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Abstract

Despite the intentions of government and commitments by its social partners, South Africa continues to experience one of the highest levels of income inequality in the world and almost half of its households live below the minimum living level used by the National Planning Commission. Persistent calls for deregulation and lower wages to encourage job creation have been countered by arguments that the depth of income poverty and the extent of income inequality require consolidation and deepening of gains made by working people since 1994 and as expected in terms of international commitment to the International Labour Organisation’s (ILO’s) Decent Work Agenda.

It is in this context that we undertake a closer examination of the shifts in the patterns of working poverty over the period 1997-2012. Challenges in calculating the rate of working poverty include defining the poverty line(s) to be used, and linking data on household incomes and individual employment status. We analyse data collected by Statistics South Africa through its October Household Surveys in 1997-1999 and General Household Surveys in 2004-2012, to examine trends in the rates of working poverty at various poverty lines, as well as trends in respect of employment amongst the poor, the depth of poverty, sources of income, and selected aspects of household composition.

Our analysis shows that although the rate of working poverty decreased during the period under examination, 14% of workers still lived in households below the lower bound official poverty line, more than a fifth lived below the upper bound official poverty line, and more than a third of workers lived in households with just enough income to cover the minimum of their most basic needs. The poverty gap decreased for the working poor and for the poor in general, with the expansion of social grants in the early 2000s playing a role. We find that changes in the labour market over the post-apartheid period have not added appreciably to the demonstrable income effects achieved through the expansion of the social grant system. The implications of these findings for labour market regulation and social policy are briefly considered.

1. Introduction

Despite the intentions of government and commitments by its social partners, South Africa continues to experience one of the highest levels of income inequality in the world (UNDP, 2014), high and persistent levels of unemployment, and almost half of its households live below the minimum living level used by the National Planning Commission¹. Persistent calls for deregulation and lower wages to encourage job creation have been countered by arguments that the depth of income poverty and the extent of income inequality require consolidation and deepening of gains made by working people since 1994 and as expected in terms of international commitment to the International Labour Organisation’s (ILO’s) Decent Work Agenda (ILO, 2009).

Much of the debate about the form and outcomes of economic development in the post-apartheid period has focused on South Africa’s persistently high rate of unemployment. Despite periods of strong economic growth in the mid-2000s, the official (or narrow) unemployment rate has remained ‘stuck’ at about 25 per cent for much of the post-apartheid period and the expanded unemployment rate has consistently been over 30 per cent (Festus, Kasongo, Moses, & Yu, 2015). The focus on these very high levels of unemployment and on the economic strategies required to generate sufficient numbers of jobs, has pushed into the background the issue of ‘working poverty’ or poverty among the employed.

¹ The minimum living level used by the National Planning Commission in its 2011 Diagnostic Report was R524 per capita per month in 2010 prices (National Planning Commission, 2011).
At the same time, research on poverty amongst the South African population as a whole (Leibbrandt, Woolard, Finn, & Argent, 2010; Meth & Dias, 2004; Posel & Rogan, 2012; van der Berg, Louw, & Yu, 2008) has been concerned largely with how a significant decrease in poverty levels coincided with the expansion of social grants in the early 2000s. Concern has been raised that reliance on government expenditure on social grants to reduce poverty is unsustainable (e.g. van der Berg et al., 2008), and the importance of employment creation as a key component of long-term poverty eradication has been emphasised. However, to the best of our knowledge, there has been no research in South Africa on poverty trends among working South Africans.

Internationally, research on working poverty has tended to explore the growth of working poverty during a time of erosion of welfare state regimes in developed countries during the last two decades of the previous millennium (Eardley, 2000; Fleury, 2007; Iceland & Kim, 2001; Joassart-Marcelli, 2005; Johnson, 2001; O’Connor, 2000). Renewed interest in working poverty in developed countries has emerged in the research literature in the wake of the financial crisis and the ensuing period of austerity in many OECD countries (Brady, Baker, & Finnigan, 2013; Brady, Fullerton, & Cross, 2010; Cooke & Lawton, 2008; Crettaz, 2013; Crettaz & Bonoli, 2010; Gottfried & Lawton, 2010; Leadbeater, Wilson, & Theseira, 2014; Slack, 2010; Theseira, 2014; Thiede, Lichter, & Sanders, 2015; Wagle, 2011; Wicks-Lim, 2012). In contrast, the developing country literature on working poverty has been far more limited (Majid, 2001; Sundaram & Tendulkar, 2002), and has drawn attention to the typical situation in developing countries where poverty rates are higher than unemployment rates, and to the need to consider the quality of employment while addressing the quantum of unemployment. A key driver of interest in working poverty in developing countries has been the ILO.

The ILO sharpened its focus on decent work from the early 2000s (ILO, 2003) and, in 2008, introduced the working poverty rate as an indicator for a new target in support of the first Millennium Development Goal (MDG), which was focused on the eradication of extreme poverty and hunger (ILO, 2009). The new target was named “Achieve full and productive employment and decent work for all, including women and young people” (ILO, 2009: 12), and it continues to be tracked as part of the ILO’s Key Indicators of the Labour Market (ILO, 2014). The ILO explicitly links working poverty and decent work, holding that “if a person’s work does not provide an income high enough to lift them and their families out of poverty, then these jobs, at the very least, do not fulfil the income component of decent work and it is likely that other components are not being fulfilled either” (ILO, 2009: 24).

In South Africa, a key question for the post-apartheid period has been whether income poverty has been primarily a matter of a lack of employment or whether, and to what extent, the low quality of employment is also a feature of poverty. It is this question on which this paper is focused. In answering this question, we also examine more specifically whether there have been changes in working poverty over a recent 15 year period, and how household dynamics, labour market earnings and social grant income have contributed to changes in working poverty rates over the period under review.

The remainder of the paper is structured as follows. Section two sets the scene for an analysis of working poverty by reviewing the international working poverty literature and then identifying some of the post-apartheid trends in income, wages and earnings in South Africa. In section three, we discuss how working poverty is defined, describe the data sources we use to measure trends in working poverty and outline some of the limitations associated with trying to investigate trends over time. Section four presents the findings in two parts. We begin by presenting estimates of the incidence and depth of working poverty and how these have changed over a recent 15 year period.
We then turn to some of the possible explanations for the trends we have identified by considering changes in income sources in the households of the working poor and how these have affected poverty risks. Section five concludes with a discussion of what the findings may mean in terms of what the labour market has ‘contributed’ to poverty reduction in post-apartheid South Africa.

2. Review

2.1 Working poverty in developed and developing countries

Internationally, the bulk of the literature on working poverty has come from developed countries (Lohmann, 2009). One of the key findings from this work is that working poverty is a fairly typical (and growing) type of poverty, particularly in the United States (Blank, Danziger, & Schoeni, 2006; Brady et al., 2013; Iceland & Kim, 2001; Joassart-Marcelli, 2005; Johnson, 2001; Slack, 2010; Thiede et al., 2015; Wagle, 2011; Wicks-Lim, 2012), but also in Canada (Fleury, 2007), Europe (Brady et al., 2010; Cooke & Lawton, 2008; Crettaz, 2013; Crettaz & Bonoli, 2010; Gottfried & Lawton, 2010, O’Connor, 2000), and Australia (Eardley, 2000). In one of the more recent studies, Brady et al. (2010) found that the rate of working poverty was higher than ‘unemployed’ poverty in 14 out of the 18 developed countries for which data were analysed. Among the countries included in the study, the rate of working poverty varied considerably, e.g. from 1.8 per cent (Belgium) to 11.1 per cent (the United States). Given the high rates of working poverty in the United States, relative to other developed economies, a number of studies have investigated some of the reasons for the high (Brady et al., 2013; Cormier & Craypo, 2000; Ehrenreich, 2001; Gleicher & Stevans, 2005) and growing (DeFina, 2007, Thiede et al., 2015) levels of working poverty in that country. Others have looked at who the working poor are (Iceland & Kim, 2001; Joassart-Marcelli, 2005; Slack, 2010, Wagle, 2011), the links between unionisation and working poverty (Brady et al., 2013) and the links between minimum wages and working poverty (Wicks-Lim, 2012).

Working poverty has received far less attention in developing countries due to data constraints and a research focus on underemployment, informal employment and subsistence agriculture. Although it is argued that the rationale for investigating working poverty in the developing world is very different from developed countries (Fields, 2011a, 2011b), the distinction between developing and developed countries is not easy to make. For example, Kapsos (see Kapsos, 2004) argues that, in developed countries, poverty is often associated with unemployment and linked with wider social problems while, in the developing world, the problem is related to the quality of employment. This distinction is contradicted by the finding by Brady et al. (2010) that the rate of working poverty was higher than ‘unemployed’ poverty in 14 out of the 18 developed countries for which data were analysed. Clearly, whatever the relative foci of poverty investigations in developed and developing countries, the data show that working poverty is a significant issue in both categories of country. One of the implications of this is that employment earnings, amongst other issues, require attention in both developed and developing countries.

As stated previously, research on working poverty outside of the OECD countries has been dominated by the ILO through its Key Indicators of the Labour Market (KILM) series. The first and
one of the most widely cited of these studies (Majid, 2001) found that approximately 534 million people in developing countries could be classified as working poor in 1997, which constituted about a quarter of the employed labour force in all of those countries. Kapsos (2004) then showed how the burden of working poverty (at the one US dollar a day rate) was on a downward trajectory in East Asia and on an upward trajectory in Sub-Saharan Africa, and projected that, by 2015, more than 40 per cent of the world’s working poor would be found in Sub-Saharan Africa. The situation would be different at the two US dollar a day line, with South Asia projected to account for approximately 40 per cent of the world’s working poor, compared with the contribution of Sub-Saharan Africa of just over 20 per cent.

One of the key findings from the global estimates of working poverty is that sub-Saharan Africa has been, by some distance, the worst performer historically (Berger & Harasty, 2002; Combes, Ebeke, Mathilde, & Yogo, 2014). Between 1980 and 2004, the working poverty rate in this region actually increased (at both the one US dollar a day and two US dollar a day poverty lines) with the numbers of working poor people (at both lines) doubling in that period.

Looking at all developing countries, Fields (2011b), suggested that, in 2011, workers living in households below the two US dollar a day poverty line accounted for 57 per cent of employment in developing countries. The most recent estimates of working poverty in the region (ILO, 2014) indicate that 39 per cent of the total workforce is below the dollar a day poverty line and 62 per cent is under the two dollar a day threshold. South Africa is unusual in the developing country context in that it has a much higher unemployment rate than the norm and a ratio of low earners to unemployed of almost one to one, compared to the average ratio in developing countries of approximately six to one (Fields, 2011a).

2.2 Trends in income, wages, and earnings over the post-apartheid period

Although there has been very little research interest in working poverty in South Africa, recent work has shown how both income and earnings have changed over the past twenty years. Visagie (2013, 2015) has shown that real increases in household (per capita) income at the middle of the income distribution have been very modest over a recent 15 year period (about 1.4 per cent per annum). At the same time, households in the lower and middle income strata saw a decrease in their total income shares even though the number and percentage of households in the middle and lower segments of the income distribution actually increased (between 1993 and 2008). In terms of the distribution of income growth, Visagie’s (2015) analysis provides evidence for a ‘middle income squeeze’ by illustrating that, while income growth was positive for all income deciles, the growth was higher at the tails of the distribution and particularly skewed towards the top income deciles. This means that progress for the ‘middle’ or typical household in South Africa has been fairly modest over the post-apartheid period. Moreover, the study concludes that the contribution of labour market earnings to income growth was disappointing over the period and that, ceteris paribus, without the expansion of the social grant system, households in the middle of the income distribution would actually have gone backwards between 1993 and 2008 (Visagie, 2015).

In terms of labour market earnings, several earlier studies (Casale, 2004; Leibbrandt, Levinsohn, & McCrary, 2005) have suggested that real earnings (and income) actually decreased in the years immediately after the end of apartheid (i.e. the mid to late 1990s). The most comprehensive analysis of earnings in post-apartheid South Africa (Wittenberg, 2014a, 2014b), to date, has now extended this work and shown that trends in labour market earnings have mirrored, to a large extent, the pattern of income growth identified by Visagie (2015). Wittenberg (2014a) identifies ‘stagnant’ growth in real earnings at the median since 1994 accompanied by strong growth at the top end of the distribution.
At the same time, there is evidence of wage growth at the 10th percentile of the earnings distribution. However, consumption expenditure by those at the bottom end of the income distribution has been affected by inflation that has been anti-poor over the 2005 to 2010 period, meaning that the purchasing power of those increased wages has been eroded (Finn, Leibbrandt, & Oosthuizen, 2014).

To the best of our knowledge, there are only a handful of studies which have investigated income or earnings in the context of working poverty in South Africa. For example, while Casale (2004) is not concerned with working poverty per se, her analysis shows that, between 1995 and 2001, a decrease in real earnings is at least partially explained by the increasing numbers of working poor captured by the Labour Force Surveys (LFSs). Similarly, Posel and Casale (2006) found that roughly a fifth of workers in 2002 were poor based on an earnings threshold of R467 per month in 2002 prices.

In the only post-apartheid study which is concerned with working poverty, specifically, Vermaak (2010, 2012) finds that working poverty decreased between 2000 and 2006 (from about 25 per cent to 18 per cent). Notably, however, Vermaak defines working poverty purely in terms of earnings. In other words, the study is actually measuring poverty wages rather than household income poverty. Nonetheless, the levels of working poverty from Vermaak’s (2012) study are very closely in line with those reported by Posel and Casale (2006). In other words, two studies have found that roughly a fifth of South African workers earn ‘poverty wages’.

The present study aims to extend the work on post-apartheid income and earnings by looking specifically at how working poverty trends have changed when total household income is considered (i.e. not just labour market earnings). In doing this, it echoes the approach to the study of working poverty used in the international literature.

3. Definitions, data and methods

3.1 Definitions

There is no universal definition of working poverty, but there are several widely used approaches. For example, Brady et al. (2010) identify an individual as working poor if she/he resides in a household with at least one employed household member but in which total household income (or per capita income) is below the poverty threshold. Vermaak’s (2010) study, as identified earlier, defines working poverty based on monthly earnings alone and, in the South African context, conducts an analysis based on two working poverty lines set at R150 and R500 (in 2000 prices). In this paper we use the ILO’s KILM definition in which a person is identified as working poor if she or he is employed and living in a household in which per-capita income or expenditure is below the poverty line (Majid, 2001). So, in other words, since poverty is measured at the household level, working poverty is defined as being employed while living in a poor household. Even though this is a slightly narrower definition than the one used by Brady et al. (2010) in the US, it still accounts for both the level of earnings and how earnings are spread across the household.

5 Casale (2004) also notes that an unknown portion of this decrease in earnings (and increase in low-paid informal employment) is due to the improved collection of data on informal employment. She argues, however, that there are still several good reasons to believe that the trend is explained both by the changes in survey methods and an actual increase in informal types of employment in the immediate post-apartheid years.
6 For a comprehensive discussion of measurement issues in the working poverty literature, see Thiede et al. (2015).
7 As with all poverty studies, income is assumed to be shared equally among all household members. The approach outlined above should, therefore, be interpreted as identifying whether workers live in households in which there is enough income, if evenly divided, to keep all household members out of poverty.
3.2 Data

The key data requirement for measuring working poverty is a survey which captures information on both employment and total household income or expenditure. Several data sources fulfil this requirement and could be used to identify trends in working poverty in post-apartheid South Africa. The Population Censuses (1995, 2001 and 2011) collect information on income and have been used in several key post-apartheid poverty studies (cf. Ardington, Lam, Leibbrandt, & Welch, 2006; Leibbrandt, Poswell, Naidoo, & Welch, 2006; Leibbrandt, Woolard, & Woolard, 2008). Census data, however, are plagued with several problems that limit their use, particularly for examining poverty measures over time. The Censuses are conducted at long intervals and income is captured in bands rather than as point estimates (Leibbrandt et al., 2006; van der Berg et al., 2008). Furthermore, the income brackets are not consistent over time and a considerable amount of work is required to make the income bands comparable across Census years (Leibbrandt et al., 2006). The Income and Expenditure Surveys (1995, 2000, 2005 and 2010) are the most widely used sources of data for analysing poverty in South Africa, but the surveys are also conducted at fairly long intervals and some of the changes in the survey methodology compromise comparisons of income data over time (van der Berg et al., 2008; Yu, 2008). Concerns have also been raised about the sampling method used in the 2000 Income and Expenditure Survey (van der Berg et al., 2008). Analyses of poverty trends based on these sources of data, therefore, are likely to be sensitive to the reference points selected for analysis and any data inconsistencies associated with a given year (i.e. the 2000 IES).

The analysis in this paper makes use of income and expenditure data from Statistics South Africa’s October Household Surveys (OHSs) conducted annually from 1993 to 1999 and the General Households Surveys (GHSs) which have been conducted annually since 2002. The OHSs and the GHSs are nationally representative large-sample (approximately 30,000 households) household surveys that collect information on the social, economic and demographic characteristics of South African households. Despite the relatively wide scope of these surveys, the questionnaires capture fairly detailed estimates of earned income. In both the OHSs and the GHSs, respondents are asked to provide point estimates of income earned from wages and self-employment. Where respondents are unable or unwilling to provide point estimates, the questionnaires ask them to select from a range of fairly narrow income bands. Across the OHSs and the GHSs, the vast majority of income for individuals with employment or earnings from self-employment is captured as point estimates (absolute values). In terms of the measurement of poverty, one of the most important features of the OHSs and the GHSs is that they regularly collect data on earned income as well as information on individual access to social grants. This makes it possible to generate measures of income for individuals and households that can be further disaggregated by income source (i.e. labour market and social grant income).

In order to measure trends in working poverty over the post-apartheid period, seven surveys are analysed in the period between 1997 and 2012. The study uses the 1997 OHS as the base year because this is the first of the OHSs to capture comprehensive information on individual access

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8 The 2005 Income and Expenditure Survey used a diary method to capture information on household expenditures over the past four weeks. In order to employ this new methodology, field workers were required to visit each household five times over a four week period and leave an expenditure (or acquisition) diary with respondents over this period. This approach differs significantly from past surveys (1995 and 2000) where respondents were asked to recall their expenditures over the most recent four week period.

9 The bi-annual (2000-2007) and the Quarterly Labour Force Surveys (2008-present) capture income on labour market earnings but do not collect information on the individual receipt of social grants.

10 For a fuller discussion on the comparability of household income data in the 1997 OHS and the GHSs see Posel and Rogan (2011).
to social grant receipts. In 2002, the first GHS was conducted, but it did not capture individual access to social grant income, and income measures derived from this survey are, therefore, not comparable with the 1997 and 1999 OHSs or the later GHSs. The post-2004 GHSs capture detailed information on the individual receipt of social grant income and are largely comparable with the post-1996 OHSs.

Crucially, the questions used to record income and expenditure are similar across the OHSs and GHSs. In both the OHSs and the GHSs, the income module captures information on an individual’s total pay/salary from their main job before deductions. Respondents are asked to give point estimates for earned income, but if unable to do so, are prompted to select from income bands. Nominal income bands are constant across the OHSs and GHSs. We follow a number of other studies (Leibbrandt et al., 2006; Meth & Dias, 2004; Posel & Casale, 2006; Posel & Rogan, 2012, Rogan, 2013) in assigning the midpoint of the reported income bracket where point estimates are not available and income is reported in bands. In order to adjust for the underestimation of income associated with households that report zero income from grants or the labour market, household income is imputed using information collected on household expenditure captured in the OHSs and the GHSs (see also Posel & Rogan, 2012, Rogan, 2013). Although household expenditure is captured through a single question, and is therefore a fairly crude proxy for total household income, it offers the means to approximate income in households that do not report earnings or grant income.

11 The 1993-1996 OHSs only ask if each individual has received the ‘old age pension/civil pension’, ‘disability grants/social grant’, ‘maintenance grant/child grant’ or ‘other grants’. In other words, the questionnaire does not identify which grant was received by the respondent. The social grant modules from the earlier OHS questionnaires are therefore not comparable with the 1997-1999 OHSs or the GHSs. The first OHS (1993) is also not comparable with the other OHSs because it did not include the former homeland states.

12 One minor difference in the way that income is captured in the OHSs and GHSs is that the OHSs include a separate section for total income/turnover from self-employment or own activities. In the GHSs, all forms of income are captured in the same section- but only after all types of work activities are recorded in an earlier section (e.g. section 2.1 in the 2004 GHS).

13 While assigning the midpoint of bracket responses for earnings from employment is common in the South African literature, it is a fairly crude practice given the assumptions about the way that bracket responses are distributed. However, a very careful analysis (see Posel and Casale, 2006) of earnings responses has suggested that assigning the mid-point is not necessarily any more biased than other methods of imputing income for those who respond in brackets (see also Vermaak, 2010). A similar analysis has suggested further that (Von Fintel 2007: 310), “‘Rudimentary’ methods such as midpoint imputation should not be dismissed” and that bracket responses in South African household surveys are reasonably stable.

14 Observations with no income information at all, those with an absolute figure but no pay period information, with no income category information, or ‘don’t know’ or ‘refuse’ were set to missing. The number and percentage of the employed with earnings information set to missing were similar across the OHSs and the GHSs. For example, roughly five per cent of the employed in the 1997 OHS and about six per cent of the employed in the 2006 GHS were assigned missing values for income.

15 Less than three per cent of the employed recorded zero labour market income across the GHSs. For example, only 1.78 per cent of the employed in the 2012 and 1.27 in 2010 recorded earning no income either as a point estimate or in the income bands. In terms of zero-income households, the percentage of households that reported zero income from earnings and grants was very similar across the GHSs- e.g. 14.4 per cent in 2006 and 12.7 per cent in 2012.

16 The 1997 OHS captures household expenditure as a point value while the other surveys collect expenditure information in bands. Where expenditure is captured in bands, the midpoint of the expenditure bracket is assigned to households that report zero earnings and zero social grant income. Most households with zero income did not report expenditure in the lowest band. In 1999, 2004 and 2006, between 34.5 per cent and 41.5 per cent of zero-income households reported that their household expenditure was in the lowest band (R0-R399 total household monthly income). Income bands are constant across all of the surveys.
3.3 Analysis

In estimating trends in working poverty, the study uses the conventional Foster-Greer-Thorbecke (FGT) (see Foster, Greer, & Thorbecke, 1984) series of measures to identify trends in the incidence and depth of income poverty among employed South Africans between 1997 and 2012. Two poverty lines based on Statistics South Africa’s (2008) official poverty thresholds are used to measure poverty. For greater comparability with the broader poverty literature, we refer more frequently to the national upper-bound poverty line of R323 per capita monthly income (in 2000 prices) proposed by Statistics South Africa (2008). This poverty threshold is based on expected minimum food and non-food requirements and is very close to the R322 per capita poverty line (in 2000 prices) that has been used in most post-apartheid poverty studies. The R323 per capita poverty line, when expressed in 2010 prices, sits between the minimum living level of R524 per person per month in 2010 terms used by the National Planning Commission (2011) and the per capita minimum living level calculated for 2010 by the National Labour and Economic Development Institute (NALEDI, 2011). Similarly, Hoogeveen & Özler (2005, 2006) originally specified Statistics South Africa’s upper-bound threshold as a lower-bound limit, and established an upper-bound poverty line of R593 per capita monthly income (again in 2000 prices). We also use the R593 per capita poverty line in our analysis, and treat that line as the point at which a household can just afford its minimum basic food and non-food needs. Consequently, we treat the R323 per capita poverty line as a point at which a household can meet some but not all of its minimum basic food and non-food needs.

While the analysis of working poverty in the post-apartheid period covers the years between 1997 and 2012, greater focus is given to the years after 2004. There are three reasons for this. The first is that there have now been several concerns raised in relation to the sampling and fieldwork protocols for the OHSs and it is not clear what impact these will have on the measure and distribution of household income (see Kerr & Wittenberg, 2013, 2015; Wittenberg & Pirouz, 2013). Second, Statistics South Africa reweighted the GHS series in 2013 (in line with the Census 2011 benchmarks) and it is not clear if the GHS series is strictly compatible with the earlier OHSs when using these new population weights. Third, much of the well documented (Leibbrandt et al., 2010; Leibbrandt et al., 2008; Meth, 2006; van der Berg et al., 2008) decrease in income poverty in South Africa occurred in the early to mid-2000s at the same time that government rapidly expanded its social grant programme. Moreover, legislation which extended minimum wage determinations to low paid sectors (i.e. agriculture and domestic work) were also introduced in this period (Department of Labour, 2002).

Given its wider impact on poverty, the role that grant income may have had on the working poor is also considered in this analysis. In particular, a widely used poverty decomposition technique is used to estimate the average marginal effect of labour market earnings and social grant income

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17 These per capita, monthly poverty lines include (in 2000 prices): the lower-bound poverty line (R219) and an upper-bound poverty line (R323), both of which are higher, in monthly Rand terms, than the one US dollar and two US dollar a day poverty. One of the most comprehensive post-apartheid poverty studies (Hoogeveen & ÖZler, 2005 & 2006) identified the upper bound poverty line as R593 monthly per capita household income (in 2000 prices), and used R322 as the lower-bound poverty line, using a cost-of-basic needs approach. Finn, Leibbrandt & Oosthuizen (2014) calculated that Hoogeveen & ÖZler’s (2005 & 2006) lower and upper poverty lines would be R573 and R1,056 per person per month in real 2010 Rands.
18 See Statistics South Africa (2008) for details about how the official poverty lines were calculated.
20 It should be emphasised that the minimum living level is the minimum level of income required for basic survival, and does not cover important non-food expenditure such as health and education, which are essential to the living of a decent life. It is clear that people cannot be expected to live at or near these minimum living levels and still function as active citizens in a modern democracy.
on the reduction of working poverty rates. In order to estimate this decomposition, the analysis makes use of the Distributional Analysis STATA Package (DASP) module developed by Araar and Duclos (2007). Examination of the relative contribution of each respective income source to poverty reduction is justified by the importance of both labour market earnings and social grant income in reducing the risk of poverty.

3.4 Limitations

While the OHSs and the GHSs regularly and consistently collect information on labour market earnings, social grant income and household expenditure, the trade-off in using these data is that they do not capture detailed information on household expenditure and, of particular significance to a study on working poverty, there is limited information on labour market status. There is no information in the surveys, for example, on hours worked, occupation types or sectors of employment for the employed. It is also not possible to identify how aggregate measures of working poverty differ between formal and informal sources of employment. A question on whether employment was in the informal or formal sector was only included in the GHSs from 2010 onwards.

The most obvious limitation associated with using the GHSs to measure poverty levels, however, is the possible underestimation of income. Studies (Meth & Dias, 2004; Posel & Rogan, 2012; Rogan, 2013) which have used the GHSs or the bi-annual Labour Force Surveys to measure poverty have had to account for the fact that these surveys only capture information on social grant income and labour market earnings. There are two ways to consider whether the possible underestimation of income from the GHSs has a particular bias on estimates of the working poor. First, the 1997 OHS captured a greater number of income sources than the other surveys. Using these data, it is possible to estimate the difference in the estimate of working poverty from the method outlined above compared with an estimate based on the full measure of income available from the OHS (1997). In making this comparison (Appendix A) we find that there are no significant differences in the working poverty headcount estimates based on a fuller measure of income (i.e. one that includes private pensions, worker’s compensation, state maintenance grants, private maintenance, the unemployment insurance fund (UIF), remittances, gratuities and ‘other’ sources). There is a small but significant difference in the working poverty gap estimates but the imputed estimate is actually lower than the estimate derived from the full income measure (suggesting that the approach that we use does not necessarily underestimate income).

Second, using the GHS data it is possible to create an additional household income measure by replacing household income data with expenditure data for observations for which total household expenditure is greater than total household income. In other words, if the GHS identifies some households as surviving on social grants only, but there are other undetected sources of income (e.g. remittances or private transfers) in these households, then income will be underestimated in these households (and poverty overestimated). By substituting income data with expenditure data, this type of underestimation will be addressed. When we make this adjustment to GHS data series (Appendix B), we find poverty and working poverty headcount estimates are slightly (but not significantly) lower compared with the main imputation method used in this paper. In 2012, however, both poverty and working poverty are significantly lower when we substitute

21 The algorithm developed by Araar and Duclos (2006) estimates the contribution of each income source to the elimination of poverty by comparing what the FGT measures would have been without each particular source of income. By making use of the Shapley values, the model estimates the average marginal effect of each income source over all possible combinations of income sources (income subsets), thereby avoiding the bias associated with the order in which income sources are included in the model.
expenditure data for income data in households where reported expenditure is greater than income. In terms of working poverty trends, the only change is that the drop in working poverty in 2012 is statistically significant (at the R323 poverty line). In other words, the 2006-2010 trend of a flat working poverty line remains unchanged even after adjusting income data upwards in line with self-reported expenditure.

Finally, with respect to the possible underestimation of income data from the GHSs, we note that the actual levels of poverty estimated from the OHSs and the GHSs are fairly closely in line with one of the most comprehensive poverty studies (Ardington et al., 2006) from the post-apartheid period in terms of addressing the underestimation of household income. While there are clearly still some concerns with using the GHSs to estimate poverty trends over time, it is certainly the case that none of Statistics South Africa’s household surveys (with the possible exception of the 2008/9 Living Conditions Survey) have been purpose-built for the measurement of income poverty. Therefore the data used in this study should be seen as a consistent and regular, albeit somewhat crude, measure of the economic well-being of South African workers and their households.

4. Findings

4.1 The working poor in post-apartheid South Africa, 1997-2012

The analysis begins with an overview of trends in the poverty headcount rate between 1997 and 2012 (Table 1). In order to contextualise trends in working poverty, poverty rates for the population as a whole (and in some tables for adults as a separate category) are presented alongside estimates of headcount rates for the employed. At the two lower official poverty thresholds, the data are closely in line with the existing literature and show that poverty increased in the late 1990s (e.g. from 59.5 per cent to 63.7 per cent between 1997 and 1999 at the higher (z=323) poverty line) before decreasing in the early to mid-2000s.

---

22 This study used a multiple imputation technique to deal with the problem of zero-income households in the 1996 and 2001 Censuses.

23 The significant drop in poverty in 2012 does raise some questions. While there are a number of unusual outliers at the upper end of the income distribution (Q22asto), the distribution at the median and below is not appreciably different from previous years and is therefore not expected to impact on poverty estimates.
Table 1 Poverty headcounts (P0) for South Africa, 1997 – 2012 (per capita)

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<tbody>
<tr>
<td>All</td>
<td>59.53 (0.64)</td>
<td>63.65 (0.65)</td>
<td>60.23 (0.76)</td>
<td>54.84 (0.81)</td>
<td>52.36 (0.73)</td>
<td>50.85 (0.71)</td>
<td>48.06 (0.69)</td>
<td>-19.27†</td>
</tr>
<tr>
<td>Workers</td>
<td>28.79 (0.61)</td>
<td>34.40 (0.65)</td>
<td>28.85 (0.69)</td>
<td>23.78 (0.64)</td>
<td>23.81 (0.62)</td>
<td>22.87 (0.56)</td>
<td>21.40 (0.53)</td>
<td>-25.67†</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>48.85 (0.63)</td>
<td>54.33 (0.66)</td>
<td>49.35 (0.76)</td>
<td>42.86 (0.78)</td>
<td>40.19 (0.67)</td>
<td>38.85 (0.64)</td>
<td>35.46 (0.61)</td>
<td>-27.41†</td>
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<tr>
<td>Workers</td>
<td>19.44 (0.49)</td>
<td>25.97 (0.57)</td>
<td>20.02 (0.57)</td>
<td>14.79 (0.47)</td>
<td>15.04 (0.49)</td>
<td>14.52 (0.43)</td>
<td>13.76 (0.43)</td>
<td>-29.22†</td>
</tr>
</tbody>
</table>

Source: Own calculations from the OHSs (1997-1999) and the GHSs (2004-2012)
† Denotes a significant change in the poverty headcount between 1997 and 2012 at the 95 per cent level of confidence
†† Denotes a significant change in the poverty headcount between 1997 and 2012 at the 90 per cent level of confidence
Notes: The data are weighted (revised weights). Standard errors in brackets.
Poverty lines in 2000 prices

At both poverty lines, the relative decrease in working poverty was larger than for the population as a whole. For example, the poverty headcount rate decreased by about 19 per cent between 1997 and 2012 for the population as a whole but by 26 per cent for the employed (i.e. workers). At the lower poverty threshold (z=219) the difference in the size of the decrease in poverty rates was much smaller (i.e. 27 per cent for the population as a whole and 29 per cent among the employed).

A first glance at the data would therefore suggest that the findings on working poverty during the post-apartheid period are mixed. On the one hand, while 29 per cent and 19 per cent of all workers were poor in 1997 at two official poverty lines, by 2012 these poverty rates had decreased by more for workers than for the population as a whole. In other words, progress in poverty reduction seems to have been greater for those linked with the labour market. On the other hand, in 2012, more than a fifth (21 per cent) of workers were still living in households with a level of income which did not meet their minimum basic needs, as per Statistics South Africa’s official upper poverty line. Using our higher poverty line (see Table 2 below), i.e. line of R593 used by Hoogeveen & Özler (2005, 2006), we find that, in 2012, more than a third of workers lived in households that could just cover their minimum basic needs.

Table 2 explores these findings further by ‘zooming in’ on the period during which progress in poverty reduction finally began to take hold in South Africa (i.e. the early to mid-2000s) and by looking at three different groups, namely the population as a whole, adults, and workers. At all three poverty lines, working poverty decreased between 2004 and 2012. Even after the large expansion of the grant system in the early 2000s, the risk of poverty for workers decreased by more than for adults and the population as a whole (at the two higher poverty lines). In terms of the magnitude of the reduction in poverty, the relative decreases in poverty among workers are greater at the lower poverty thresholds.

In other words, the greatest reduction in working poverty is seen at the lower bound poverty threshold where the rate of working poverty decreased by 31 per cent (compared with a decrease of about 20 per cent at the R593 poverty line). This might suggest that the greatest success in reducing working poverty during the 2000s took place among the poorest workers, albeit from
a lower base. However, the fact that the decrease in working poverty was actually very similar (about 31 per cent) to the overall decrease in poverty at this threshold also suggests that progress in poverty reduction among workers was not much different than progress among adults or the population as a whole (at this particular threshold).

Table 2 Poverty headcount ($P_0$) rates for South Africa, 2004 – 2012 (per capita)

<table>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>z=593</td>
</tr>
<tr>
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<td>67.35</td>
<td>65.75</td>
<td>62.75</td>
<td>-13.08†</td>
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<td>(0.70)</td>
<td>(0.79)</td>
<td>(0.70)</td>
<td>(0.70)</td>
<td>(0.72)</td>
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<tr>
<td>Adults</td>
<td>66.29</td>
<td>62.40</td>
<td>61.00</td>
<td>59.78</td>
<td>55.81</td>
<td>-15.81†</td>
</tr>
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<td>(0.74)</td>
<td>(0.83)</td>
<td>(0.71)</td>
<td>(0.71)</td>
<td>(0.73)</td>
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<tr>
<td>Workers</td>
<td>45.10</td>
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<td>41.11</td>
<td>39.50</td>
<td>36.33</td>
<td>-19.45†</td>
</tr>
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<td>(0.87)</td>
<td>(0.89)</td>
<td>(0.79)</td>
<td>(0.74)</td>
<td>(0.75)</td>
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<td></td>
<td></td>
<td>z=323</td>
</tr>
<tr>
<td>All</td>
<td>60.23</td>
<td>54.84</td>
<td>52.36</td>
<td>50.85</td>
<td>48.06</td>
<td>-20.21†</td>
</tr>
<tr>
<td>(0.76)</td>
<td>(0.81)</td>
<td>(0.73)</td>
<td>(0.71)</td>
<td>(0.69)</td>
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<tr>
<td>Adults</td>
<td>53.17</td>
<td>47.31</td>
<td>45.38</td>
<td>44.50</td>
<td>41.04</td>
<td>-22.81†</td>
</tr>
<tr>
<td>(0.76)</td>
<td>(0.80)</td>
<td>(0.70)</td>
<td>(0.68)</td>
<td>(0.65)</td>
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<tr>
<td>Workers</td>
<td>28.85</td>
<td>23.78</td>
<td>23.81</td>
<td>22.87</td>
<td>21.40</td>
<td>-25.82†</td>
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<td>(0.69)</td>
<td>(0.64)</td>
<td>(0.62)</td>
<td>(0.56)</td>
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<td>z=219</td>
</tr>
<tr>
<td>All</td>
<td>49.35</td>
<td>42.86</td>
<td>40.19</td>
<td>38.85</td>
<td>35.46</td>
<td>-28.15†</td>
</tr>
<tr>
<td>(0.76)</td>
<td>(0.78)</td>
<td>(0.67)</td>
<td>(0.64)</td>
<td>(0.61)</td>
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<tr>
<td>Adults</td>
<td>42.14</td>
<td>35.73</td>
<td>33.74</td>
<td>33.15</td>
<td>29.08</td>
<td>-31.00†</td>
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<tr>
<td>(0.72)</td>
<td>(0.73)</td>
<td>(0.61)</td>
<td>(0.59)</td>
<td>(0.54)</td>
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<tr>
<td>Workers</td>
<td>20.02</td>
<td>14.79</td>
<td>15.04</td>
<td>14.52</td>
<td>13.76</td>
<td>-31.27†</td>
</tr>
<tr>
<td>(0.57)</td>
<td>(0.47)</td>
<td>(0.49)</td>
<td>(0.43)</td>
<td>(0.43)</td>
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</table>

Source: Own calculations from the GHSs (2004-2012)
† Denotes a significant change in the poverty headcount between 1997 and 2012 at the 95 per cent level of confidence
++ Denotes a significant change in the poverty headcount between 1997 and 2012 at the 90 per cent level of confidence
Notes: The data are weighted (revised weights)
Standard errors in brackets
All poverty lines in 2000 prices

A closer look at the 2004-2012 period also suggests that, after 2006, the headcount rate among workers did not change significantly while there was a large and significant drop in poverty among adults and the population as a whole. In order to better illustrate this, Figure 1 plots the changes in the poverty headcount rates from 2004 to 2012 graphically. Between 2004 and 2006, the trend lines (and accompanying confidence intervals) show a clear and significant decrease in the poverty headcount rate for the population as a whole, for adults and for workers (at the R323 poverty line). However, from 2006 onwards, the trend line for workers is flatter than the lines for the other two groups. It is also clear from the confidence intervals plotted alongside the working poverty trend line that the upper bound confidence interval for the 2012 working poverty headcount is higher than the lower bound confidence interval for the 2006 headcount. The decrease in working poverty between 2006 and 2012 was therefore not statistically significant. Among the other two groups, on the other hand, the confidence intervals do not overlap and therefore poverty did decrease significantly over this recent six year period (i.e. 2006-2012).
Since the poverty headcount identifies only one aspect of income poverty (i.e. whether an individual is above or below the specified threshold), an analysis of the depth of working poverty (or the working poverty gap) is presented in Table 3. The findings in the table would suggest that, as expected, the working poverty gap also decreased over the post-2004 period. Moreover, the decreases are sizeable at 30 and 32 per cent at the respective poverty lines. One difference in the depth of poverty is that the decreases over the period were very similar to the decreases in the depth of poverty for the population as a whole. In fact, at the lower poverty threshold (z=219), the decrease in the working poverty gap was actually smaller than the decrease in the overall poverty gap (32 per cent and 35 per cent, respectively). This again points to the conclusion that progress in reducing working poverty among the poorest workers was not very different from progress among the poorest households. As with the poverty headcount, it would again appear that progress in reducing the working poverty gap has halted, or even reversed, after 2006. On the whole, then, a conventional poverty analysis has shown that working poverty decreased over the early part of the 2000s but that not much progress has been made since about 2006 in either the incidence or depth of working poverty.
### Table 3: The working poverty gap (P1) in South Africa, 2004 – 2012

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<tbody>
<tr>
<td></td>
<td>z=323</td>
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</tr>
<tr>
<td>All</td>
<td>35.11 (0.55)</td>
<td>30.59 (0.54)</td>
<td>27.82 (0.45)</td>
<td>27.25 (0.44)</td>
<td>24.79 (0.41)</td>
<td>-29.39†</td>
</tr>
<tr>
<td>Workers</td>
<td>14.37 (0.39)</td>
<td>10.52 (0.32)</td>
<td>10.43 (0.33)</td>
<td>10.34 (0.32)</td>
<td>10.04 (0.33)</td>
<td>-30.13†</td>
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<tr>
<td></td>
<td>z=219</td>
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</tr>
<tr>
<td>All</td>
<td>25.73 (0.48)</td>
<td>21.72 (0.46)</td>
<td>19.03 (0.36)</td>
<td>18.74 (0.35)</td>
<td>16.69 (0.33)</td>
<td>-35.13†</td>
</tr>
<tr>
<td>Workers</td>
<td>9.53 (0.32)</td>
<td>6.28 (0.24)</td>
<td>6.22 (0.26)</td>
<td>6.33 (0.26)</td>
<td>6.47 (0.29)</td>
<td>-32.11†</td>
</tr>
</tbody>
</table>

Source: Own calculations from the GHSs (2004-2012)
† Denotes a significant change in the poverty gap between 1997 and 2012 at the 95 per cent level of confidence
†† Denotes a significant change in the poverty gap between 1997 and 2012 at the 90 per cent level of confidence
Notes: The data are weighted (revised weights)
Standard errors in brackets
All poverty lines in 2000 prices
Household well-being is estimated as average per capita total household monthly income

As identified in the previous section, there are a number of ways to measure working poverty in the literature. While estimating the working poverty rate (and the working poverty gap) is one of the more common methods, another useful approach is to consider the percentage of the poor population that is employed (Table 4). Over the entire period, the working poor became a significantly larger segment (with increases of about 27 per cent over the period at the lower-bound poverty line) of the poor (working age) population according to two national poverty lines. So by 2012, about 21 per cent of working age South Africans living in households below the lower-bound poverty line were working poor, compared to almost a quarter of working age South Africans living in households below the slightly higher poverty line (z=323).

### Table 4: Percentage of the poor who are employed, 1997-2012

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<tr>
<td></td>
<td>z=323</td>
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</tr>
<tr>
<td>All</td>
<td>19.94 (0.20)</td>
<td>24.67 (0.25)</td>
<td>21.57 (0.30)</td>
<td>20.82 (0.33)</td>
<td>22.68 (0.31)</td>
<td>22.54 (0.31)</td>
<td>24.20 (0.34)</td>
<td>21.36†</td>
</tr>
<tr>
<td>Workers</td>
<td>16.78 (0.21)</td>
<td>22.15 (0.27)</td>
<td>18.61 (0.31)</td>
<td>16.81 (0.33)</td>
<td>18.84 (0.34)</td>
<td>18.82 (0.34)</td>
<td>21.39 (0.39)</td>
<td>27.47†</td>
</tr>
<tr>
<td></td>
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</table>

Source: Own calculations from the OHSs and the GHSs
† Denotes a significant change between 1997 and 2012 at the 95 per cent level of confidence
†† Denotes a significant change between 1997 and 2012 at the 90 per cent level of confidence
Notes: The data are weighted (revised weights)
Sample restricted to the working age population (16-64, inclusive)
Standard errors in brackets

Extending this analysis further, Table 5 considers the ‘in-working poverty’ definition which is preferred in some of the literature (see Brady et al., 2010; Peña-Casas & Lata, 2004) from European countries. The tables present the percentage of poor South Africans (of all ages) that live with an employed member. At the two lower bound poverty thresholds, there were no significant changes over the crucial 2004-2012 period. At the R323 poverty line, roughly half of all poor South
Africans lived with an employed household member over the period. In terms of the ‘causes’ of poverty, this finding would suggest that unemployment is the main cause for about half of the poor population while low earnings is the key concern for the other half. At the upper-bound poverty line, the majority of poor South Africans actually live with an employed person (e.g. 58 per cent in 2012) and this percentage actually increased significantly over the period (by about three per cent). In other words, poor South Africans became increasingly likely to live with a worker between 2004 and 2012 (albeit at the upper-bound poverty line only).

Table 5 Percentage of the poor who live with an employed household member, 2004-2012

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</thead>
<tbody>
<tr>
<td><strong>z=219</strong></td>
<td>44.43 (0.29)</td>
<td>40.00 (0.31)</td>
<td>41.99 (0.29)</td>
<td>42.64 (0.30)</td>
<td>43.85 (0.32)</td>
<td>-1.31</td>
</tr>
<tr>
<td><strong>z=323</strong></td>
<td>49.81 (0.26)</td>
<td>46.69 (0.28)</td>
<td>49.08 (0.25)</td>
<td>49.28 (0.26)</td>
<td>49.42 (0.27)</td>
<td>-0.78</td>
</tr>
<tr>
<td><strong>z=593</strong></td>
<td>56.56 (0.24)</td>
<td>55.26 (0.25)</td>
<td>57.93 (0.22)</td>
<td>58.49 (0.22)</td>
<td>58.29 (0.23)</td>
<td>3.06†</td>
</tr>
</tbody>
</table>

Source: Own calculations from the GHSs
† Denotes a significant change in the poverty headcount between 2004 and 2012 at the 95 per cent level of confidence
†† Denotes a significant change in the poverty headcount between 2004 and 2012 at the 90 per cent level of confidence
Notes: The data are weighted
Standard errors in brackets

4.2 Informal employment and working poverty

One question that remains is whether the trends in working poverty identified in this section apply to both formal and informal workers. As indicated earlier, this question is difficult to answer because, while the GHSs are useful in terms of consistency in the measure of household income and expenditure over time, they are weak in detail and particularly with regard to employment characteristics. However, a question on the ‘formality’ of employment was included from 2010 onwards so it is possible to provide a brief glimpse into the composition of the working poor from that year onwards (Table 6).

Table 6 Poverty among formal and informal workers, 2010 and 2012

<table>
<thead>
<tr>
<th></th>
<th>% of workforce in informal employment</th>
<th>% of the working poor in informal employment</th>
<th>Headcount (P₀) informal sector</th>
<th>Headcount (P₀) formal sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010</strong></td>
<td>19.45 (0.31)</td>
<td>39.38 (0.75)</td>
<td>46.31 (1.09)</td>
<td>17.21 (0.53)</td>
</tr>
<tr>
<td><strong>2012</strong></td>
<td>19.53 (0.32)</td>
<td>37.20 (0.78)</td>
<td>40.76 (1.15)</td>
<td>16.70 (0.54)</td>
</tr>
</tbody>
</table>

Source: Own calculations from the GHSs.
Notes: The data are weighted
Income sources are expressed in real monthly per capita terms (z = R323)

In line with official estimates from the Quarterly Labour Force Surveys (own calculations from the QLFS 2012- Quarter 3), the GHS data suggest that just under 20 per cent of the total workforce is in the informal sector. In 2010, 39 per cent of the working poor were in the informal sector and in 2012 this dropped to 37 per cent (although the difference is not significant). Not surprisingly, the headcount rate is far higher among informal workers (46 per cent in 2010) than for formal workers.
The interesting finding, however, is that the risk of poverty decreased significantly between 2010 and 2012 for informal workers (i.e. from 46 per cent to 41 per cent) but there was no change for formal sector workers. A tentative conclusion from this finding is that some of the changes in working poverty over the period have not necessarily been driven by formal sector workers exclusively. The informal sector makes up a fifth of the total workforce and, at least in the last two years of the period under review, the significant changes were in the risk of working poverty in the informal sector and not in the formal sector.

4.3 The working poor and their households, 2004-2012

This section now turns to an analysis of some of the possible reasons why the decrease in working poverty was not much greater than the decline in poverty for the population as a whole over the 2000s. In particular, the finding that the level of working poverty has been relatively consistent since 2006, even though overall poverty rates have declined, requires further investigation. Table 7 begins exploring some of the reasons for the observed trends in working poverty by considering the (self-reported) main sources of household income among the working poor. The table shows that, while labour market income is the single largest source of household income for the working poor, there have been only very small changes between 2004 and 2010.24

At the same time, the percentage of the working poor who reported that social grant income was the main household income source increased significantly (from 13 per cent in 2004 to 18 per cent in 2010). This is somewhat surprising in the sense that there is no specific grant for able-bodied working age adults (i.e. no unemployment protection) in South Africa.

Table 7 Main source of household income among the working poor (z=323), 2004-2010

| Source: Own calculations from the GHSs |
| Notes: The data are weighted (revised weights) |
| Standard errors in brackets |
| † † Denotes a significant change between 2004 and 2010 at the 95 per cent level of confidence |
| †† Denotes a significant change between 2004 and 2010 at the 90 per cent level of confidence |
| NB: This question was changed in the 2012 GHS and is no longer comparable with previous years. |

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries/wages</td>
<td>70.48 (0.69)</td>
<td>72.15 (0.77)</td>
<td>72.19 (0.66)</td>
<td>67.08 (0.72)</td>
</tr>
<tr>
<td>Remittances</td>
<td>4.64 (0.31)</td>
<td>4.47 (0.33)</td>
<td>3.82 (0.26)</td>
<td>3.38 (0.26)</td>
</tr>
<tr>
<td>Pensions and grants</td>
<td>13.39 (0.51)</td>
<td>14.44 (0.54)</td>
<td>18.85 (0.56)</td>
<td>18.14 (0.56)</td>
</tr>
<tr>
<td>Sales of farm products and services</td>
<td>1.76 (0.20)</td>
<td>3.13 (0.43)</td>
<td>1.46 (0.17)</td>
<td>0.10 (0.04)</td>
</tr>
<tr>
<td>Other non-farm income</td>
<td>9.44 (0.43)</td>
<td>4.71 (0.36)</td>
<td>2.99 (0.25)</td>
<td>0.65 (0.12)</td>
</tr>
<tr>
<td>No income</td>
<td>0.30 (0.11)</td>
<td>0.61 (0.16)</td>
<td>0.68 (0.17)</td>
<td>0.05 (0.02)</td>
</tr>
</tbody>
</table>

24 Comparisons with 2010 should be made with caution since the response categories changed slightly in this year, i.e. the estimates for 2010 may not be strictly comparable with those from 2004-2008.
Given the low values of the social grants but, at the same time, the relative importance of these grants to the working poor, Table 8 looks more closely at the types of grants received in the households of the working poor. The main conclusion from the table is that the working poor are increasingly likely to live in households which receive a Child Support Grant. Between 2004 and 2012, for example, the percentage of poor workers (according to the R323 poverty line) who lived in a household which received a Child Support Grant increased from 41 per cent to 57 per cent. The relatively low value of this particular grant might then explain the rapid decrease in the depth (but not necessarily the headcount) of poverty among workers, particularly at the lower poverty line (R219). Between 2004 and 2012, the overall coverage of social grants among the working poor also increased substantially – the average number of grants received almost doubled and the percentage of the working poor living in a grant-receiving household increased from 51 per cent to 63 per cent.

| Table 8 Social grant receipt among the working poor (z=323), 1997 - 2012 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|
| Percentage with grant receipt |         |         |         |         |         |         |         |
| CSG26                  | ---     | 0.69    | 40.85   | 52.05   | 53.50   | 58.31   | 56.54   |
|                        | (0.09)  | (0.76)  | (0.88)  | (0.80)  | (0.79)  | (0.83)  |         |
| SOAP27                 | 16.49   | 13.02   | 13.33   | 10.93   | 14.29   | 14.60   | 12.93   |
|                        | (0.42)  | (0.40)  | (0.50)  | (0.48)  | (0.60)  | (0.50)  | (0.45)  |
| DG28                   | 2.94    | 2.32    | 7.20    | 5.62    | 7.79    | 7.18    | 5.86    |
|                        | (0.19)  | (0.18)  | (0.41)  | (0.36)  | (0.37)  | (0.39)  | (0.32)  |
| FCG29                  | 0.15    | 0.09    | 0.35    | 0.33    | 1.66    | 2.21    | 2.85    |
|                        | (0.05)  | (0.04)  | (0.08)  | (0.07)  | (0.17)  | (0.21)  | (0.23)  |
| Total number of grants received (by the household) |         |         |         |         |         |         |         |
|                        | 0.23    | 0.18    | 0.90    | 1.20    | 1.49    | 1.65    | 1.68    |
|                        | (0.01)  | (0.01)  | (0.02)  | (0.03)  | (0.03)  | (0.03)  | (0.03)  |
| Percentage with at least one grant |         |         |         |         |         |         |         |
|                        | 18.79   | 15.42   | 51.16   | 54.80   | 61.72   | 65.55   | 63.12   |
|                        | (0.44)  | (0.42)  | (0.77)  | (0.89)  | (0.78)  | (0.78)  | (0.85)  |

Source: Own calculations from the 1997 OHS and the 2006 GHS
Notes: The data are weighted
Standard errors in brackets

The results reported in the previous two tables clearly demonstrate the important role of social grants in the households of the working poor. The key question then is the extent to which grant income contributed to the decrease in working poverty and, by extension, whether working poverty would have decreased without it. The last two figures present an analysis of the respective contributions of social grant income and labour market income to the reduction of the incidence and depth (P_0 and P_1) of working poverty. The relative contributions of these income sources

25 Another factor which is important to consider is household composition. For example, it is possible that working poverty did not increase by as much as expected (or at all, e.g. from 2006 onwards) because workers are distributing their earnings across an increasing number of household members or dependents. The GHSs, however, suggest that this is not the case. The average household size in which the working poor lived actually decreased marginally, as did the average number of children living with working poor South Africans. As a result, the ratio of children to total households size in the households of the working poor did not change over the period under review (own calculations from the 2004-2012 GHSs, Appendix D).
26 The Child Support Grant (CSG) was only rolled out in April of 1998 so there is no information on these grants captured in the 1997 OHS.
27 The SOAP in the State Old Age Pension
28 The DG is the Disability Grant
29 The FCG is the Foster Child Grant
to poverty reduction are depicted graphically and are based on the decomposition technique described in the previous section.

Between 2004 and 2012, the overall composition of total household income among workers did not change appreciably. Not surprisingly, earned income was the single largest source and comprised, at the mean, 94 per cent of total household income in the households of workers in 2004 whereas grant income comprised only about one or two per cent in both years. The decomposition (Figure 2) suggests, however, that grant income became slightly more important to the reduction of the poverty headcount among workers between 2004 and 2012. The relative contribution of grant income to the reduction of working poverty (relative to what it would have been without these three sources of income) increased from two per cent to three per cent between 2004 and 2012.

In the population as a whole, the relative contribution of social grants to poverty reduction increased from seven to nine per cent (not shown in the graph). So, in relative terms, the increase in importance of the contribution of grant income to poverty reduction was greater among the working population than for the population as a whole. This is likely to be the case, in part, because households with at least one worker (even poorly paid) are likely to be closer to the poverty line such that the addition of even a modest grant payment could push those households over a given poverty line.

Figure 2 Relative contributions to reducing the working poverty headcount (P₀) by income source, 1997-2012

![Graph showing relative contributions to reducing working poverty headcount from 1997 to 2012.]

Source: Own calculations from the GHSs using the DASP module developed by Araar and Duclos (2007)
Notes: The data are weighted
Income sources are expressed in real monthly per capita terms (z = R 323)

The same decomposition, but for the working poverty gap, suggests more strongly that, without social grant income, the gains made by the working poor over the early 2000s would have been more limited (Figure 3). The relative contribution of grant income towards the reduction of the working poverty gap increased from seven to eight per cent between 2004 and 2010. Among the population as a whole, the relative contribution of grant income to reducing the depth of poverty was far higher but the increase was far more modest between 2004 and 2012 (not shown in the graph).
5. Discussion

Despite some clear progress in the early 2000s, working poverty is still a problem in South Africa. In 2012, just over a fifth of all employed South Africans lived in households where there was not enough income to meet the minimum of the most basic needs of all household members. Using a slightly higher poverty line, we find that, in that same year, more than a third of all employed South Africans lived in households with just enough income to meet their minimum basic needs.

In addition, the data from the OHSs and the GHSs show that changes in the labour market over the post-apartheid period have not added appreciably to the demonstrable income effects achieved through the expansion of the social grant system. Rather, it seems that progress in poverty reduction may have stalled somewhat among the lowest paid workers over the past decade. Therefore, while access to employment is both a logical and a crucial step to avoiding poverty, it is clearly not enough in South Africa. Our analysis would suggest that the contribution of the labour market to human development in post-apartheid South Africa is not reaching its potential.

It is important, however, to consider how the findings on working poverty trends identified in this paper align with the broader literature and, in particular, with recent findings on post-apartheid earnings trends (Wittenberg, 2014a, 2014b), trends in ‘poverty wages’ (Vermaak, 2010, 2012) as well as with changes in the shape of the income distribution (Visagie, 2015) over the same period. Towards this end, it is reassuring (at least from a methodological perspective) to note that the income (and expenditure) data from the GHSs, on the whole, paint a picture which is largely supported by the literature on wage and income trends.

For example, Vermaak (2010) found that there was a considerable decrease in the percentage of workers who earned less than R150 and R500 per month (in 2000 prices) between 2000 and 2006. Moreover, the improvements in earnings that she found over this period were greater at the bottom of the income distribution (i.e. at the lower earnings threshold). Similarly, our findings
showed that the reduction in working poverty was greatest at the lower poverty line (i.e. among the poorest category of workers) over a longer time period. However, we qualify this particular finding by noting that the relative decrease in working poverty at this threshold was not much different than poverty decreases in the population as a whole (at this poverty line).

The recent findings that the growth in the middle of both the income distribution (Visagie, 2015) and the earnings distribution (Wittenberg, 2014a) was very modest also provide some support to our findings on working poverty. The fact that improvements in working poverty became smaller as the poverty line was increased also suggests that changes were more modest among low earning workers closer to the middle of the income distribution. Again, this seems to support the conclusion that social grant income was an important contributor to poverty reduction, even among employed South Africans. Given this important role of social grants, and the somewhat disappointing improvements in earnings, the findings presented in this paper provide support for Visagie’s (2015: 18) conclusion that, ‘…in the longer term more-inclusive household earnings growth through access to employment and rising wages is needed to drive larger scale transformation for the majority of South Africans.’

From a policy perspective, there are a number of implications associated with our findings. In terms of labour market policy specifically, studies of working poverty can contribute indirectly to debates on labour market flexibility, including minimum wage levels. Advocates of flexible labour markets tend to argue for a focus on the quantity rather than the quality of jobs. A stylised outcome of this approach would be an (implicit) acceptance of higher levels of working poverty in the hopes of lower levels of unemployment. However, in South Africa, we have both unemployment and working poverty problems, suggesting that what we need are not simply jobs, but rather decent jobs. Working poverty has persisted over a period which saw both high and low levels of economic growth, a high and persistent level of unemployment, the onset of and (partial) recovery from a major financial crisis, the introduction of protective labour market legislation, and the expansion of the social grant system. The persistence of both working poverty and unemployment amidst the interplay of these potential drivers and mediators of low earnings highlights the difficulty of the challenge that we face.

There would appear to be value in considering a combination of labour market and social policy interventions which could alleviate poverty among the employed. It is notable that the gap in South Africa’s otherwise comprehensive social security system is among able-bodied working age adults. The key question is where the responsibility lies for the more than one-fifth of the country’s workforce that resides in households which are unlikely to have enough income to meet the minimum of their most basic needs, or the more than a third who live in households with just enough income to cover the minimum of their most basic needs. Employers and the state surely have some level of responsibility for ensuring some minimum level of decent wages. At the same time, the greater social responsibility for vulnerable workers is something which should also be shared more widely.
References


## Appendix A

**Table A Including all sources of income: poverty estimates in 1997**

<table>
<thead>
<tr>
<th></th>
<th>All income sources</th>
<th>Earnings + grants + expenditure imputation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Headcount (P&lt;sub&gt;0&lt;/sub&gt;)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All individuals</td>
<td>60.23 (0.616)</td>
<td>59.53 (0.639)</td>
</tr>
<tr>
<td>Workers</td>
<td>29.59 (0.597)</td>
<td>28.79 (0.609)</td>
</tr>
<tr>
<td><strong>Poverty Gap (P&lt;sub&gt;1&lt;/sub&gt;)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All individuals</td>
<td>0.38 (0.005)</td>
<td>0.36 (0.005)</td>
</tr>
<tr>
<td>Workers</td>
<td>0.16 (0.004)</td>
<td>0.14* (0.003)</td>
</tr>
</tbody>
</table>

Source: Own calculations from the 1997 OHS

* Denotes a significant change from the preceding column at the 95 per cent level of confidence

Notes: The data are weighted

Standard errors in brackets

Rs323 per capita poverty line in 2000 prices
Appendix B

Figure B Trends in the working poverty headcount using the two methods of imputation, 2004-2012

Source: Own calculations from the GHSs
Notes: The data are weighted (revised weights)
R323 per capita poverty line in 2000 prices
Dotted lines = 95% confidence intervals

Table B Imputing income data with expenditure data if Y < C

<table>
<thead>
<tr>
<th></th>
<th>Expenditure imputation if Y &lt; C</th>
<th>Expenditure imputation for zero-income households only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Headcount (P₀)</td>
<td></td>
</tr>
<tr>
<td>All individuals</td>
<td>42.15 (0.71)</td>
<td>48.06* (0.69)</td>
</tr>
<tr>
<td>Workers</td>
<td>15.90 (0.48)</td>
<td>21.40* (0.53)</td>
</tr>
<tr>
<td>Poverty Gap (P₁)</td>
<td>18.61 (0.38)</td>
<td>24.79* (0.41)</td>
</tr>
<tr>
<td>All individuals</td>
<td>5.53 (0.19)</td>
<td>10.04* (0.33)</td>
</tr>
<tr>
<td>Workers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own calculations from the 2012 GHS
* Denotes a significant change from the preceding column at the 95 per cent level of confidence
Notes: The data are weighted
Standard errors in brackets
R323 per capita poverty line in 2000 prices
Appendix C

Figure C Poverty headcount rates among those who lived in a household with an employed member, 2004-2012

Source: Own calculations from the GHSs
Notes: The data are weighted (revised weights)
Poverty lines in 2000 prices
Dotted lines = 95% confidence intervals
### Appendix D

**Table D Selected demographic characteristics of the working poor, 2004-2012**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Household size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household composition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># working-age adults</td>
<td>3.33 (0.03)</td>
<td>3.17 (0.03)</td>
<td>3.26 (0.03)</td>
<td>3.38 (0.03)</td>
<td>3.08 (0.02)</td>
</tr>
<tr>
<td># of pensionable adults</td>
<td>0.18 (0.01)</td>
<td>0.14 (0.01)</td>
<td>0.18 (0.01)</td>
<td>0.18 (0.01)</td>
<td>0.16 (0.01)</td>
</tr>
<tr>
<td># children &lt;11</td>
<td>1.53 (0.02)</td>
<td>1.46 (0.02)</td>
<td>1.48 (0.02)</td>
<td>1.41 (0.02)</td>
<td>1.30 (0.02)</td>
</tr>
<tr>
<td># children (age 11-15, inclusive)</td>
<td>0.68 (0.01)</td>
<td>0.67 (0.01)</td>
<td>0.66 (0.01)</td>
<td>0.58 (0.01)</td>
<td>0.54 (0.01)</td>
</tr>
<tr>
<td>Ratio of children (&lt;11) to total household size</td>
<td>0.24 (0.01)</td>
<td>0.24 (0.01)</td>
<td>0.23 (0.01)</td>
<td>0.22 (0.01)</td>
<td>0.22 (0.01)</td>
</tr>
<tr>
<td>Ratio of pensioners to total household size</td>
<td>0.03 (0.01)</td>
<td>0.02 (0.01)</td>
<td>0.03 (0.01)</td>
<td>0.03 (0.01)</td>
<td>0.03 (0.01)</td>
</tr>
</tbody>
</table>

Source: Own calculations from the GHSs
Notes: The data are weighted
       Standard errors in brackets
Appendix E

Figure E Trends in the working poverty headcount after adjusting for household size and composition, 2004-2012

Source: Own calculations from the GHSs
Notes: The data are weighted (revised weights)
      \[ z = R_{323} \]
      Adult equivalent adjusted poverty line = R362 (in 2000 prices)\(^{30}\)
      Dotted lines = 95\% confidence intervals

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30 The adjustment follows Woolard and Leibbrandt (1999) in defining children as those aged ten and younger. Adult equivalence is adjusted by:
\[
(A + \alpha K)^\theta
\]
Where \(A\) is the number of adults in the households, \(K\) is the number of children, \(\alpha\) is the estimated ratio of consumption required for a child, relative to an adult, and \(\theta\) represents an economy of scale parameter for household consumption. In adjusting for household composition and size we follow the poverty literature in estimating that children consume half the resources of adults (\(\alpha = 0.5\)) and that households take advantage of modest economies of scale (\(\theta = 0.9\)).