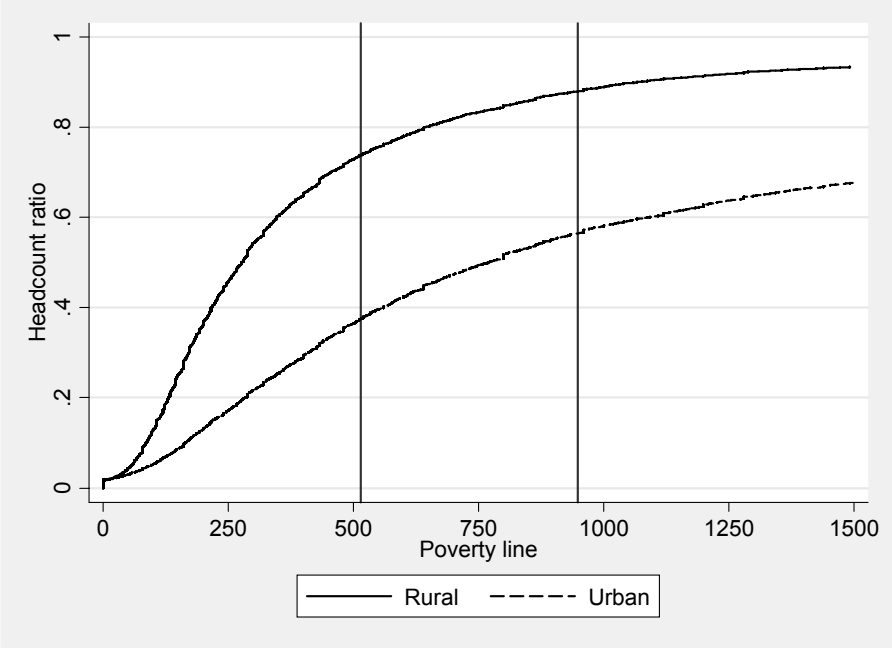
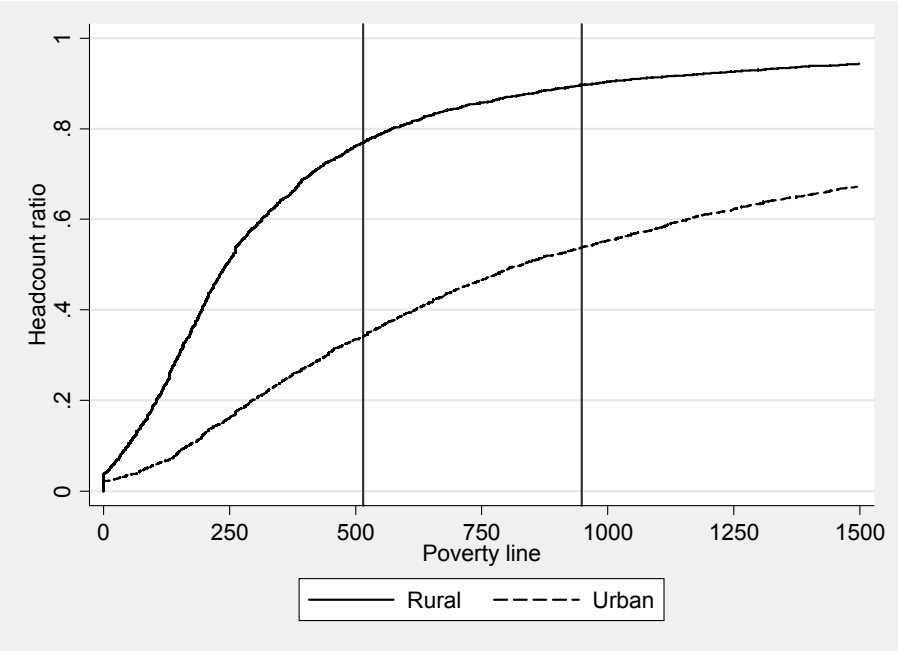


Figure A.3.6: CDF's by geotype in 1993



REFERENCES

Agüero, J., M. Carter and I. Woolard (2008), "Do Unconditional Cash Transfers Enhance Human Capital Accumulation? Analysis of the South African Child Support Grant", Working Paper, School of Development Studies, University of KwaZulu-Natal.

Argent, J. (2009), "Household Income: Report on NIDS Wave 1", *National Income Dynamics Technical Report*, No. 3, SALDRU. (at http://www.nids.uct.ac.za/home/index.php?/Nids-Documentation/technical-papers.html)

Bertrand M., S. Mullainathan and D. Miller (2000), "Public Policy and Extended Families: Evidence from South Africa", *NBER Working Paper* 7594.

Bhorat, H. and C. van der Westhuizen (2009), "Economic Growth, Poverty and Inequality in South Africa: The First Decade of Democracy", unpublished paper.

Bhorat, H., C. van der Westhuizen and A. Cassim (2009), "Findings from NIDS 2008: Access to Household Services and Assets", *NIDS Discussion Paper* No. 4, SALDRU.

Bhorat, H., M. Leibbrandt and I. Woolard (2000), "Understanding Contemporary Household Inequality in South Africa", *Studies in Economics and Econometrics*, 24(3), 31-52.

Bhorat, H., P. Naidoo and C. van der Westhuizen (2006), "Shifts in Non-income Welfare in South Africa, 1993-2004", DPRU Conference Paper. 18-20 October, Johannesburg.

Boler T. and I. Timæus (2006), "Father Figures: Why Fathers and Cash Grants Matter in Responding to the Impact of AIDS on Education", Centre for Population Studies, London School of Hygiene and Tropical Medicine. Powerpoint presentation.

Budlender, D. and I. Woolard (2006), "The Impact of the South African Child Support and Old Age Grants on Children's Schooling and Work", Study prepared for: International Programme on the Elimination of Child Labour International Labour Office.

Case, A. (2001a), "Health, Income and Economic Development", Annual World Bank Conference on Development Economics 2001/2002: 221-241.

Case, A. (2001b), "Does Money Protect Health Status? Evidence from South African Pensions", *NBER Working Paper* 8495.

Case, A. and A. Deaton (1998), "Large Cash Transfers to the Elderly in South Africa", *NBER Working Paper* 5572, NBER: Cambridge, MA.

Case, A. and C. Ardington (2008), "The Impact of Parental Death on School Enrolment and Achievement: Longitudinal Evidence from South Africa", *Demography.*

Case, A., V. Hosegood and F. Lund (2005), "The Reach and Impact of Child Support Grants: Evidence from KwaZulu-Natal", *Development Southern Africa*, Vol. 22, No. 4.

Duflo, E. (2000), "Grandmothers and Granddaughters: Old Age Pension and Intra-Household Allocation in South Africa", *NBER Working Paper* 8061.

Elbers, C., P. Lanjouw, J. Mistiaen and B. Özler (2008), "Reinterpreting between-group Inequality", *Journal of Economic Inequality*, 6(3), 231-245.

Extended Public Works Programme, Republic of South Africa (2009), available: www.epwp.gov.za

Fedderke, J.W., J. Manga and F. Pirouz (2003), "Challenging Cassandra: Household and Per Capita Household Income Distribution in the October Household Surveys 1995-1999: Income and Expenditure Surveys 1995 and 2000 and the Labour Force Survey 2000", unpublished mimeograph, University of the Witwatersrand.

Finn, A., Franklin, S., Keswell, M., Leibbrandt, M., and J. Levinsohn (2009), "Expenditure: Report on NIDS Wave 1", *National Income Dynamics Technical Report*, No. 4, SALDRU. (at http://www.nids.uct.ac.za/home/index.php?/Nids-Documentation/technical-papers.html)

Finn, A., Leibbrandt, M. and I Woolard (2009), "Income and Expenditure Inequality: Analysis of the NIDS Wave 1 Data Set", *National Income Dynamics Discussion Paper*, No. 4, SALDRU. (at http://www.nids.uct.ac.za/home/index.php?/Nids-Documentation/discussion-papers.html)

Glewwe, P. (1986) "The Distribution of Income in Sri Lanka in 1969-70 and 1980-81: A Decomposition Analysis", *Journal of Development Economics*, No. 24, 255-274.

Haarman, C. and D. Haarman (1996), "A Contribution Towards a New Family Support System in South Africa", Report for the Lund Committee on Child and Family Support.

Hamoudi, A. and D. Thomas (2005), "Pension Income and the Well-Being of Children and Grandchildren: New Evidence from South Africa", California Center for Population Research On-Line Working Paper Series.

Hemson, D. (2007), *Mid Term Review of the Expanded Public Works Programme: Synthesis Report*, Human Sciences Research Council: Pretoria.

Hoogeveen, J.G. and B. Özler (2006), "Poverty and Inequality in post-Apartheid South Africa: 1995-2000", in Bhorat, H. and R. Kanbur: *Poverty and Policy in Post-Apartheid South Africa*, Cape Town, HSRC Press.

Klasen, S. and I. Woolard (2009), "Surviving Unemployment without State Support: Unemployment and Household Formation in South Africa", *Journal of African Economies*.

Kruger, J. (1998), "From Single Parents to Poor Children: Refocusing South Africa's Transfers to Poor Households with Children", Paper delivered at the 2nd International Research Conference on Social Security, International Social Security Association, Jerusalem, 26-29 January 1998.

Kruger, J.J. (1992), "State Provision of Social Security: Some Theoretical, Comparative and Historical Perspectives with Reference to South Africa", Masters thesis. Stellenbosch: University of Stellenbosch.

Lam, D. and M. Leibbrandt (2009), "Schooling Inequality and Earnings Inequality in South Africa since the End of Apartheid", unpublished paper.

Leibbrandt, M., C. Woolard and I. Woolard (2000), "The Contribution of Income Components to South African Income Inequality: A Decomposable Gini Analysis", *Journal of African Economies*, 9(1): 79-99.

Leibbrandt, M., C. Woolard and I. Woolard (2009), "Poverty and Inequality Dynamics in South Africa: Post-Apartheid Developments in the Light of the Long-Run Legacy", Chapter 10, in: Aron, J., B. Kahn and G. Kingdon (eds.) *South African Economic Policy under Democracy*, Oxford, Oxford University Press.

Leibbrandt, M., I. Woolard and H. McEwen (2009), *Employment and Inequality Outcomes in South Africa: What Role for Labour Market and Social Policies?* Southern Africa Labour and Development Research Unit, University of Cape Town.

Leibbrandt, M., L. Poswell, P. Naidoo and M. Welch (2006), "Measuring Recent Changes in South African Inequality and Poverty Using 1996 and 2001 Census Data" in: Bhorat, H. and R. Kanbur (eds.) *Poverty and Policy in Post-Apartheid South Africa*, Pretoria, HSRC Press.

Leibbrandt, M., S. van der Berg and H. Bhorat (2001), "Introduction", in Bhorat, H., M. Leibbrandt, M. Maziya, S. van der Berg and I. Woolard (eds.) *Fighting Poverty: Labour Markets and Inequality in South Africa.* Cape Town: UCT Press, pp. 1-20.

Leibbrandt, M., Woolard, I. and L. de Villiers (2009), "Methodology", *National Income Dynamics Technical Report*, No. 1, SALDRU. (at http://www.nids.uct.ac.za/home/index.php?/Nids-Documentation/technical-papers.html)

Lerman, R. and S. Yitzhaki (1994), "Effect of Marginal Changes in Income Sources on U.S. Income Inequality", *Public Finance Quarterly*, 22:4, 1.

Lund, F.J. (1993), "State Social Benefits in South Africa", *International Social Security Review* 46(1): 5-25.

Maitra, P. and R. Ray (2003), "The Effect of Transfers on Household Expenditure Patterns and Poverty in South Africa", *Journal of Development Economics*, 71(1): 23-49.

May, J., with Attwood, H., P. Ewang, F. Lund, A. Norton and W. Wentzel (1998), *Experience and Perceptions of Poverty in South Africa*, Durban: Praxis Publishing.

McGrath, M.D. (1983) "Inequality in the Size Distribution of Personal Income in South Africa in Selected Years Over the Period from 1945 to 1980", unpublished PhD. Dissertation, University of Natal Durban.

Meth, C. (2006) "What was the Poverty Headcount in 2004 and how does it Compare to Recent Estimates by van der Berg *et al.*?" *SALDRU Working Paper* 01/2006, School of Economics, University of Cape Town.

Meth, C. (2007) "Flogging a Dead Horse: Attempts by van der Berg *et al.* to measure changes in poverty and inequality", *SALDRU Working Paper* 09/2007.

Meth, C. (2009), "Costing and Justifying (if possible), a Workseeker's Grant. Unpublished.

National Treasury, 1998. Budget Review. Pretoria: Government Printer.

National Treasury, 2009. Budget Review. Pretoria: Government Printer.

OECD (2008), *Growing Unequal? Income Distribution and Poverty in OECD Countries*, OECD Publishing, Paris.

Posel, D., J. Fairburn and F. Lund (2004), "Labour Migration and Households: A Reconsideration of the Effects of the Social Pension on Labour Supply in South Africa", Ninth Annual Conference on Econometric Modelling for Africa, 30 June to 2 July 2004.

Samson, M., *et al.* (2001), "The Impact of Social Security on School Enrolment in South Africa", Research Paper No. 25, Economic Policy Research Institute: Cape Town.

Seekings, J. and N. Nattrass (2005), *Class, Race and Inequality in South Africa*. New Haven, Yale University Press.

Shorrocks, A.F. (1984), "Inequality Decomposition by Population Subgroups", *Econometrica*, 52, 1369-88.

Simkins, C. (2005) "What Happened to the Distribution of Income in South Africa between 1995 and 2001?", unpublished paper, University of the Witwatersrand.

Statistics South Africa (2000), *Measuring poverty in South Africa*, Pretoria: Statistics South Africa.

Statistics South Africa (2007), *Labour Force Survey, September 2007*, Microdata, Pretoria: Statistics South Africa.

Statistics South Africa (2009), *Quarterly Labour Force Survey, Quarter 2, 2009*, Statistical Release P0211, Pretoria: Government Printer.

United Nations Development Program (2004), *South Africa Human Development Report 2003: The Challenge of Sustainable Development*. UNDP South Africa: Oxford University Press.

Van der Berg, S. and M. Louw (2004), "Changing Patterns of South African Income Distribution: Towards Time Series Estimates of Distribution and Poverty", *South African Journal of Economics*, 72(3): 546-572.

Van der Berg, S., *et al.* (2006), "Trends in Poverty and Inequality since the Political Transition", *Development Policy Research Unit Working Paper* 06/104.

Van der Berg, S., M. Louw and D. Yu (2008), "Post-transition Poverty Trends based on an Alternative Data Source", *South African Journal of Economics,* 76(1): 58-76.

Whiteford, A. and D. Van Seventer (2000), "South Africa's Changing Income Distribution in the 1990s", *Journal of Studies in Economics and Econometrics*, 24(3): 7–30.

Whiteford, A. and M. McGrath (1994), *Distribution of Income in South Africa*, Pretoria: Human Sciences Research Council.

Wittenberg, M. (2009), "Weights: Report on NIDS Wave 1", *National Income Dynamics Technical Report*, No. 2, SALDRU. (at http://www.nids.uct.ac.za/home/index.php?/Nids-Documentation/technical-papers.html)

Woolard, I. and C. Woolard (2007), *Earnings Inequality in South Africa 1995-2003*. Pretoria: HSRC Press. ISBN 978-0796921734.

Woolard, I., M. Carter and J. Agüero (2005), "Analysis of the Child Support Grant: Evidence from the KwaZulu-Natal Income Dynamics Study, 1993-2004", Report to the Department of Social Development.

World Bank (2009), *Levels and Patterns of Safety Net Spending in Developing and Transition Countries*, Safety Net Primer, The World Bank, Washington DC.

Yamauchi, F. (2005), *Early Childhood Nutrition, Schooling and Within-sibling Inequality in a Dynamic Context: Evidence from South Africa*, International Food Policy Research Institute, Washington DC.

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS

Most recent releases are:

No. 106 *RISING YOUTH UNEMPLOYMENT DURING THE CRISIS: HOW TO PREVENT NEGATIVE LONG-TERM CONSEQUENCES ON A GENERATION?*
Stefano Scarpetta, Anne Sonnet and Thomas Manfredi (2010)

No. 105 *TRENDS IN PENSION ELIGIBILITY AGES AND LIVE EXPECTANCY, 1950-2050*
Rafal Chomik and Edward Whitehouse (forthcoming)

No. 104 *ISRAELI CHILD POLICY AND OUTCOMES*
John Gal, Mimi Ajzenstadt, Asher Ben-Arieh, Roni Holler and Nadine Zielinsky (2010)

No. 103 *REFORMING POLICIES ON FOREIGN WORKERS IN ISRAEL*
Adriana Kemp (2010)

No. 102 *LABOUR MARKET AND SOCIO-ECONOMIC OUTCOMES OF THE ARAB-ISRAELI POPULATION*
Jack Habib, Judith King, Asaf Ben Shoham, Abraham Wolde-Tsadick and Karen Lasky (2010)

No. 101 *TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID*
Murray Leibbrandt, Ingrid Woolard, Arden Finn and Jonathan Argent (2010)

No. 100 *MINIMUM-INCOME BENEFITS IN OECD COUNTRIES: POLICY DESIGN, EFFECTIVENESS AND CHALLENGES*
Herwig Immervoll (2009)

No. 99 *HAPPINESS AND AGE CYCLES – RETURN TO START…? ON THE FUNCTIONAL RELATIONSHIP BETWEEN SUBJECTIVE WELL-BEING AND AGE*
Justina A.V. Fischer (2009)

No. 98 *ACTIVATION POLICIES IN FINLAND*
Nicola Duell, David Grubb and Shruti Singh (2009)

No. 97 *CHILDREN OF IMMIGRANTS IN THE LABOUR MARKETS OF EU AND OECD COUNTRIES: AN OVERVIEW*
Thomas Liebig and Sarah Widmaier (2009)

No. 96 *INCOME DISTRIBUTION AND SUBJECTIVE HAPPINESS: A SURVEY*
Claudia Senik (2009)

No. 95 *LOOKING INSIDE THE PERPETUAL-MOTION MACHINE: JOB AND WORKER FLOWS IN OECD COUNTRIES*
Andrea Bassanini and Pascal Marianna (2009)

No. 94 *JOBS FOR IMMIGRANTS: LABOUR MARKET INTEGRATION IN NORWAY*
Thomas Liebig (2009)

No. 93 *THE WELFARE EFFECTS OF SOCIAL MOBILITY*
Justina A.V. Fischer (2009)

No. 92 *HOW EXPENSIVE IS THE WELFARE STATE? GROSS AND NET INDICATORS IN THE OECD SOCIAL EXPENDITURE DATABASE (SOCX)*
Willem Adema and Maxime Ladaique (2009)

No. 91 *SHOULD PENSION SYSTEMS RECOGNISE "HAZARDOUS AND ARDUOUS WORK"?*
Asghar Zaidi and Edward Whitehouse (2009)

See full List of Social, Employment and Migration Working Papers at www.oecd.org/els/workingpapers

Other series of working papers available from the OECD include: OECD Health Working Papers

RECENT RELATED OECD PUBLICATIONS:

JOBS FOR YOUTH: GREECE (2010) www.oecd.org/employment/youth

JOBS FOR YOUTH: DENMARK (2010) www.oecd.org/employment/youth

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: ISRAEL (2010) www.oecd.org/els/israel2010

JOBS FOR YOUTH: UNITED STATES (2009) www.oecd.org/employment/youth

JOBS FOR YOUTH: POLAND (2009) www.oecd.org/employment/youth

OECD EMPLOYMENT OUTLOOK: Tackling the Jobs Crisis (2009) www.oecd.org/els/employment/outlook

DOING BETTER FOR CHILDREN (2009) www.oecd.org/els/social/childwellbeing

SOCIETY AT A GLANCE – ASIA/PACIFIC EDITION (2009) www.oecd.org/els/social/indicators/asia

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: SLOVENIA (2009) www.oecd.org/els/slovenia2009

INTERNATIONAL MIGRATION OUTLOOK: SOPEMI (2009) www.oecd.org/els/migration/imo

PENSIONS AT A GLANCE 2009: Retirement-Income Systems in OECD Countries (2009) www.oecd.org/els/social/pensions/PAG

JOBS FOR YOUTH: FRANCE (2009) www.oecd.org/employment/youth

SOCIETY AT A GLANCE 2009 – OECD Social Indicators (2009) www.oecd.org/els/social/indicators/SAG

JOBS FOR YOUTH: AUSTRALIA (2009) www.oecd.org/employment/youth

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: CHILE (2009) www.oecd.org/els/chile2009

PENSIONS AT A GLANCE – SPECIAL EDITION: ASIA/PACIFIC (2009) www.oecd.org/els/social/pensions/PAG

SICKNESS, DISABILITY AND WORK: BREAKING THE BARRIERS (VOL. 3) – DENMARK, FINLAND, IRELAND AND THE NETHERLANDS (2008) www.oecd.org/els/disability

GROWING UNEQUAL? Income Distribution and Poverty in OECD Countries (2008) www.oecd.org/els/social/inequality

JOBS FOR YOUTH: JAPAN (2008) www.oecd.org/employment/youth

JOBS FOR YOUTH: NORWAY (2008) www.oecd.org/employment/youth

JOBS FOR YOUTH: UNITED KINGDOM (2008) www.oecd.org/employment/youth

JOBS FOR YOUTH: CANADA (2008) www.oecd.org/employment/youth

JOBS FOR YOUTH: NEW ZEALAND (2008) www.oecd.org/employment/youth

JOBS FOR YOUTH: NETHERLANDS (2008) www.oecd.org/employment/youth

OECD LABOUR FORCE STATISTICS: 1987-2007 (2008) www.oecd.org/std/labour

JOBS FOR IMMIGRANTS (Vol.2): Labour Market Integration in Belgium, France, the Netherlands and Portugal (2008) www.oecd.org/els/migration/integration/jobs2

For a full list, consult the OECD online Bookshop at www.oecd.org/bookshop