

A Study of the Size, Composition and Characteristics of the Middle Class in South Africa

Justin Visagie University of KwaZulu-Natal

27 - 29 October 2010

Indaba Hotel and Conference Centre
Johannesburg
South Africa

Hosted by





A STUDY OF THE SIZE, COMPOSITION AND CHARACTERISTICS OF THE MIDDLE CLASS IN SOUTH AFRICA

Justin Visagie University of KwaZulu-Natal justinvisagie@gmail.com

Abstract

To date there has been little consensus in the way in which the middle class is defined within the South African literature. This paper attempts to provide a robust description of the middle class in South Africa by contrasting three common definitions of the middle class from within the international economic literature on class. The size, racial composition, income levels, labour market status and educational levels of the middle class in South Africa are described. South Africa is shown to have a comparatively small middle class, indicative of South Africa's high level of income inequality. Furthermore, class structure in South Africa still reflects the ongoing legacy of apartheid, with White households predominating the very top of the class pyramid. Middle class households however are overwhelmingly African. Further, the level of affluence and standard of living of the middle class in South Africa is far from that traditionally associated with the middle class of developed economies.

1. Introduction

There is a large literature which investigates how access to resources has changed in post-apartheid South Africa. Many studies measure trends in poverty, thereby focussing on changes at the lower end of the income distribution, or they estimate changes in inequality (c.f. Hoogeveen & Özler, 2006; Leibbrandt et al, 2006; Van der Berg et al, 2008; Van der Berg et al, 2010; Leibbrandt et al, 2010). However, there has been relatively little work which investigates the nature of the middle class in the post-apartheid period (c.f. Rivero et al, 2003; Schlemmer, 2006; Udjo, 2008; Statistics South Africa, 2009; Van der Berg et al, 2010). Furthermore, this research has been hampered by the absence of comprehensive information on income received by households.

There are numerous reasons why a thorough examination of the size and nature of the middle class in South Africa is important. An analysis of the middle class provides another window through which progress in development can be measured. For example, a small middle class highlights the polarisation of income in society. The nature of the middle class may also be an important 'ingredient' for future development. For example, studies from a number of countries suggest that a sizable middle class may help to foster higher levels of economic growth (c.f. Easterly 2001); be it through attitudes and behaviours specific to the middle class (c.f. Landes,

1998; Doepke & Zilibotti, 2007); promotion of optimal levels of effective-demand (c.f. Brown, 2004); higher overall rates of human capital accumulation (c.f. Galor & Zeira, 1993; Perotti, 1996; Sokoloff & Engerman, 2000); or the promotion of democracy and political stability (c.f. Bollen & Jackman, 1985; Barro, 1999).

The objective of this study is to define and describe the current state of the middle class in South Africa. The data used in the analysis come from the first wave of the National Income Dynamics Survey (NIDS), conducted in 2008. This survey collected comprehensive income and expenditure information on a representative sample of approximately 7,300 South African households or 28,000 individuals.

In the study, three definitions of the middle class from the economic international literature are compared: the middle third or 'tercile' of households within the income distribution (c.f. Pressman, 2007); households that fall within 75% - 125% of median income (c.f. Thurlow, 1987; Pressman, 2007); and a \$4 - \$14 income range representing an absolute approach to defining class status (c.f. Banerjee & Duflo, 2008; Ravallion, 2010). The choice of definition is shown to be an important factor in determining the size, composition and characteristics of the middle class. The size of the middle class in particular is strongly dependant upon which definition is used. Nevertheless, there are common findings robust to the choice of definition. African households are substantially under-represented in the upper class and over-represented in the lower class. White households in contrast are under-represented in both the lower and middle class but over-represented in the upper class.

The study further shows that middle class status in South Africa does not reconcile with middle class status of economies in the developed world. Average per capita income for the middle class ranges from R707 to R1,002 (2008 prices), depending on how the middle class is defined. For the middle class, earnings from the labour market contributes the largest share towards household income. Grant income is also an important source of income for the middle class. The middle class would shrink by approximately 25% if income from grants were removed. Further, individuals in the middle class face a lower rate of unemployment as well as higher average earnings than individuals in the lower class despite being not much more educated.

Lastly, changing the basis of the analysis from household income to household expenditure makes little difference to the main conclusions reached. The same applies to the inclusion of implied rent as a source of household income, although average income increases significantly upon the inclusion of implied rent.

The paper is structured as follows. Section 2 reviews the literature on the middle class in South Africa as well as the choice of definition for the middle class. Section 3 discusses the NIDS 2008 data which is used to analyse the middle class in South Africa. Section 4 compares the selection of households across three different definitions of the middle class from the international economic literature, while section 5 compares the size of the middle class across these different definitions. Section 6 describes the racial composition and economic profile of the middle class in South Africa. This includes descriptions of average incomes, sources of income, the labour market and educational attainment. Lastly, section 7 examines two further issues of robustness: the inclusion of implied rent as an additional source of household income; and the effects of

using expenditure rather than income to identify class status. The final section concludes the study and summarises the main findings.

2.1 Review: The Middle Class in South Africa

To the author's knowledge, there are only a handful of studies which attempt to identify the middle class in South Africa to date:

Rivero et al (2003) examine the development of the middle class in South Africa between 1994 and 2000 in light of the positive association between the size of the middle class and stable democracy. Using the Human Sciences Research Council February Omnibus Surveys, Rivero et al define the middle class at the level of the individual and measure class status by occupation filtered further by earnings (between the second and fourth earnings quintiles of the White population group). This follows a sociological approach to defining the middle class. They report that the middle class in South Africa grew from 8.8% in 1994 to 11.9% of the population in 2000. This growth was characterised by an increase in the number of Africans in high-level occupations (particularly professionals). Nonetheless, a relatively small sample size (approximately 2,500 individuals) for each survey means that trends for specific occupational groups were hindered by issues of statistical significance.

Seekings and Nattrass (2002) also investigate class structure in South Africa from a sociological framework of analysis. Examining data from the 1993 Project for Statistics on Living Standards and Development Survey, they use the occupational status of the household head to identify class structure. Seekings and Nattrass formulate a multi-tiered class structure in which they identify the 'intermediate class' (routine white-collar, skilled or supervisory workers), 'semi-professional class' (teachers or nurses), and 'upper class' (managerial, technical or professional occupations) but without any specific categorisation of the middle class. Nevertheless they do subsequently discuss the 'changing middle class' in which "teachers, nurses, professionals and junior and middle managers" are said to constitute the middle class. This highlights an apparent disconnect in the sociological literature on class, whereby, on the one hand individuals are described as being middle class in terms of their occupation, but on the other hand they are deemed to be upper class in terms of their relative position within the income distribution. This is typical of the difficulties in using a sociological approach to define class status within a developing economy such as South Africa.

Schlemmer (2005), using All Media Product Survey (AMPS) data from 1993 and 2003, examines the growth of households deemed to be 'the core African middle class'. These are African households who earned in excess of R12,000 per month in 2003 prices and fell into South African Advertising Research Foundation's (SAARF) top two Living Standard Measures (LSM's 9 & 10).¹ Schlemmer finds that the core African middle class grew from some 19,000 individuals in 1993 (0.11% of the African population aged 16+) to 129,000 individuals (0.58% of the African population aged 16+) in 2003– an impressive growth rate of 20% per annum. However such low population estimates for the middle class raise questions of statistical significance in

3

¹ The South African Advertising Research Association's Living Standard Measure divides households into categories from one to ten based on their asset base and standards of living.

the analysis. Furthermore, the high level of growth for the core African middle class is partly driven by the low base level in 1993. Moreover, using total household income to define the middle class fails to take into account the important role of household size in determining living standards. Lastly, Schlemmer provides no upper income threshold in his definition of the middle class. Hence there is no formal distinction between middle and upper class households in this analysis.

Udjo (2008) also uses SAARF's Living Standard Measure to examine what he terms to be the 'African emerging middle class'; namely, African households who fall within LSM's 5 – 7. This refers to individuals who typically live in households with an income of R2,436 – R6,437 per month. Using All Media Product Survey (AMPS) data, he finds that the African middle class grew from 6.31 million individuals in 2001 to 9.32 million individuals in 2007. This represents an average annual growth rate for the emerging African middle class of 6.5%. Udjo then uses the Community Survey 2007 to supplement the AMPS data with richer demographic information on the 'African emerging middle class'. However Udjo's definition of the middle class in the Community Survey 2007 is inconsistent with the way that the middle class is defined in the AMPS data and therefore not directly comparable between these two datasets.² Further, both the AMPS and the Community Survey 2007 are both problematic in their estimation of total household income form all sources.³

Van der Berg (2010) comments on the size of the African middle class using AMPS data. He reports that the percentage share of Africans in the middle class (defined as individuals with a per capita income of above R2,083 per month) increased from 21.1% in 1994 to 44.0% in 2008. This followed a general increase in the size of the middle class from 13.5% to 20.6% of the total population between 1994 and 2008. However Van der Berg does not provide any upper income threshold for the middle class defined in his analysis. Hence his definition of the middle class includes both the middle class and the upper class conjointly.

Lastly, Statistics South Africa (StatsSA) (2009) examine the growth of households with a 'middle class standard of living' across a wide range of datasets, namely, the October Household Surveys 1998-1999, the Labour Force Surveys 2000-2001 and the General Household Surveys 2002-2006. The middle class is defined by StatsSA as households "residing in formal housing, having a water tap in the residence, having a flush toilet in the residence, having electricity as the main lighting source, having electricity or gas as the main cooking source, and having a landline or a household member having a cell phone" (StatsSA, 2009: 1). Given their broad notion of middle class living standards, this study provides more of a generalised examination of the socio-

⁻

² Udjo does not identify middle class households by the same criteria across these two household surveys. This is because the community survey 2007 does not ask some of the necessary questions that were used to identify the middle class in the AMPS data.

³ The AMPS dataset only collects information on income from all sources using a household one-shot question– this is likely to prove unreliable, particularly at assessing household income at the upper end of the distribution. The Community Survey 2007 on the other hand does collect detailed information on household income but is suspected to have unreliable information on unemployment, grants, income, the institutional population (those individuals residing in collective living quarters) and the distribution of households by province (c.f. Statistics Council of South Africa, 2007).

economic development of households in South Africa rather then a specific analysis of the middle class.

2.2. What is middle class?

What is apparent from the abovementioned studies on the development of the middle class in South Africa is that there is a lack of consensus concerning what being 'middle class' entails.

Conceptualising class has its roots within the sociological literature. Marx (1974) defined class according to ownership of the means of production, where the middle class (sometimes referred to as petit-bourgeois) occupied the middle ground in society as small business owners or white-collar workers- neither pure bourgeois given their partial ownership of the means of production, nor pure proletariat given their degree of authority over other workers in managing the production process. Practically, this amounts to identifying class status at the level of the individual and by occupation i.e. by social hierarchy. However there are two problems with such an approach: firstly, it is not clear as to how to classify the occupational status (and therefore the class status) of individuals who are unemployed, out of the labour force, or in full-time education. Secondly, using occupation to measure class status implies that class is measured at the level of the individual (as opposed to the household). This means that members of the same household may be divided into different class categories despite the fact that they may share their resources. The occupational status of the household head is therefore sometimes used as a proxy for the class status of the whole household; nonetheless it is not clear as to why the occupational status of the household head should serve as an appropriate marker for the class status of the household.

Within the international economic literature, class structure is typically identified according to per capita household income or expenditure i.e. according to the *economic* hierarchy. The middle class is thus pragmatically (and perhaps more intuitively) defined as those households who are relatively neither 'poor' nor 'rich' but lie in the middle of the income distribution. Class structure is therefore identified at the level of the household, and identifying class status is more easily quantifiable. There has however been some measure of difference in the way in which per capita income is used to define class status across developed and developing countries.

Within developed economies, a relative approach to defining the middle class has been consistently employed. Here, households are divided into income deciles (or terciles) and the middle deciles are selected as middle class. Alternatively, the middle class is sometimes defined as those households which fall within a certain range of median per capita income (typically 75% - 125%; see Thurow, 1987).

Within developing economies however, there has been less consensus as to how to define the middle class using per capita income. This is because centring the middle class on median income (as the relative approach does) may lead to some households being classified as middle class who fall below the poverty line. This has led some economists to use an absolute approach to defining middle class status i.e. in terms of a specified per capita income range. Ravallion (2010) suggests that the lower boundary for this income range be approximated by the national poverty line and that the upper boundary be approximated by the poverty line of a developed

country (in other words, the middle class in developing economies are non-poor by local standards but still poor compared to the standards of developed economies).

2.3. Defining Class Status in South Africa

Following the international economic literature on identifying class status, this paper uses household income as the grounds for measuring class status in South Africa. Furthermore, both a relative approach and an absolute approach to defining the middle class are employed. The household is used as appropriate unit of analysis, but adjusted for household size. Hence households are ranked within the national income distribution according to per capita income.⁴

The following three definitions of the middle class from the economic international literature are adopted:

- 1) 'Tercile': Following a relative approach to class status, the 'tercile' definition refers to households falling within the middle third (*middle tercile*) of the per capita household income distribution.
- 2) '% median': Also following a relative approach to class status, this definition refers to households who fall between 75% 125% of median per capita household income. The advantage of the '% median' definition is that it allows class size to fluctuate over time in contrast to the 'tercile' definition.
- 3) '\$4 \$14 per day': This definition refers to households who fall within a per capita income range of \$4 to \$14 per day in 2008 prices and hence is based upon an absolute approach to defining class status.⁵ Following the suggestion of Ravallion (2010), the lower bound of the middle class income range is set to the national poverty line whilst the upper bound is set to the US poverty line.⁶

Conveniently, any definition of the middle class segments the population into three natural class categories: lower, middle and upper class. The state of the middle class can therefore be easily compared and contrasted to the state of the lower class and upper class respectively.

3. Data

The National Income Dynamics Survey (NIDS) 2008 provides a reliable source of data on the socioeconomic status of all households in South Africa in 2008. This nationally representative

⁴ Per capita expenditure is also used as an alternative measure of identifying class status. Section 7 looks at the robustness of the description of the middle class to using income or expenditure as the basis for measuring class status.

⁵ Using a purchasing power parity exchange rate of R4.25 to the dollar, that is incomes between R519 and R1815 per capita per month c.f. Leibbrandt et al (2010) for use of purchasing power parity exchange rates in the NIDS 2008.

⁶ Hoogeveen and Osler's (2006) national poverty line of R519 per month in 2008 prices equates to \$4 per day in 2008 prices whilst the US poverty line of \$14 per day in 2008 prices (R1815 per month in 2008 prices) is taken from Ravallion (2010).

household survey is particularly useful in measuring class status given that it captures detailed information on both total household income and expenditure.

Income data within the NIDS 2008 is measured comprehensively from the following sources: labour market income, government grant income, other government income, investment income, remittance income, agricultural income, and implied rental income. However implied rental income is excluded from the analysis owing to concerns of reliability and comparability. Including implied rent as a source of income is discussed in section 7.

The NIDS 2008 also provides a comprehensive measurement of total household expenditure. This comprises household expenditure from the following sources: total monthly food expenditure, total monthly non-food expenditure, and total monthly rental expenditure.⁸

Missing data in the NIDS have been imputed where feasible in order to ensure that income and expenditure are represented as comprehensively as possible (c.f. Argent, 2009). Given the comprehensive nature of income and expenditure data contained in the NIDS 2008, using this dataset provides the opportunity to measure more rigorously class status in South Africa. This represents a noteworthy improvement on current research into the South African middle class which has largely been based upon income or expenditure data collected from 'one-shot' type questions.

4. Class Structure and the Income Distribution

The following section examines the degree of similarity between households identified as middle class across the three definitions of class status (identified in section 2) using the household per capita income distribution.

As shown in Figure 1, there is some degree of overlap between households selected into the middle class across all three definitions. However the range of per capita household monthly income is significantly different across definitions as well as the centre point of that income range. Table 1 indicates that the '\$4-\$14 per day' definition of the middle class contains the wealthiest and widest set of households in the middle class whilst the '% median' definition is most restrictive in terms of the income range set for the middle class.

⁷ Labour market income consists specifically of "main and secondary job, casual wages, self employment income, 13th cheque, other bonus, profit share, 'helping friends' income, and extra piece-rate income". Government grant income consists specifically of "old age pension, disability grant, child grant, foster care grant, and care dependency grant". Other government income consists specifically of "UIF income, and workers compensation". Investment income consists specifically of "interest/dividend income, rental income, and private pensions and annuities." Agricultural income consists specifically of "sale of agricultural goods, value of own-production of agricultural goods consumed, value of own-production of agricultural goods given away – costs incurred in the production of agricultural goods are subtracted from this income."

⁸ Food expenditure consists of the sum of 32 food items; non-food expenditure consists of the sum of 52 non-food items. Rental expenditure excludes implied rental expenditure— which is discussed in further detail in section 7.

Nonetheless, there is a reassuring measure of similarity across all three definitions. This rough similarity is however strongly dependant on two factors:

Firstly, the specific position of the income boundaries under the absolute approach may be significantly varied. For example, if the lower and upper bounds of the income range (here \$4-\$14 per day) are adjusted upwards to select households with a standard of living commensurate with the living standards of middle class households of developed economies, the lower bound for this per capita income range might arguably *start* at \$14 per day (i.e. at the current US poverty line). Nevertheless, the absolute income bounds employed here correspond to those suggested appropriate for developing countries by Ravallion (2010). In a separate study, Banerjee and Duflo (2008) use a similar income range of \$3 to \$15 (adjusted to 2008 prices) to identify the middle class of thirteen developing countries.

Secondly, the broad similarity across definitions depends on use of the household as the unit of analysis, not the individual. This is because the median household in the household per capita income distribution lives on R711 per month, whilst the median individual in the individual per capita income distribution lives on only R450 per month. Employing the individual as the unit of analysis would therefore result in both the '% median' and 'tercile' definitions of class status selecting a much poorer middle class comparative to the '\$4-\$14 per day' definition. However, it is not clear as to why the individual should be used as the unit analysis in measuring class status given that total household income is naturally situated at the level of the household.

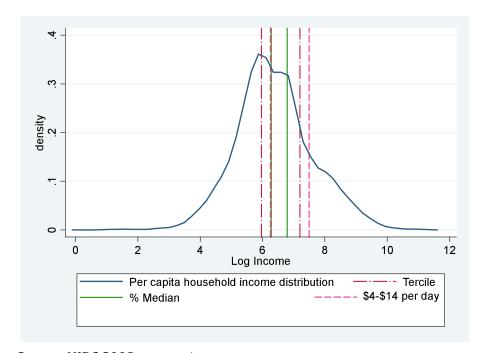


Figure 1: Kernel Density Estimation of Log Income

Source: NIDS 2008, own estimates

Table 1: Lower and upper bound ranges for households in the middle class by definition

Per capita monthly income			
Tercile	% Median	\$4-\$14 per day	

Lower Boundary	R 391	R 533	R 519
Upper Boundary	R 1,334	R 889	R 1,815
Middle of Range	R 863	R 711	R 1,167
Size of Range	R 943	R 356	R 1,296

Source: NIDS 2008, own estimates Notes: The data are weighted

Although some measure of similarity exists between these three definitions of class status, careful attention must be given to the way in which class status is defined in any analysis of the middle class. The remainder of this paper therefore uses all three of the definitions of the middle class discussed above in order to identify a robust picture of the middle class in South Africa.

5. The Size of the Middle Class

5.1 The Current Size of the Middle Class

Assessing the size of the middle class is important given the relationship between the middle class and economic development (c.f. Easterly, 2001; Pressman, 2007). Table 2 reports on the size of the middle class in South Africa in 2008 using all three definitions of middle class status. The table demonstrates that class size is very dependant on the particular definition in use. The size of the middle class ranges from 1.96 million households (containing 6.72 million individuals) to well over double this amount at 4.57 million households (containing 15.73 million individuals) depending on the definition. Claims regarding the size of the middle class should therefore always be considered hand-in-hand with how the middle class has been defined.

Table 2: Class size by definition of class status

	Tercile				% Median	n \$4-\$14 per day				
	Lower	middle	upper	lower	middle	upper	lower	middle	upper	Total
Households (millions)*	4.58 (33.4%)	4.57 (33.3%)	4.58 (33.4%)	5.86 (42.7%)	1.96 (14.3%)	5.91 (43%)	5.78 (42.1%)	4.29 (31.2%)	3.66 (26.7%)	13.73 (100%)
% Income	6.1%	15.7%	78.2%	9.5%	6.6%	83.9%	9.3%	17.9%	72.7%	100%
Individuals (millions)*	21.51 (44.2%)	15.73 (32.3%)	11.45 (23.5%)	26.83 (55.1%)	6.72 (13.8%)	15.14 (31.1%)	26.53 (54.5%)	13.22 (27.1%)	8.95 (18.4%)	48.69 (100%)
% Income	6.1%	15.7%	78.2%	9.5%	6.6%	83.9%	9.3%	17.9%	72.7%	100%

Source: NIDS 2008, own estimates

Notes: * Percentage of total in parenthesis

The data are weighted

The 'tercile' definition of class status is least useful in assessing the size of the middle class given that this definition predefines a constant size of the middle class. Rather, it is the percentage share of total income accruing to the middle class that is most illuminating when using this definition. Here, the middle class receives only 15.7% of total income. This is similar to the percentage share under the '\$4-\$14 per day' definition of 17.9% although much higher than the 6.6% of total income using the '% median' definition'. Nonetheless, the message is clear across

all three definitions— the middle class in South Africa appears to lack the economic clout typically associated with the middle class of developed economies.

The relatively smaller size of the middle class as defined by the '% median' definition (both in terms of the percentage of households as well as the percentage of total income) is illustrative of the high level of income inequality within South Africa. Birdsall et al (2000) report on the size of the middle class from a selection of 25 countries defining the middle class as households falling within 75% - 125% of median per capita household income. From a selection of 19 developed countries they estimate the middle class to comprise on average 37.2% of households and from a selection 6 Latin American developing countries they estimate the middle class to comprise on average 21.7% of households (the lowest being Panama at 19.4%). South Africa's comparatively smaller middle class of just 14.3% of households (using the same '% median' definition) illustrates that very high income inequality in South Africa squeezes out the middle class from both ends of the distribution.

The '\$4-\$14 per day' definition of class status also illustrates the fact that South Africa has a relatively smaller middle class in comparison to estimates of the middle class in other developing countries. Table 3 reproduces Ravallion's (2010) calculations of the size of the middle class across a range of developing regions using a very similar definition of class status of '\$3-\$14 per day'.⁹ (Please note however that Ravallion reports on the percentage of individuals [not households] which fall within the middle class i.e. Ravallion's estimates need to be compared to lower half of Table 2 above).

Table 3: Percentage of individuals within each class category using a definition of middle class status of between \$3 and \$14 (in 2008 prices) per capita per day

Class Status (middle class between \$3-\$14 per cap						
Region	Lower	Middle	Upper	Total		
East Asia and Pacific	38.7%	59.3%	2.0%	100%		
Of which China	36.3%	61.8%	1.9%	100%		
Eastern Europe and Central Asia	8.9%	73.4%	17.7%	100%		
Latin America and Caribbean	17.1%	65.8%	17.1%	100%		
Middle East and North Africa	16.9%	78.7%	4.5%	100%		
South Asia	73.9%	25.8%	0.3%	100%		
Of which India	75.6%	24.1%	0.3%	100%		
Sub-Saharan Africa	72.9%	25.8%	1.3%	100%		
Total	47.0%	48.5%	4.5%	100%		
Total excluding China	50.4%	44.3%	5.3%	100%		

Source: Estimates from Ravallion (2010)

⁹ Ravallion uses an absolute definition of class status of \$2 - \$13 per capita per day (in 2005 prices) which converts into \$3 - \$14 per capita per day in 2008 prices. Ravallion's lower bound of \$3 is based upon the median poverty line amongst 70 poverty lines for developing countries, whilst South Africa's lower bound of \$4 is based upon a commonly used South African poverty line (c.f. Hoogeveen&Osler, 2006).

Most of the developing regions in Table 3 have a comparatively larger percentage of individuals within the middle class compared to the 27.1% of individuals within the middle class in South Africa. This is with the exceptions of South Asia and Sub-Saharan Africa. However, whilst both South Asia and Sub-Saharan Africa have a relatively small upper class (and a very large lower class), South Africa contains a relatively large upper class comprising 18.4% of all individuals in spite of a small middle class. Indeed, South Africa's upper class is larger than the upper class of any of the regions reported in the table above. Although both the regions 'Eastern Europe and Central Asia' and 'Latin America and Caribbean' have a large upper class, their middle class comprises over 65% and 73% of total individuals respectively. South Africa's class structure, which contains a large upper and lower class alongside a relatively small middle class, appears somewhat unique in comparison to the regions presented in Table 3 above. This is indicative of the impact of high levels of income inequality on the class structure in South Africa.

5.2 Future Projections of the Size of the Middle Class

Currently, only one wave of NIDS data is available. It is therefore not possible, as of yet, to examine any *changes* to the size of the middle class across time using NIDS data in isolation. Nevertheless, it is possible to simulate the effect of distribution neutral economic growth on the potential size of the middle class into the near future. Table 4 reports on the impact to the class structure of five years of low (2% per annum for five years), medium (5% per annum for five years), and high (8% per annum for five years) average economic growth. Only the '\$4-\$14 per day' definition of class status is reported on. This is because distribution neutral growth has no impact on the class structure when using relative definitions of class status. The 'tercile' and '% median' definitions of class status show no change under any scenario of distribution neutral growth. Therefore, Table 4 uses the '\$4-\$14 per day' definition of class status to assess the impact of distribution-neutral growth on the size of the middle class over the next five years *ceteris paribus*— that is, holding household size and the absolute income threshold of '\$4-\$14 per day' constant over the next five years. Although these assumptions are somewhat unrealistic, this model at least provides a base scenario from which the potential impact of economic growth on the class structure on South Africa can be inferred.

Table 4: Impact on class structure of distribution neutral income growth after five years using '\$4-\$14 per day' definition of class status

	Lower	Middle	Upper						
Class size (millions) a	Class size (millions) after x% growth per annum for 5 years*								
Base 2008 (current)	5.78 (42.1%)	4.29 (31.2%)	3.66 (26.6%)						
2%	5.41 (39.4%)	4.40 (32.0%)	3.92 (28.5%)						
5%	4.80 (35.0%)	4.55 (33.1%)	4.38 (31.9%)						
8%	4.24 (30.9%)	4.66 (33.9%)	4.83 (35.2%)						
Change from base in	2008 ⁺								
2%	-0.37 (-6.4%)	0.11 (2.6%)	0.26 (7.1%)						
5%	-0.98 (-16.9%)	0.26 (6.1%)	0.72 (19.7%)						
8%	-1.54 (-26.6%)	0.37 (8.6%)	1.17 (32.0%)						
Elasticity "% change class size to % change income"									
2% - 0.61 0.25 0.68									
5%	- 0.61	0.22	0.71						

8%	- 0.57	0.18	0.68
----	--------	------	------

Source: NIDS 2008, own estimates

Notes: *percentage of total households in each scenario in parenthesis

*percentage change in parenthesis

The data are weighted

Growth in the number of middle class households appears to be very slow to respond to distribution neutral economic growth. A low rate of economic growth of only 2% per annum for the next five years (that is an effective increase in per capita incomes by 10.41% from 2008) hardly increases the size of the middle class by the end of this period (the middle class grows by a mere 2.6%). However, even a very high level of economic growth of 8% per annum for five years only increases the size of the middle class by 8.6%, despite an effective increase in per capita incomes of 46.93% from 2008.

The elasticity of class size to income (i.e. percentage change in class size to the percentage change in income) demonstrates this point clearly. Under various scenarios of economic growth, the elasticities of both the lower and upper class remain above 0.57, whilst in comparison, the middle class fails to produce an elasticity above 0.25. This is partly because distributional neutral growth results in both entry *and* exit of households into the middle class (whereas households may only enter and exit the upper and lower class respectively). The middle class is therefore highly unresponsive to distribution neutral changes in the income structure.

What the above analysis of distribution neutral growth makes clear is that it is the spread of incomes in South Africa which ultimately limits the size of the middle class. If South Africa is to develop a class structure with a relatively more sizable middle class, economic growth needs to be far more than just distribution-neutral.

6. Composition and Characteristics of the Middle Class

6.1 Race and Class

The following section examines the composition and characteristics of the middle class using the NIDS 2008. It is interesting to examine to what extent race continues to underlie the class structure in South Africa in light of fourteen years since the end of apartheid.

Table 5 shows both column and row percentages for class and race in South Africa using all three definitions of the middle class discussed in section 2. Given that class status is calculated

-

¹⁰ That is taking the absolute value of the elasticity of the lower class, given that the lower class shrinks with economic growth.

¹¹ At a rate of economic growth as high as 8% per annum for five years, one might be tempted to reassess the thresholds for what constitutes middle class according to the absolute definition of the middle class. Nonetheless, at the end of this period of high economic growth, the lower class would still constitute some 30.9% of total households– hence middle class households would still maintain their significance as households privileged within the income structure, justifying keeping the absolute income threshold for the middle class constant over this period.

at the level of the household, the household's race is designated as the race of the household head. There are also a very small percentage of households for whom no race was recorded. These households are included in the table under the column 'missing'.

Looking at the percentage shares of households in the lower, middle and upper class for each race group respectively (i.e. the column percentages) reveals significant differences between the three definitions of class status. In particular, the shares for the middle class across all races are consistently smaller using the '% median' definition of class status (and comparatively wider for the upper and lower class) compared to the 'tercile' and '\$4-\$14 per day' definitions. This is a function of the smaller population share of the middle class when using the '% median' definition (class size was discussed in Section 4). Nevertheless, the *pattern* of class structure for each race group is consistent across all three definitions. In this regard, African households are more concentrated in the lower class (and least concentrated in the upper class) while White households are more concentrated in the upper class (and least concentrated in the lower class). Coloured and Indian households are more likely to be higher up the class structure than African households but still significantly less privileged than White households. Hence, an examination of the distribution of households within the class structure for each racial grouping shows that class in South Africa still strongly resembles the design of apartheid.

Table 5: Class status and race by definition of class status

	African	Coloured	Indian	White	Missing	Total
Tercile						
Lower	40.6% (92.5%)	22.9% (5.7%)	10.9% (0.8%)	2.0% (0.7%)	16.0% (0.3%)	33.4% (100%)
Middle	36.0% (82.3%)	42.3% (10.5%)	21.0% (1.6%)	13.3% (5.0%)	37.4% (0.7%)	33.3% (100%)
Upper	23.5% (53.6%)	34.9% (8.6%)	68.1% (5.0%)	84.8% (31.9%)	46.6% (0.8%)	33.3% (100%)
Total	100% (76.1%)	100% (8.3%)	100% (2.5%)	100% (12.6%)	100% (0.6%)	100% (100%)
% Media	n					
lower	51.2% (91.5%)	33.1% (6.4%)	14.3% (0.8%)	3.3% (1.0%)	25.9% (0.4%)	42.7% (100%)
middle	15.7% (83.6%)	16.2% (9.4%)	7.3% (1.3%)	5.4% (4.7%)	25.1% (1.0%)	14.3% (100%)
upper	33.1% (58.5%)	50.8% (9.7%)	78.4% (4.5%)	91.3% (26.6%)	49.1% (0.7%)	43.1% (100%)
Total	100% (76.1%)	100% (8.3%)	100% (2.5%)	100% (12.6%)	100% (0.6%)	100% (100%)
\$4-\$14 p	er day					
lower	50.6% (91.5%)	32.2% (6.3%)	14.3% (0.8%)	3.3% (1.0%)	25.9% (0.4%)	42.1 (100%)
middle	32.2% (78.6%)	44.1% (11.7%)	32.3% (2.6%)	16.5% (6.6%)	32.5% (0.6%)	31.2 (100%)
upper	17.2% (49.0%)	23.7% (7.3%)	53.4% (4.9%)	80.2% (37.8%)	41.6% (0.9%)	26.6 (100%)
Total	100% (76.1%)	100% (8.3%)	100% (2.5%)	100% (12.6%)	100% (0.6%)	100% (100%)

Source: NIDS 2008, own estimates Notes: Row percentages in parenthesis

Missing refers to where no race was recorded for any of the household members.

The data are weighted

¹² This assumption is unproblematic as less than 2.5% of households are of mixed race

Class and race can also be examined by looking at the percentage shares of households from each race within the lower, middle and upper class respectively (i.e. row percentages). All three definitions of class status give similar results. African households posses a much higher share of total households which means that in absolute terms, Africans form the majority in each class category (despite being most concentrated within the lower class when looking at African households only). The middle class is comprised overwhelmingly of African households (in excess of 78% of total households), followed next by Coloured, White and lastly Indian households. This may appear somewhat surprising, given that the media has often discussed the rise of the 'black middle class'. What the above table reveals is that the middle class is overwhelmingly 'black' using any of the three economic definitions of the middle class found within the international literature. Even within the upper class, African households predominate, followed next by White households.

In order to explore the ongoing legacy of apartheid in more detail, the racial composition of the upper class is examined in isolation. Using the '\$4-\$14 per day' definition of class status, the upper class is divided into a further three terciles. Table 6 reports on the racial composition of the upper class divided into the 'lower upper class' (R1,816 – R2,999 per capita per month), the 'middle upper class' (R3,000 – R5,332 per capita per month) and the 'upper upper class' (\geq R5,333 per capita per month).

Class remains highly racialised within these three tiers of the upper class shown in Table 6. More specifically, the proportion of White households increases and the proportion of African households decreases as class status rises. However, in absolute terms, White households only form the majority of households when referring to the 'upper upper class.'

Table 6: Upper class and race (\$4-\$14 per day definition of class status)

Upper Class	Income Range	African	Coloured	Indian	White	Total
	(per capita per month)					
Lower	R1,816 – R2,999	43.0 (63.6)	54.0 (11.9)	18.2 (2.7)	19.1 (21.7)	33.4 (100)
Middle	R3,000 – R5,332	35.6 (53.2)	25.4 (5.7)	38.0 (5.7)	30.7 (35.4)	33.1 (100)
Upper	≥R5,333	21.4 (31.6)	20.7 (4.6)	43.9 (6.5)	50.3 (57.3)	33.5 (100)
Total		100 (49.5)	100 (7.4)	100 (5.0)	100 (38.2)	100 (100)

Source: NIDS 2008, own estimates
Notes: Row percentages in parenthesis
The data are weighted

To summarise, the racial distribution of households across the class structure in South Africa still broadly aligns with the legacy of apartheid. African households are most concentrated in the lower class whilst White households are most concentrated in the upper class. That said, the higher population share of African households means that Africans households still form the majority share of all households within the middle and upper class. It is only within the 'upper upper class' that White households form the majority. The middle class is shown to be overwhelmingly African, in line with the majority population share of African households.

¹³ Any of the three definitions could be used to show similar results.

6.2 Income and Class

The middle class, by definition, is a relatively more privileged segment of society. Nevertheless, high income inequality in South Africa means that the relatively higher income status of the middle class does not necessarily translate into high levels of income in absolute terms. Table 7 shows the relationship between mean per capita household monthly income and class status using all three definitions of the middle class.

Table 7 reveals that middle class incomes, although substantially higher than the lower class, are in absolute terms, still highly constrained regardless of the definition of class status employed. Alternate definitions of class status do however capture somewhat different sets of households from within the income distribution (as was previously shown in Figure 1). Here the absolute '\$4-\$14 per day' definition of the middle class captures a relatively wealthier subset of households— 42% and 34% higher than mean income using the '% median' and 'tercile' definitions respectively. Nonetheless, all three definitions of class status agree that the incomes of middle class households are on average closer to the incomes of lower class than to upper class. Indeed, if the 'tercile' definition of the middle class is used some 31.9% of individuals within the middle class fall below a poverty line of R519 per capita per month in 2008 prices. Hence, in absolute terms, Table 7 shows that incomes of the middle class are far from desirable, despite being better-off than a sizable proportion of lower class households.

Table 7: Mean per capita monthly household income and the sources of income by definition of class status

	Mean Per Capita Income	Std. error	Labour Market	Gov. Grants	UIF&Work. Comp.	Invest- ments	Remitt- ances	Subs. Agric.	Total
Tercile									
Lower	R 192	R 3	33.94%	51.72%	0.70%	1.15%	10.52%	1.97%	100%
Middle	R 747	R 10	62.75%	26.51%	0.95%	1.55%	7.97%	0.26%	100%
Upper	R 5,193	R 420	85.03%	2.09%	0.26%	8.68%	3.90%	0.04%	100%
% Median	•	•	•	•	•	•		•	•
Lower	R 249	R 4	37.16%	48.62%	0.61%	1.08%	10.96%	1.58%	100%
Middle	R 707	R 5	65.56%	24.13%	1.51%	2.07%	6.42%	0.30%	100%
Upper	R 4,263	R 361	82.28%	5.84%	0.37%	7.06%	4.38%	0.07%	100%
\$4-\$14 pe	r day								
Lower	R 246	R 4	36.98%	48.74%	0.61%	1.02%	11.06%	1.59%	100%
Middle	R 1,002	R 14	71.65%	18.61%	0.95%	2.23%	6.36%	0.21%	100%
Upper	R 6,107	R 473	85.23%	1.27%	0.29%	10.03%	3.13%	0.04%	100%
Overall	R 2,044	R 206	61.49%	25.91%	0.63%	3.90%	7.35%	0.72%	100%

Source: NIDS 2008, own estimates Notes: The data are weighted

¹⁴ No persons in the middle class under the '% median' or the '\$4-\$14 per day' definitions of class status fall below the R519 poverty line. See further, Hoogeveen and Osler (2006) for estimation of this poverty line.

Table 7 also shows where households within each class on average derive their income from i.e. their respective sources of income. Labour market income is the most important source of income for the middle class from which between 63% and 72% of total income is on average derived, depending on the definition of middle class status employed. The upper class derives an even greater proportion of income from the labour market (in excess of 82%) whilst the lower class receives under 37% of income from the labour market. Success within the labour market therefore appears to be particularly important in determining a household's relative position within the class structure in South Africa.

This is not to understate the importance of government grant income. Within the middle class, somewhere between 19% and 27% of total income is collected from government grants. Removing government grant income from the middle class would cause the middle class to shrink by approximately 25% (using the '\$4-\$14 per day' definition of middle class status). This means that 25% of middle class households would regress out of the middle class and into poverty if it were not for government grant funding. The lower class is naturally most reliant upon grant income—between 49% and 52% of income accruing to the lower class is on average derived from government grant income. The vast majority of this government grant funding comes through the South African Old Age Pension and the Child Support Grant. This means that households in the lower class containing no elderly members or children do not have any means of accessing this very important source of income.

The middle class also collects between 6% and 8% of income from remittances. This is testament to South Africa's migrant system of labour. Income from investments is very low for the middle class– under 2.5% of total income using any of the three definitions of class status. Although rising for the upper class, income from investments continues to account for a small share of total income.¹⁵ Lastly, neither the middle class, not the lower class appear to significantly supplement their incomes with subsistence agriculture despite their relatively low mean per capita incomes.¹⁶

6.3 The Labour Market and Class

The middle class is primarily dependant on the labour market for the majority of its income. Furthermore, dependence upon labour market income is positively related to class status. Thus, in order to investigate the relationship between the labour market and class status in more detail, Table 8 shows the average wage and employment status of the working age population (aged 15 years – 64 years) across class status. Approximately 10% of individuals did not report their labour market status. This rate of non-response however is not significantly different across class status.

 $^{^{15}}$ Although income from investments may suffer from under-reporting, it seems unlikely that this would alter the conclusion that the proportion of income derived from investments is relatively low.

¹⁶ Income from agriculture in the NIDS 2008 captures both the direct income from the sale of agricultural goods as well as the implied income from the consumption of agricultural goods. Many assumptions are made in determining the value of agricultural goods consumed– this may affect the accuracy of any specific point estimate. Nevertheless, income from agricultural goods appears to be generally very low, even in light of these data limitations.

Table 8 shows that the labour force is strongly related to class status in two mutually reinforcing ways, robust to the definition of class status in use:

Firstly, the proportion of household members who are employed increases by class status, and the proportion who are economically inactive decreases by class status. This suggests that access to employment is an important correlate of class status. Indeed, the rate of unemployment varies inversely with class status. The middle class broad unemployment rate (which includes the non-searching unemployed)¹⁷ ranges between 23% and 29%, depending on the definition of the middle class in use. Although high, the middle class broad unemployment rate is still significantly lower than the alarmingly high rate of unemployment for the lower class in excess of 53%. Even within the upper class, between 9% and 12% of households members in the workforce are unemployed depending on the definition of class status in use.

The second way in which the labour market is related to class status is that average earnings of employed household members are positively related to class status. Furthermore, there is a non-linear rate of change in the level of earnings of employed household members when transitioning between classes. In particular, working individuals from the middle class earn on average between 2.0 and 2.7 times the amount of working individuals from the lower class depending on the definition of class status adopted, whilst working individuals from the upper class earn on average between 4.3 and 4.8 times the amount of working members from the middle class. On average, earnings therefore increase exponentially as class status increases.

Table 8: Class status and the labour force for the working age population (aged 15 - 64)

Average Wage (employed)	Broad Unemploy-	Unemployed (searching &	Employed	Not Econ. Active	Missing	Total
(ciripioyeu)	ment nate	non scarcining)				
R 975*	57.5%*	27.8%*	42.8%*	20.5%*	8.9%	100%
R 2 671	28.9%	17.7%	27.0%	43.6%	11.7%	100%
R 12 657*	9.8%*	7.3%*	16.8%*	67.4%*	8.5%	100%
	•	•	•	•	•	•
R 1 273*	53.2%*	26.3%*	40.5%*	23.1%*	10.1%	100%
R 2 538	28.0%	17.7%	25.0%	45.6%	11.7%	100%
R 10 827*	12.1%*	8.8%*	18.5%*	64.1%*	8.6%	100%
lay	•	•	•		•	•
R 1 257*	53.4%*	26.3%*	40.7%*	22.9%*	10.1%	100%
R 3 304	22.9%	15.3%	23.0%	51.4%	10.4%	100%
R 14 787*	8.5%*	6.4%*	16.9%*	68.6%*	8.2%	100%
R 7 076	31.1%	18.7%	30.3%	41.3%	9.7%	100%
	Wage (employed) R 975* R 2 671 R 12 657* R 1 273* R 2 538 R 10 827* day R 1 257* R 3 304 R 14 787*	Wage (employed) Unemployment Rate R 975* 57.5%* R 2 671 28.9% R 12 657* 9.8%* R 1 273* 53.2%* R 2 538 28.0% R 10 827* 12.1%* day R 1 257* 53.4%* R 3 304 22.9% R 14 787* 8.5%*	Wage (employed) Unemployment Rate (searching & non-searching) R 975* 57.5%* 27.8%* R 2 671 28.9% 17.7% R 12 657* 9.8%* 7.3%* R 1 273* 53.2%* 26.3%* R 2 538 28.0% 17.7% R 10 827* 12.1%* 8.8%* day R 1 257* 53.4%* 26.3%* R 3 304 22.9% 15.3% R 14 787* 8.5%* 6.4%*	Wage (employed) Unemployment Rate (searching & non-searching) R 975* 57.5%* 27.8%* 42.8%* R 2 671 28.9% 17.7% 27.0% R 12 657* 9.8%* 7.3%* 16.8%* R 1 273* 53.2%* 26.3%* 40.5%* R 2 538 28.0% 17.7% 25.0% R 10 827* 12.1%* 8.8%* 18.5%* day R 1 257* 53.4%* 26.3%* 40.7%* R 3 304 22.9% 15.3% 23.0% R 14 787* 8.5%* 6.4%* 16.9%*	Wage (employed) Unemployment Rate (searching & non-searching) Active R 975* 57.5%* 27.8%* 42.8%* 20.5%* R 2 671 28.9% 17.7% 27.0% 43.6% R 12 657* 9.8%* 7.3%* 16.8%* 67.4%* R 1 273* 53.2%* 26.3%* 40.5%* 23.1%* R 2 538 28.0% 17.7% 25.0% 45.6% R 10 827* 12.1%* 8.8%* 18.5%* 64.1%* day R 1 257* 53.4%* 26.3%* 40.7%* 22.9%* R 3 304 22.9% 15.3% 23.0% 51.4% R 14 787* 8.5%* 6.4%* 16.9%* 68.6%*	Wage (employed) Unemployment Rate (searching & non-searching) Active R 975* 57.5%* 27.8%* 42.8%* 20.5%* 8.9% R 2 671 28.9% 17.7% 27.0% 43.6% 11.7% R 12 657* 9.8%* 7.3%* 16.8%* 67.4%* 8.5% R 1 273* 53.2%* 26.3%* 40.5%* 23.1%* 10.1% R 2 538 28.0% 17.7% 25.0% 45.6% 11.7% R 10 827* 12.1%* 8.8%* 18.5%* 64.1%* 8.6% day R 1 257* 53.4%* 26.3%* 40.7%* 22.9%* 10.1% R 3 304 22.9% 15.3% 23.0% 51.4% 10.4% R 14 787* 8.5%* 6.4%* 16.9%* 68.6%* 8.2%

Source: NIDS 2008, own estimates.

Notes: * Significantly different from the corresponding middle class level at the 95% level of confidence.

Broad unemploy. rate is calculated as (searching + non-searching unemployed)/(Econ. Active)

Missing refers to where an individual did not record their labour market status

 $^{^{17}}$ The unemployment rate is calculated as: (searching and non-searching unemployed)/(employed + searching and non-searching unemployed)*100

The data are weighted

Overall, higher rates of participation in the labour market amongst the working age population, higher chances of finding employment amongst the economically active as well as higher average wages for the employed favour individuals of higher class status. Nonetheless, a considerable proportion of individuals within the middle class are still unemployed and mean wage earnings of the middle class are still far below that of the upper class.

6.4 Education and Class

The abovementioned labour market patterns by class status can be investigated in light of the differences in education between the lower, middle and upper class respectively. Table 9 reports the average years of education by class status as well as the proportion of individuals falling within various categories of educational attainment across the lower, middle and upper class. Approximately 5% of individuals did not record their educational level as indicated by the column 'missing' in the table; further, the rate of non-response was significantly higher for the upper class, although non-response accounted for under 7.5% of upper class households.

The majority of individuals within the middle class have less than a Matric education—only within the upper class do more than 50% of individuals possess at least a Matric education. The proportion of individuals with a tertiary education shows the most contrast across the lower, middle and upper class. For the middle class, fewer than 5% of individuals have a tertiary level education whereas less than 1% of individuals within the lower class have a tertiary level education. Only within the upper class do a sizable proportion of individuals have a tertiary level education of between 21% and 30% of individuals, depending on the definition of class status in use. Further, restricting the sample in Table 9 to individuals aged 21 years to 64 years (in light of the fact that younger individuals may still be completing their schooling) does not change any of the conclusions reached.

Table 9: Class status and education for the working age population (aged 15-64)

	Average Years of Education	No Schooling	Some Primary	Incomplete Secondary	Matric	Tertiary	Missing	Total
Tercile								
lower	8.0*	9.4%	25.1%*	47.5%	12.9%*	0.9%*	4.3%	100%
middle	8.7	7.4%	19.7%	46.2%	19.1%	2.8%	4.7%	100%
upper	11.3*	1.6%*	6.2%*	29.8%*	30.2%*	25.4%*	6.8%	100%
% Median								
lower	8.1*	9.2%	24.7%*	47.5%	13.5%*	0.9%*	4.2%	100%
middle	8.8	7.1%	20.0%	46.1%	19.3%	3.0%	4.6%	100%
upper	10.8*	2.8%*	8.2%*	33.4%*	28.4%*	20.5%*	6.6%*	100%
\$4-\$14 per da	ny							
lower	8.0*	9.3%*	24.7%*	47.6%	13.5%*	0.9%*	4.2%	100%
middle	9.2	6.1%	17.4%	44.6%	21.8%	5.1%	5.1%	100%
upper	11.7*	1.1%*	4.0%*	26.7%*	31.2%*	29.6%*	7.4%*	100%
Overall	9.2	6.6%	18.0%	42.2%	19.8%	8.3%	5.1%	100%

Source: NIDS 2008, own estimates.

Notes: * Significantly different from the corresponding middle class level at the 95% level of confidence.

Missing refers to where an individual did not record their level of education

The data are weighted

The lower and middle class have a mean level of education of only 8 and 9 years of education respectively (this amounts to a lower secondary education), compared to between 11 to 12 years of education for the upper class (12 years corresponds to a Matric level education), depending on the definition of class status employed.

Such a seemingly small (although statistically significant) difference between the lower and middle class in their mean level of education does not seem to justify the more than double average wage rate (and half the broad unemployment rate) for the middle class in comparison to the lower class (see Table 8). Education does not appear to fully explain the differences in labour market outcomes between the lower and middle class. The upper class is also significantly more successful within the labour market, however more of this difference appears attributable to significant differences in educational attainment, particularly at the tertiary level of education.

7. Issues of Robustness

In analysing the size, composition and characteristics of the middle class in South Africa, three definitions of class status have been consistently employed in order to form a robust picture of the middle class in South Africa. There are two more issues of robustness which merit further attention: namely, the inclusion of implied rent as a source of household income; and the use of expenditure as opposed to income as the basis for measuring class status.

7.1 Inclusion of Implied Rent

Implied rent can be defined as the value of rental income that households would receive if they were not living in their own residences as well as the value of rent that households would have to pay if they were not residing at their current residence free of charge. In practice, implied rent has seldom been included within any analysis of income in South Africa. This is partly because household surveys infrequently collect the necessary information. Over and above a lack of data, it is also not clear whether changes in implied rent across time (given the recent South African property boom) represent any real changes in household welfare, at least where measuring poverty is concerned. The NIDS 2008 does present the opportunity to calculate implied rent, however the reliability of this data is somewhat questionable given that rates of non-response for the value of implied rent were in excess of 40% and therefore required significant imputation (c.f. Argent, 2010; Leibbrandt et al, 2010).

Despite these concerns, Table 10 shows that including implied rent as a source of income makes little difference to the analysis of the middle class. The table reports the cell percentages from a cross-tabulation of class status where implied rent is included or excluded using the '\$4-\$14 per day' definition of class status. Any of the three definitions of class status give very similar results. Table 10 shows that close to 90% of households maintain the same class status whether implied rent is included or excluded as a source of income, where 10% of households decrease their class status if implied rent is included as a source of income.

Table 10: Cross-tabulation of class status including and excluding implied rent using \$4-\$14 per day definition of class status

		Excl. Implied Rent					
		Lower	Middle	Upper	Total		
Rent	Lower	35.7%	0.0%	0.0%	35.7%		
ed R	Middle	6.3%	28.1%	0.0%	34.4%		
Implied	Upper	0.2%	3.1%	26.6%	30.0%		
Incl.	Total	42.1%	31.2%	26.6%	100.0%		

Source: NIDS 2008

Notes: The data are weighted

The level of household income is however significantly affected by implied rent. It was estimated that close on 80% of households received some measure of implied rental income comprising on average of approximately one fifth of total household income. Hence the inclusion of implied rent significantly increases the income profile of all households within the class structure. Nonetheless it is not clear that this increase in income from implied rent represents a real increase in household welfare and as such whether it should be included in the measure of class status.

7.2 Income versus Expenditure

The second issue worth further examination in terms of robustness is the use of expenditure as opposed to income as the basis for measuring class status.

Theoretically, the difference between income and expenditure for a household is the level of savings or dissavings, where lifetime expenditure is equal to lifetime income. Households therefore smooth their consumption given fluctuations in income across time. Expenditure is often favoured to income as a better indication of the general level of household wellbeing—although in practice both measures are commonly used (c.f. Ravallion, 1994; Deaton, 1997; Deaton&Zaidi, 2002). In terms of measuring class status, it is perhaps arguable that income is the preferable measure, given that within the idea of class status is generally a notion of household income, as opposed to expenditure. Nonetheless, household respondents may be more willing to report expenditure than income, and particularly the very rich and the very poor.

Table 11 thus reports on the cell percentages from a cross-tabulation of class status using income or expenditure as the basis of the analysis. The table uses the '\$4-\$14 per day' definition of class status to make the comparison, however all three definitions of class status give very similar results. There appears to be a fair degree of rearrangement in the class structure when income is substituted for expenditure. More specifically, 12% of households increased their class status, 20% decreased their class status and the remaining 68% of households maintained the same class status when substituting income for expenditure. This suggests that using expenditure as opposed to income in measuring class status may have a significant impact on the description of the middle class in South Africa.

Table 11: Cross-tabulation of class status across per capita income versus per capita expenditure using the \$4-\$14 per day definition of class status

		Per Capita Expenditure			
		Lower	Middle	Upper	Total
Per Capita Income	Lower	33.5%	7.4%	1.3%	42.1%
	Middle	12.1%	15.4%	3.7%	31.2%
	Upper	0.8%	7.2%	18.7%	26.6%
	Total	46.4%	30.0%	23.6%	100%

Source: NIDS 2008, own estimates Notes: The data are weighted

Reassuringly however, this does not appear to be the case. The authors own estimates reveal that the size, race, education and labour market status of the middle class remain largely unchanged whether class status is measured using income or expenditure. Even a comparison between per capita income and expenditure across class categories are surprisingly similar: the per capita monthly expenditure of the lower, middle and upper class (using expenditure to define class status under the '\$4-\$14 per day' definition) is R 256, R 995, and R 5,523 respectively, in comparison to the per capita monthly income of the lower, middle and upper class (using income to define class status under the '\$4-\$14 per day' definition) of R 246, R 1,002 and R 6,107 respectively.

Overall, the picture of class status in South Africa presented in this paper appears robust to the inclusion of implied rent as an additional source of income or the use of expenditure as opposed to income as the basis of measuring class status— bar the minority of statistics which understandably relate to these changes in measurement.

8. Conclusion

To date there has been little consensus in the way in which the middle class is defined within the South African literature. This paper has attempted to provide a more robust description of the middle class in South Africa by contrasting three common definitions of the middle class from the international economic literature on class. The South African middle class is seen to be comparatively small in relation to middle classes of other developing countries (especially in light of its sizable upper class). Potential for future growth in the size of the middle class is also highly limited if economic growth is limited to being distribution neutral. The class structure in South Africa continues to display the ongoing legacy of Apartheid. African households are most concentrated in the lower class whereas White households are most concentrated in the upper class. Nonetheless, the larger absolute number of African households means that African households form the majority within the lower, middle and upper class. Only within the 'upper upper class', do the number of White households surpass the number of African households. The middle class is therefore comprised overwhelmingly of African households. Per capita income levels of the middle class are not far from the income levels of impoverished households within the lower class. Indeed, if the middle tercile of households in the income distribution are selected as middle class, 31.9% of individuals within these households would fall below the R519 per capita per month poverty line in 2008 prices. The middle class relies predominantly on income from the labour market; although government grant funding is also an important

source of income for the middle class. Indeed, when using the '\$4-\$14 per day' definition of class status, grant income is found to prevent approximately 25% of middle class households from falling into the lower class and into poverty. The middle class receives more than double the average wage of the lower class, as well as possessing a broad unemployment rate of roughly half of that of the lower class. However the average educational levels of the middle class are only slightly higher than the lower class – they do not appear to fully explain the relative success of the middle class over the lower class within the labour market. Overall, the description of class status in South Africa depicts a middle class whose economic status is privileged in comparison to the lower class however the level of development of the middle class is still well below the level of affluence traditionally associated with the middle class of developed economies.

References

Argent, J. 2009. Household Income: Report on NIDS Wave 1. *National Income Dynamics Survey*, Technical Paper no 3.

Banerjee A. and Duflo, E. 2008. What is Middle Class about the Middle Classes around the World? *Journal of Economic Perspective*. 22(2): 3–28.

Barro, R. 1999. Determinants of Democracy. *Journal of Political Economy*, 107(6): 158 – 183.

Birdsall, N., Graham, C. and Pettinato, S. 2000. Stuck in the Tunnel: Is Globalisation Muddling the Middle Class. *Center on Social and Economic Dynamics*. Working Paper No 14.

Bollen, K. A. and Jackman, R. W. 1985. Political Democracy and the Size Distribution of Income. *American Sociological Review*, 50: 438 - 457.

Brown, C. 2004. Does Income Distribution Matter for Effective Demand? Evidence from the United States. *Review of Political Economy*, 16(3): 291 – 307.

Cantril, H. 1965. The Pattern of Human Concern. Rutgers University Press, New Brunswick, NJ.

Cashell, B. 2007. Who are the Middle Class? *Congressional Research Service Reports and Issue Briefs*, paper RS22627. Cornell University ILR School.

Carter, M.R. and May, J. 2001. One Kind of Freedom: Poverty Dynamics in Post-Apartheid South Africa. *World Development*, 29(12): 1987-2006.

Curry-Stevens, A. 2008. Building the Case for the Study of the Middle Class: Shifting our Gaze from Margins to Centre. *International Journal of Social Welfare*, 17: 379–389.

Deaton, A. 1997. *The analysis of household surveys: A microeconometric approach to development policy*. Baltimore, MD: The John Hopkins University Press.

Deaton, A., & Zaidi, S. 2002. Guidelines for Constructing Consumption Aggregates for Welfare Analysis. *Living Standards Measurement Study Working Paper* 135, World Bank, Washington, DC.

Doepke, M. and Zilibotti, F. 2008. Occupational Choice and the Spirit of Capitalism. *The Quarterly Journal of Economics*, 123(2): 747-793.

Easterly, W. 2001. The Middle Class Consensus and Economic Development. *Journal of Economic Growth, 6*: 317 – 335.

Galor, 0. and Zeira, J. 1993. Income Distribution and Macroeconomics. *Review of Economic Studies*, 60: 35 – 52.

Hoogeveen, J. and Özler, B. 2006. Not Separate, Not Equal: Poverty and Inequality in Post-Apartheid South Africa. *In* Bhorat, H. and Kanbur, R. (eds.) *Poverty and Policy in Post-Apartheid South Africa*. Cape Town: HSRC Press

Landes, D. 1998. The Wealth and Poverty of Nations. New York NY: Norton.

Layard, P. 2006. *Happiness: Lessons from a New Science*. Penguin.

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

Leibbrandt, M., Woolard, I., Finn, A. and Argent, J. 2010. Trends in South African Income Distribution and Poverty since the Fall of Apartheid. *South African Labour and Development Research Unit*. School of Economics. University of Cape Town. OECD Social, Employment and migration Working Papers No. 101

May, J., Carter, M. and Posel, D. 1995. *The composition and persistence of poverty in rural South Africa: an entitlements approach.* Land and Agriculture Policy Centre. Land and Agriculture Policy Centre Policy Paper No. 15.

May, J. and Woolard, I. 2007. Poverty Traps and Structural Poverty in South Africa: Reassessing the Evidence from KwaZulu-Natal. *African Econometric Society Conference*, Draft Paper.

Perotti, R. 1996. Growth, Income Distribution, and Democracy: What the Data Say. *Journal of Economic Growth*, 1: 149 – 188.

Pressman, S. 2007. The Decline of the Middle Class: An International Perspective. *Journal of Economic Issues*, 41(1): 181 – 200.

Ravallion, M. 1994. Poverty Comparisons. Chur, Switzerland: Harwood Academic Press.

Ravallion, M. 2010. The Developing World's Bulging (but Vulnerable) Middle Class. *World Development*, 38(4): 445-454.

Ravallion, M. and Lokshin, M. 2001. Identifying Welfare Effects from Subjective Questions. *Economica*, 68(271): 335-357

Ravallion, M. and Lokshin, M. 2002. Self-rated economic welfare in Russia. *European Economic Review*, 46: 1453-1473.

Ray, D. 1998. Development Economics. Princeton: Princeton University Press.

Rivero, C., Du Toit, P. and Kotze, H. 2003. Tracking the Development of the Middle Class in Democratic South Africa. *Politeia*, 22(3): 6-29.

Schlemmer, L. 2005. Lost in Transformation? South Africa's Emerging Middle Class. *Centre for Development and Enterprise*. CDE Focus Occasional Paper No 8.

Sokoloff, K. L. and Engerman, S.L. 2000. Institutions, Factor Endowments, and Path of Development in the New World. *Journal of Economic Perspectives*, 14(3): 217-232.

Statistics Council of South Africa. 2007. *Statement on the Results of the Community Survey 2007*. [Online]. Available: http://www.statssa.gov.za [20 February 2010]

Statistics South Africa. 2009. *Profiling South Africa Middle Class Households, 1998 2006*. Statistics South Africa Report No 03-03-01.

Thurow, L. 1987. A Surge in Inequality. Scientific American, 256: 30-37.

Udjo, E.O. 2008. The Demographics of the Emerging Black Middle Class in South Africa. Pretoria: University of South Africa, *Bureau of Market Research*, Research Report No 375.

Van der Berg, S. 2010. Straddling Two Worlds: Income Inequality in South Africa. *Centre for Development and Enterprise*. Draft paper.

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

Woolard, I., Klasen, S. and Leibbrandt, M. 2002. Income Mobility and Household Dynamics in South Africa: The Case of KwaZulu-Natal. *Labour Markets and Social Frontiers*. South African Reserve Bank: 5-11.