Life chances and class: Estimating inequality of opportunity in South Africa for various life stages

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ABSTRACT

This paper aims to determine the degree to which class and socio-economic background influence a child's life chances and their future perspectives. We build on the growing number of papers that deal with the concept of inequality of opportunity. Comparing children from poor and middle class households we find significant differences in terms of access to basic education, sanitation, clean water and mobility. Our multivariate analysis highlights the importance of class membership for schooling outcomes and labour market prospects of a child. The single most important variable to explain schooling outcomes are mother's education. While income seems to be less important for younger ages it becomes increasingly important for the chances of reaching matric and obtaining tertiary education. The results are robust for various models and panel data.

Keywords: Inequality of opportunity, Intergenerational mobility, South Africa, Middle class
JEL codes: D63, I24, J62

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1 Introduction

According to Du Toit and Kotzé (2011:77), "formal equality in South Africa was achieved by constitutional ruling, but actual socioeconomic quality, however, was not." This simple statement points to one of the core problems in South African society after the political transition, namely the lack of substantive economic freedom following political liberalisation. Almost two decades since the end of apartheid, poverty has retained its strong racial dimensions. This remains the state of affairs despite the elimination of formal discriminatory rules and legislation.

While poverty has remained very concentrated amongst blacks, there has however been some evidence of improved social mobility at the top end of the income distribution, attested to by an increase in the black share of affluence. Consequently, there has been rising inequality within the racial groups, with a sharp increase in the Gini coefficient of both the white and the black population groups in the post-apartheid period (Yu, 2010).

This paper evaluates access to opportunities in South Africa by comparing the opportunities of individuals from different socio-economic backgrounds at different life stages, in terms of access to basic amenities and goods such as clean water and food at a young age, reaching matric or obtaining tertiary education, and finding employment as an adult. The paper shows that class and socio-economic background have a dramatic influence on a child's life chances in terms of these criteria and that such opportunities affect a child's starting point in life. Our multivariate analysis highlights the importance of class membership for schooling outcomes and labour market prospects of a child.

2 Theory and Literature review

This section of the paper provides a short review of the literature and the concept of inequality of opportunity. In the past two decades several studies have observed socio-economic and intergenerational mobility. More recently, other researchers have focussed attention on the conceptual issue of mobility and on the notion of equality of opportunity (e.g. Barros et al., 2009 or Ferreira and Gignoux, 2011). For South Africa,

a paper by Burns and Keswell (2012) focuses on intergenerational persistence of educational status in KwaZulu-Natal, and finds that such persistence has increased over generations, while a paper by the World Bank (2012) observes inequality of opportunity among children in South Africa using the Human Opportunity Index (HOI).

Most of the research regarding inequality of opportunity is motivated as a theory of fairness and justice. Commencing with Rawls's (1971) *A Theory of Justice*, and Sen's (1980) *Tanner Lectures*, political philosophers and economists have discussed the appropriate sphere wherein equality should be promoted. A key development in this discussion is the incorporation of a central role for personal responsibility into the definition of fairness (Ferreira et al., 2011). Equality of opportunity is often described as an ideal compromise between different perspectives on equity, because it retains the vital dimensions of egalitarianism, while simultaneously allowing for differences in outcomes based on effort, merit and other relevant criteria. Allowing outcomes to differ is critical because this entails that choices can have consequences, and consequences can in turn help to inform and reward individuals' behaviour.

This analysis will follow the approach by John Roemer (1998), who acknowledges this tension between egalitarianism and effort by differentiating between two potential sources of unequal outcomes, namely *circumstances* (factors exogenous to the person, such as gender, race, family background or place of birth) and *individual efforts* (outcome determinants which can be affected by individual choice). Essentially, this forms the basis of a simple binary view of the fairness of life chances. Within this conceptual framework a level playing field is one where one's fate is largely determined by one's own efforts, rather than being determined by inherited factors and circumstances such as one's family background, gender or race.

Our approach acknowledges the New-Weberian school, inasmuch as we wish to ascertain the extent to which factors such as inequality of life chances among individuals and families are structured on the basis of class. One central claim in the New-Weberian tradition is that variations in market positions arise out of differences in the possession of market-relevant assets that determine life chances. Inspired by this work, instead of merely investigating how life chances limit choices, we invert the

question and investigate how class influences the ability to escape from poverty and enables the next generation to form their own choices.

3 Estimating inequality of opportunity at various life stages

In this section of the paper we will examine life chances by comparing the respective opportunities of young school children, emerging adults and young adults from different socio-economic classes and backgrounds. Comparing the opportunities of young children from privileged and disadvantaged backgrounds is informative as young individuals have had limited opportunity to differentiate themselves based on effort and hard work, thus differences in opportunities between them are largely attributable to differences in the circumstances into which they were born. Further, the level of education is of particular interest due to its strong correlation with life chances (Burns and Keswell, 2011). We believe that looking at emerging adults and their school to work transition is particularly of interest in the case of South Africa where youth unemployment is exceptionally high.

3.1 Circumstances and opportunities of young children

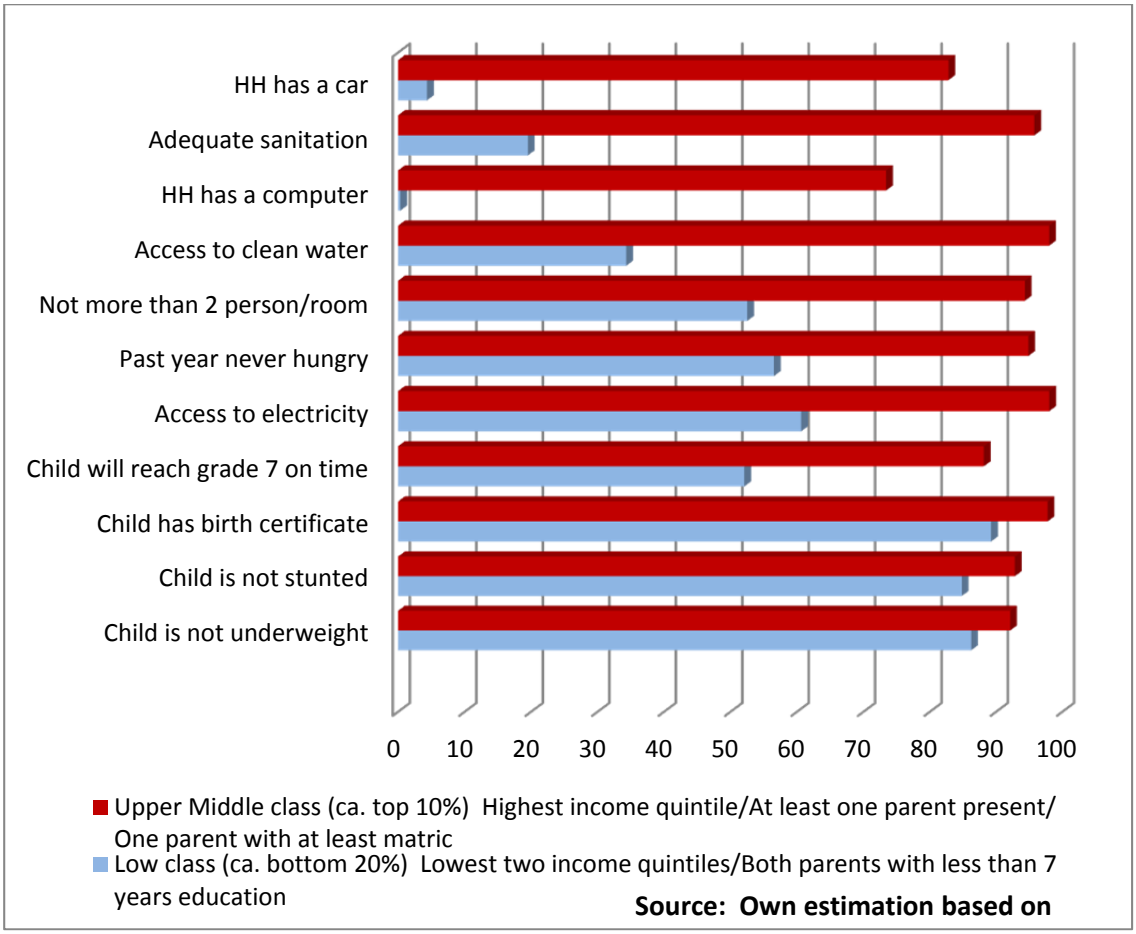
Access to key goods and services such as clean water, basic education, health services, minimum nutrition and citizenship rights is crucial to allow individuals to pursue a life of their own choosing (World Bank, 2010: 32). Providing children with a complete set of basic opportunities is essential in affording them the opportunity to make their own life choices and to realize their productive potential.

Figure 1 considers the likelihood that children aged between 10 and 14 would live in certain circumstances and would reach various benchmarks based on their socio-economic background. To this end, we compare the life chances of a child from a very poor household to that of an affluent household. For the purposes of the subsequent analysis a household is therefore defined as “poor” if it belongs to the bottom two quintiles, at least one biological parent lives in the household and neither parent has completed primary education. A household is classified as “affluent” if it belongs to the richest income quintile, both biological parents live in the household and at least one parent has completed high school or achieved a higher education.

In most cases – apart from reaching Grade 7 on time[2] – these circumstances and benchmarks are not under the direct control of these children and differences should therefore be interpreted as indicative of inequalities that cannot be attributed to effort.

The results[3] show that living in a disadvantaged household reduces the chances of reaching Grade 7 on time by about 36 percentage points (52% vs. 88%). Children completing Grade 7 on time are more likely to have had access to schools of reasonable quality and can avoid unnecessary grade repetition (HOI, 2010: 45).[4]

Figure 1: Estimated probability of reaching various benchmarks for children from different socio-economic background.



[2] Reaching Grade 7 on time is defined as being in the right class for a child's age, e.g. if a child is born in 1994 he/she is expect to be in Grade 7.

[3] The estimations reported are based on the information of the National Income Development Study 2008 (NIDS).

[4] However, some provinces in South Africa do not endorse grade repetition, which might lead to an underestimation or misestimation of inequality of school quality when using this measure.

The outcome differences are even more pronounced in terms of the chances of a child from a poor socio-economic background living in a household with access to adequate sanitation (20% vs. 96%) and clean water (34% vs. 98%).[5] Having access to clean water and sanitation are important factors in determining susceptibility to serious illnesses like cholera[6]. The chances of having access to a car (4% vs. 83%) or a computer (0.4% vs. 73%) are close to zero for children from a poor background. On the other hand, there seem to be only small differences in the likelihood of the child being underweight (6 percentage point difference) or being stunted (8 percentage point difference) between children form poor and more affluent households.

In terms of living conditions, the likelihood that a child will live in an overcrowded household (more than 2 persons per room) and with no electricity (a key factor enabling a child to read and do homework when it is dark) is between 38 and 42 percentage point higher when the child is from a poor parental background. These children also face a much higher likelihood of being hungry. Our results are in line with the findings of the Word Bank (2012) study: for the chosen set of basic goods we find significant differences in the access for children from different backgrounds.

As Figure 1 shows, socio-economic class has a very marked influence on the opportunities and circumstances of children. The literature suggests that these circumstances and opportunities mean that young children from disadvantaged and deprived households have a very different starting point in life than young children from affluent households.

To further examine the origins of the observed differences, we adopt the Human Opportunity Index (HOI) used in several studies by the World Bank (2010, 2012) to explore inequality of opportunity for children. The HOI measures in a single indicator the absolute coverage rate of a particular service, adjusted by how equitably the available services are distributed among groups differentiated by circumstance (World

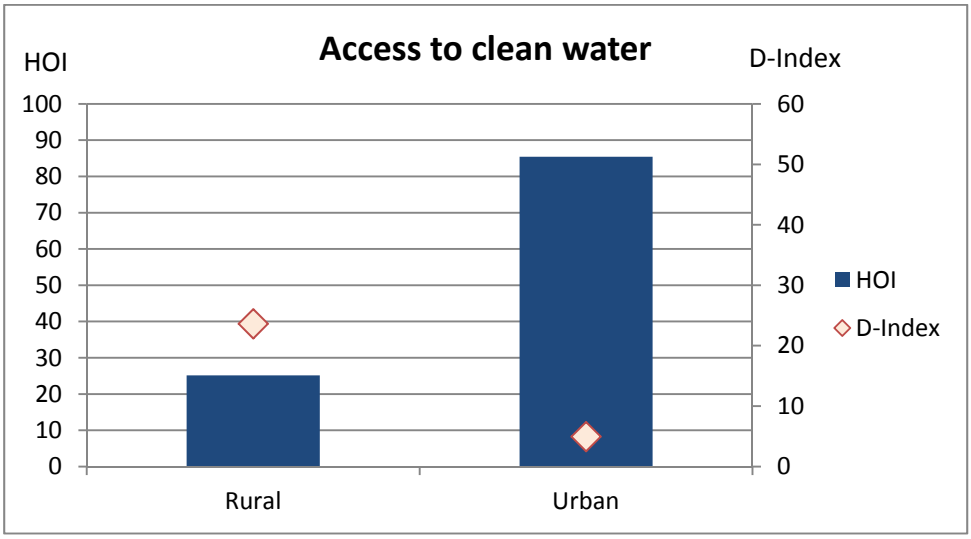
[5] Access to clean water is defined as having a piped water tap in the dwelling, on site or in the yard. Clean sanitation is defined has having either a flush or chemical toilet.

[6] E.g. Mugero and Hoque (2001) find that contaminated water and low latrine coverage are key risk factors for a cholera epidemic in effected rural areas.

Bank, 2012, 18). The first part, the average coverage rate, can be directly adopted using household survey data. The second part uses a dissimilarity index (D), which measures the dissimilarity of access rates for a given service for groups defined by the circumstance characteristics (race, location, gender and so forth), compared to the average access rate of the whole population (World Bank, 2010).

Figure 2 shows the HOI and the D-Index for access to clean water. While a HOI of 100 points would indicate universal access, 0 points mean that there is no access to clean water at all. The HOI bar fur urban children has a value of about 85 points and the D-Index is about 5 points. Therefore, in urban areas water coverage rates are high and the differences in opportunities are not based on circumstances. In contrast, the HOI has only a value of about 25 points indicating much lower access rates in rural areas. In addition, the D-Index has a value of 40 points which indicates that about 40% of opportunities are inequitably allocated among circumstance groups.

Figure 2: HOI and D-Index for access to clean water for children age 10-14



Looking at Figure 10 in the appendix shows significant differences for all infrastructure services in access to the services and the inequality within circumstance groups. Especially stark are the results for access to proper sanitation, which is nearly absent in rural areas and very unequal distributed. While the possession of cars is highly influenced by their circumstances, there are no major differences between children from rural and urban areas. The same patterns hold for computers. These differences in possessions can be partly explained by an asset deficit of the black population who

could not accumulate wealth during the apartheid period. Finally, for rural children, finishing grade 7 on time is less likely and more dependent on background.

The next section focuses on a next stage in people's lives, examining how socio-economic class and background affect outcome variables such as reaching matric, accessing tertiary studies and securing employment in later adolescent life stages.

3.2 Schooling, skill achievement and life satisfaction in emerging adulthood

Figure 3 illustrates that the likelihood of an emerging adult[7] reaching matric by the age of 19 or 20 vastly differs between those from a poor socio-economic background and those from more affluent households (17% vs. 88%). For male students from disadvantaged backgrounds the probability is lower than 15%. In addition, there are significant differences in the self-reported ability to read and write English competently and in computer literacy. Such skills are very likely to be relevant for the individual's labour market prospects.

Figure 3: Education differences for emerging adults by socio-economic background

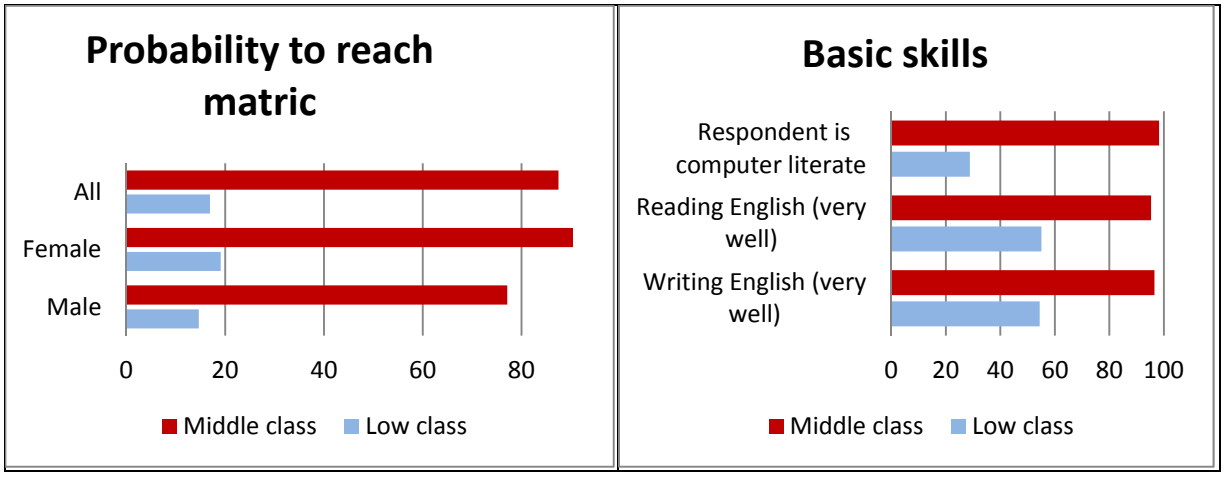
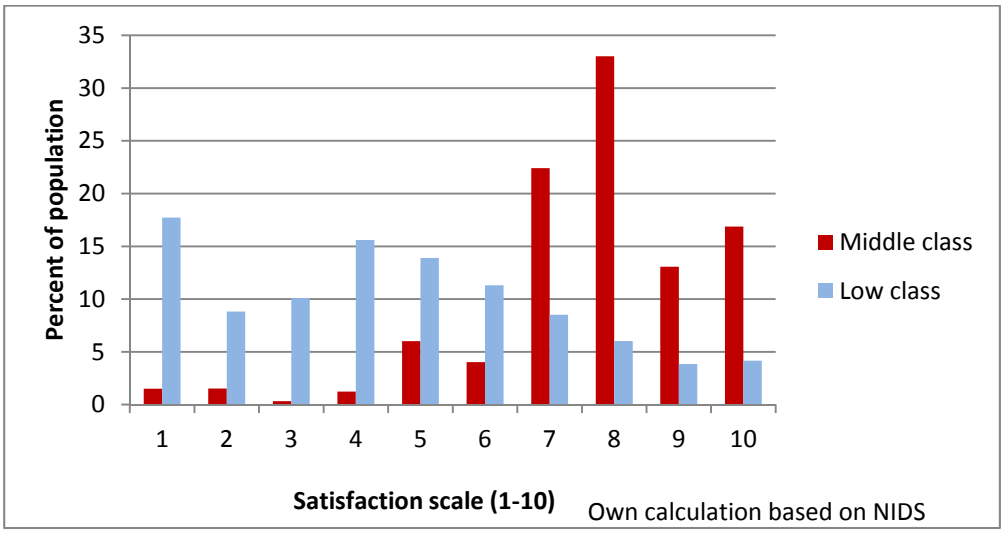


Figure 4 suggests that the disparities in the opportunities and circumstances of these emerging adults affect their life satisfaction. On a satisfaction scale (1-10, 10 being most satisfied), emerging adults with middle class parents report considerably higher average satisfaction levels than those with poor parents. These differences could be

[7] The term 'emerging adult' was coined by Arnett (2000) to describe individuals from their late teens to their mid-twenties, but for the purposes of this analysis it is used in a more restrictive sense to refer to the age group 19 to 20.

attributed to anticipated life circumstances, their current living conditions or a combination of the two.[8] It is telling that such stark differences in reported happiness and life satisfaction can already be discerned at such early stages of these individuals' lives.

Figure 4: Life satisfaction of emerging adults from different parental class



3.3 Young adults and labour market prospects

Figure 5 illustrates the chances a young adult (aged 21-25) has of reaching matric, achieving a tertiary qualification and obtaining employment (left figure). Again, if your parents are poor, your likelihood of reaching matric by this age is considerably lower than for those with affluent parents (19% vs. 77%). Similarly, the likelihood of obtaining some tertiary education is extremely low (1% vs. 50%). Consequently, these individuals also face a much higher likelihood of not finding employment (46% vs. 15%)[9].

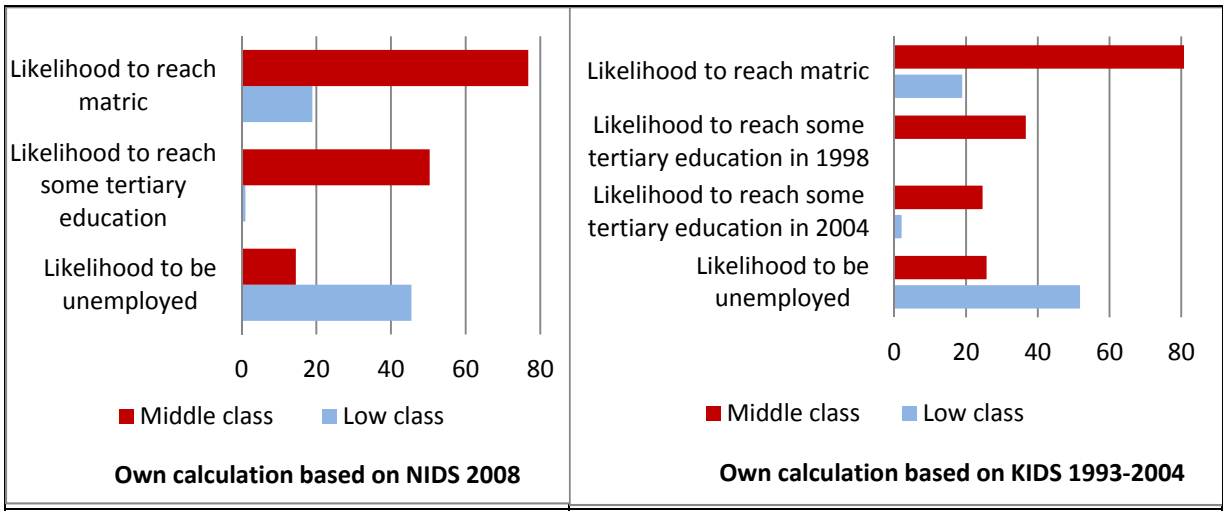
The first wave of NIDS (2008), however, can only provide a description and no causal correlations. For this reason, we test the robustness of these findings using the KwaZulu-Natal Income Dynamics Study 1993-2004 (KIDS). Here we estimate the

[8] Life satisfaction for ages 14-16 does not show such distinct differences between middle class and poor individuals. The effect of life circumstances on life satisfaction seems to be more pronounced for ages 17-20.

[9] Yet, young adults from an affluent background are more likely to be attending university, which might overestimate the difference. However, they will have a higher likelihood of being offered employment with the completion their studies.

likelihood that, dependent on the socio-economic class of their parents, a child aged between 7 and 17 in 1993 will reach matric or some tertiary education in 2004 (1998). The results correspond with the NIDS findings: a child who lived with poor parents in 1993 has only a 19% chance of reaching matric in 2004, while a child with affluent parents has a 82% chance. Additionally, the analysis shows that a child with poor parents has a near zero chance of accessing tertiary education.

Figure 5: Likelihood of a young adult (21-25) reaching matric, obtaining some tertiary education and not finding employment



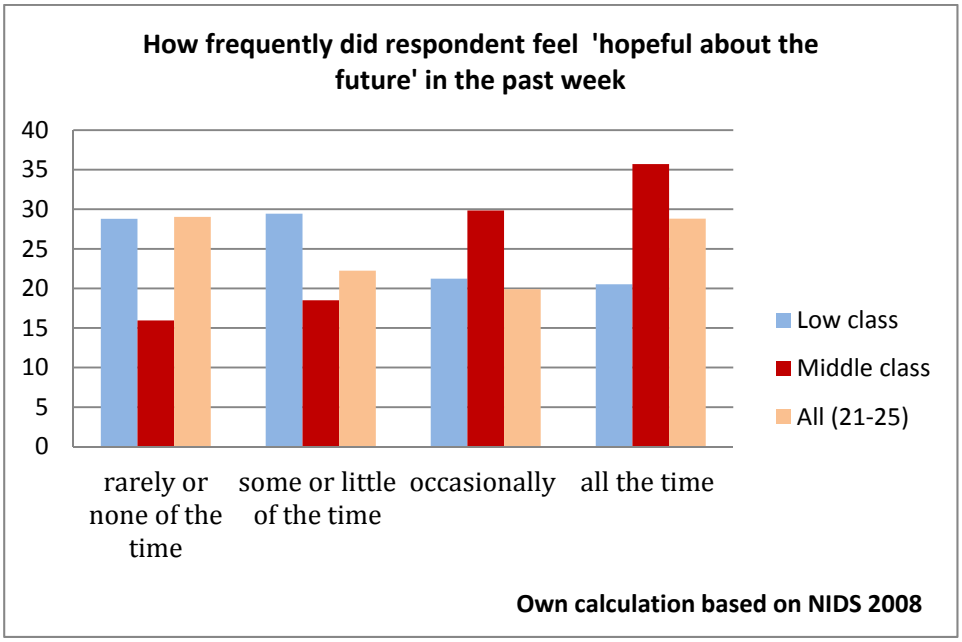
While these results appear to confirm and support the results from the cross-section, we need to note that younger household members who left the household were not followed by the KIDS panel, and therefore children leaving the household to pursue tertiary opportunities may often disappear from the sample. This may also help explain why KIDS shows that fewer students accessed tertiary education in 2004 than in 1998.

Finally, Figure 6 illustrates the level of optimism reported by respondents of this age group regarding their future. Here again, we detect notable differences between the reported optimism of young adults with poor parents and those with affluent parents.

Another indicator of self-perception which further highlights the role of socio-economic background is the reservation wage: the lowest wage at which people would be willing to work in the labour market.[10]

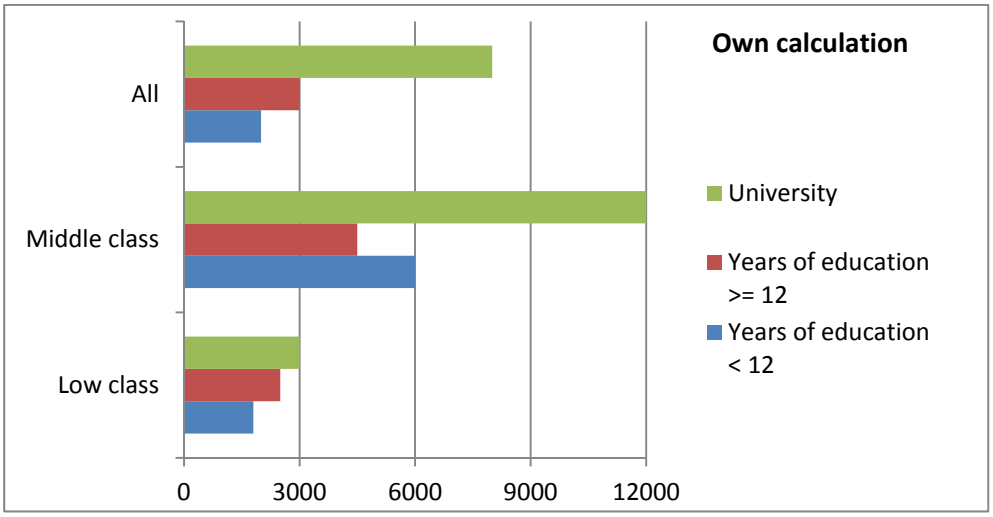
[10] In NIDS 2010 the reservation wage is identified by the following question: "What is the absolute lowest monthly take-home wage that you would accept?"

Figure 6: Respondent's future perspective (age 21-25)



As illustrated in Figure 7, coming from a poor socio-economic background reduces the reservation wage of young adults quite dramatically. While young adults with a middle class background who went to university have a median reservation wage of about R12000, the median reservation wage is only about R3000 for their low class counterparts. This might be explained either by young adults with a better socio-economic background being able to afford to wait for a high paying job, or that they have a better self-perception of their true "market value", since they are able to compare themselves to their parents.

Figure 7: Median reservation wage for young adults (age 21-35)



3.4 Regression analysis

Identifying the factors that explain differences in early school performance is important to understand life opportunities and social mobility. Without access to a good education, children's choices will be severely constrained. There are two plausible ways through which parental education can influence their children's school performance: a direct effect through inherited genetics (intergenerational ability) and an indirect effect via support, assistance and encouragement (parents with higher education will value school quality and education more highly and are able to help their children to perform well at school).

In Table 1, column (1) illustrates the results of a linear regression estimating the likelihood of reaching Grade 7 on time.[11] Note the convex relationship indicated by the significance of the coefficient on the squared value of the mother's education; the father's education has a positive slope but is not significant. Hence, a mother's education seems to have a significantly greater influence than a father's education, a finding which corresponds to other studies (Ardington et al., 2011; Buis, 2012; Burns and Keswell, 2011).[12]

The model also shows that on average female students perform significantly better than male students. The same is true for children from a Coloured and Indian background. On average, white students do not have a better school record in early life stages, ceteris paribus. That means black children have the same grade progression in early life stages if they have similar socio-economic background, something which often does not apply. The number of children in a household is negatively correlated with the likelihood of reaching Grade 7 on time, whereas household income has a positive but insignificant impact (richer parents may send their children to better quality schools, which may not be reflected in school repetition by Grade 7).

[11] A linear model is used since it can be straightforwardly interpreted. Using a logit model shows that all results remain significant and the same (see Table 4 in the Appendix).

[12] If parental education works either through helping children perform well at school or through the transmission of cultural capital, one would expect that a mother's education has a stronger effect, since the mother traditionally spends most time with the children (Buis, 2012: 6).

Column (2) of Table 1 illustrates that the education levels of parents are positive and significantly correlated with the likelihood of reaching matric by the ages of 19 to 20. Again, the mother's education squared term is highly significant and positive, indicating convex returns on a mother's education.

In comparison to the first regression, it is notable that per capita household income is now significant and positive. Therefore, while in early life stages education seems to be heavily dependent on the mother's education, income becomes more important in explaining differences in later outcomes of the school career.

Table 1: School outcome regressions (based on NIDS 2008)

	(1)	(2)
	Age 10-14	Age 19-20
VARIABLES	Grade7	Matric
Mother lives in the Household	0.00212	0.0432
	(0.0258)	(0.0418)
Mother's years of education	-0.00173	-0.0194
	(0.00930)	(0.0118)
Mother's years of education^2	0.00154**	0.00278***
	(0.000656)	(0.000913)
Father lives in the Household	0.0557**	0.0515
	(0.0283)	(0.0478)
Father's years of education	0.00540	0.0163***
	(0.00342)	(0.00564)
Log of per capita HH income	-0.00142	0.0427**
	(0.0146)	(0.0209)
Female household head	0.00516	0.105**
	(0.0252)	(0.0422)
Number of children	-0.00958	-0.0158*
	(0.00619)	(0.00884)
Coloured	0.108***	-0.123*
	(0.0402)	(0.0709)
White	0.0396	-0.0192
	(0.0682)	(0.0908)
Female	0.170***	0.135***
	(0.0218)	(0.0345)
Tribal	0.00434	-0.156**
	(0.0458)	(0.0692)
Urban formal	-0.0105	0.000752
	(0.0497)	(0.0742)
Urban informal	0.0462	-0.0440
	(0.0625)	(0.0911)
Age	-0.0276***	
	(0.00750)	
Constant	0.825***	-0.158
	(0.135)	(0.151)
Observations	3,142	1,151
R-squared	0.130	0.305

Not listed: dummy variables for provinces and if mother and father education observations were missing.
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

The next analysis focuses on factors that determine whether or not a young adult will reach some tertiary education by the ages of 20 to 26. Since South Africa generally has strong convex returns on education, achieving tertiary education is an important factor associated with good prospects in the labour market. The results of Table 2, column (1), are in line with our earlier findings, namely the importance of parents' education and household income. Note the highly significant squared term on household income, indicating that richer households are much more likely to enable their children to get some tertiary education. These results stand in opposition to the findings of a study by Lam et al. (2010), who do not find strong credit restraints for South African students. However, that study is confined to students from the Western Cape participating in the Cape Area Panel Study (CAPS), and regressions control for test results.

Table 2: Tertiary education regression (based on NIDS 2008)

VARIABLES	(1) Some tertiary education	(2) Further education (except University)	(3) University
Mother's years of education	-0.0158*	-0.00747	-0.0196***
	(0.00823)	(0.00774)	(0.00638)
Mother's years of education^2	0.00199***	0.00132*	0.00190***
	(0.000672)	(0.000674)	(0.000533)
Father's years of education	0.0111***	0.00896***	0.00358
	(0.00342)	(0.00312)	(0.00227)
Log of per capita HH income	-0.239***	-0.137*	-0.157***
	(0.0725)	(0.0833)	(0.0562)
Log of per capita HH income^2	0.0245***	0.0151**	0.0147***
	(0.00620)	(0.00726)	(0.00493)
Coloured	-0.0486	-0.0386	-0.0251
	(0.0407)	(0.0384)	(0.0280)
Indian	0.177	0.0541	-0.0479
	(0.144)	(0.174)	(0.0679)
White	-0.121*	-0.149**	0.0651
	(0.0700)	(0.0696)	(0.0618)
Female	0.0239	0.0125	0.0103
	(0.0201)	(0.0199)	(0.0127)
Tribal	0.0337	0.00713	-0.0163
	(0.0402)	(0.0480)	(0.0187)
Urban formal	0.103**	0.0302	0.0469*
	(0.0478)	(0.0560)	(0.0273)
Urban informal	0.124**	0.0635	0.0408
	(0.0536)	(0.0594)	(0.0267)
Constant	0.500**	0.246	0.429***
	(0.217)	(0.237)	(0.161)
Observations	2,315	2,248	2,121
R-squared	0.233	0.142	0.217

Not listed: province dummies and whether or not parents are living in HH
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

In order to test the robustness of our results, we use the panel option of NIDS to follow those students enrolled in school during 2007-2008 and note who are making the transition into tertiary education. The results of the panel regression shown in Table 5 in the Appendix confirm that parents' education is one important factor. We also note that the coefficient for household income is twice the size in column (2). Therefore, household income seems to have a larger impact on the likelihood of pursuing tertiary education then achieving matric. In addition, in Table 2 the coefficient for white is negative, which seems to be surprising. Yet, when splitting tertiary education into university and other forms of further education, the white coefficient is no longer negative or significant when looking at university education only.

Figure 8 and Figure 9 give a graphic illustration of the model. In the first graph one can see a large increase in the probability of reaching Grade 7 on time (cf. reaching Grade 7 by the age of 14), when the mother has more than 12 years as opposed to less than 7 years of education. This highlights the importance of mother's education, independent of the income of the household. Furthermore, the size of the confidence interval emphasizes that there is much less unexplained variation when a mother has more than 12 years of education.

Figure 8: Correlation between mother's education/ income quintile and reaching Grade 7 on time

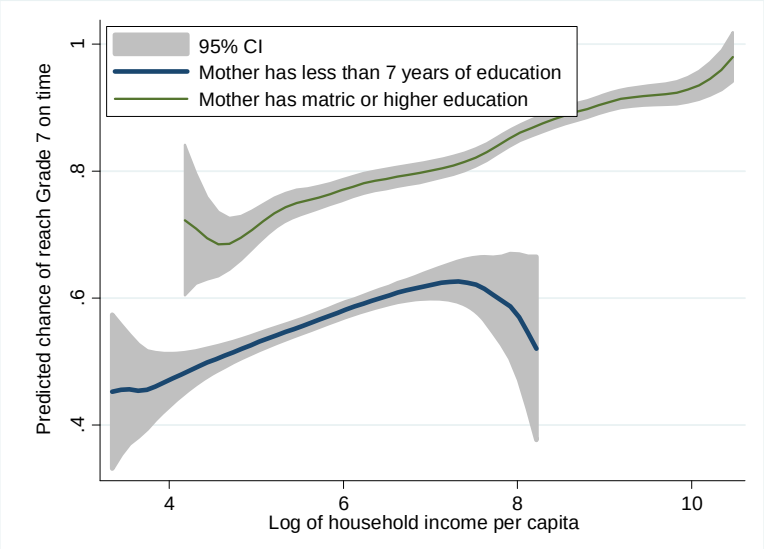


Figure 9: Correlation between mother's education/ income quintile and reaching some tertiary education

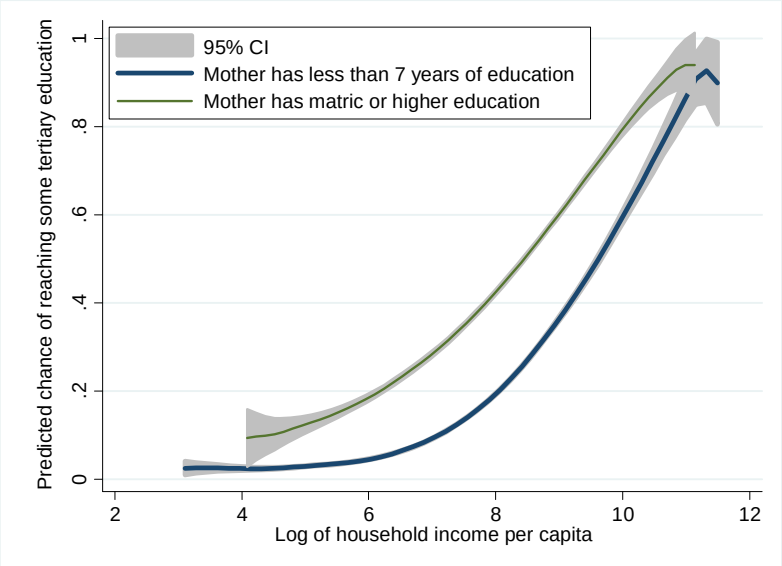


Figure 9 illustrates the influence that a mother's education and living in an affluent household has on accessing tertiary education. The two graphs show that income explains much more of the likelihood of reaching tertiary than lower levels of education. For poor households (below R500 per capita income), the chances of accessing tertiary education remain slim (below 10%) even with a mother that achieved 12 years of education. However, for individuals with per capita income above R25000, the probability of accessing a tertiary institution exceeds 90%, ceteris paribus. The figure also shows virtually no chance of reaching tertiary education for a child with a mother who has less than 7 years of education and where the household's per capita income is below R1000 per month.

Finally, Table 3 illustrates the results of a reservation wage regression to determine which factors influence the minimum income wage a young adult would work for. As expected, for South Africa there are convex returns to education, therefore obtaining higher education will significantly increase the reservation wage. Secondly, the reservation wage is significantly higher for adults with well-educated parents. It is interesting to note that even for the reservation wage the mother's education seems to be more important than the father's. Most importantly, per capita household income is significantly positive. While it seems obvious that while an individual is working his/her salary will determine the reservation wage, in column (3) we see that household income influences the decision even when the young adult is unemployed. In addition,

it seems that Coloureds and Whites have significantly higher reservation wages, while females would work for a lesser amount then men, on average ceteris paribus.

Table 3: Reservation wage regression (based on NIDS, 2010)

	(1)	(2)	(3)
	All	Employed	Unemployed
VARIABLES	Ln (res wage)	Ln (res wage)	Ln (res wage)
Best age in years	0.0102**	0.0184***	0.00393
	(0.00399)	(0.00666)	(0.00547)
Years of education completed	-0.0311**	-0.00614	-0.0703***
	(0.0158)	(0.0167)	(0.0246)
Years of education completed^2	0.00644***	0.00462***	0.00879***
	(0.00102)	(0.00109)	(0.00162)
Mother's years of education	0.0127**	0.0210***	0.00572
	(0.00499)	(0.00797)	(0.00606)
Father's years of education	0.00306	-0.00706	0.0104*
	(0.00504)	(0.00822)	(0.00603)
Log of per capita HH income	0.121***	0.201***	0.0720**
	(0.0187)	(0.0312)	(0.0303)
Coloured	0.269***	0.250***	0.292***
	(0.0606)	(0.0727)	(0.1000)
Indian	0.150	0.235*	0.0753
	(0.0950)	(0.121)	(0.138)
White	0.360***	0.348***	0.272**
	(0.0861)	(0.105)	(0.133)
Urban formal	0.0876*	0.0626	0.148**
	(0.0528)	(0.0791)	(0.0650)
Urban informal	-0.0232	-0.0273	-0.0101
	(0.0610)	(0.0923)	(0.0793)
Tribal	0.0782	0.0996	0.0656
	(0.0498)	(0.0782)	(0.0634)
Female	-0.187***	-0.182***	-0.186***
	(0.0337)	(0.0523)	(0.0411)
Constant	6.172***	5.302***	6.784***
	(0.182)	(0.275)	(0.313)
Observations	5,323	1,984	3,345
R-squared	0.240	0.276	0.184

Not listed: dummies for mother and father education missing.
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

4 Conclusion

This paper's aim was to determine the degree to which class and socio-economic background influence a child's life chances and their future perspectives. Using NIDS 2008 we found significant differences for children from poor and middle class households in terms of access to sanitation, clean water, mobility, etc. In terms of their education, children are much more likely to reach Grade 7 on time when parents and especially mothers are well educated. While income seems to be less important for younger ages it becomes increasingly important for the chances of reaching matric and obtaining tertiary education. Socio-economic background plays a major role in explaining who enters university and who does not. The results are robust for various models and panel data. Finally, our results show that people have much higher expectations of the labour market and therefore higher reservation wages when coming from a higher socio-economic background, even when controlling for education.

5 Literature

Arnett, J. J. (2000), Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.

Behrman, J., Birdsall N., and M. Szekely, (2000), Intergenerational Mobility in Latin America: Deeper Markets and Better Schools Make a Difference, In New Markets, New Opportunities? Economic and Social Mobility in a Changing World, edited by Nancy Birdsall and Carol Graham, 135-67. Washington: Brookings and the Carnegie Endowment for International Peace.

Bourguignon, F., F. Ferreira, and M. Menéndez, (2007), Inequality of Opportunity in Brazil, *Review of Income and Wealth*, 53(4), 585–618.

Buis, M. L. (2012), The Composition of Family Background: The Influence of the Economic and Cultural Resources of Both Parents on the Offspring's Educational Attainment in the Netherlands Between 1939 and 1991, *European Sociological Review*, doi:10.1093/esr/jcs009.

Burns, J. and M. Keswell, (2011), Inheriting the Future: Intergenerational Persistence of Educational status in KwaZulu-Natal, *Economic History of Developing Regions*, 27:1, 150-175.

Du Toit, P. and H. Kotzé, (2011), Liberal Democracy and Peace in South Africa: The Pursuit of Freedom as Dignity, New York: Palgrave Macmillan.

Ferreira, F.H.G. and J. Gignoux, (2011), The Measurement of Inequality of Opportunity: Theory and an Application to Latin America, *Review of Income and Wealth*, 57 (4), 622- 657.

Ferreira, F. H. G., J. Gignoux and M. Aran, (2011), The measurement of inequality of opportunity with imperfect data: The case of Turkey, Journal of Economic Inequality, 9, 651–680.

Lam, D., C. Ardington, N. Branson, K. Goostrey, and M. Leibbrandt, (2010), Credit Constraints and the Racial Gap in Post-Secondary Education in South Africa, SALDRU Working Paper.

Mugero, C. and A. Hoque, (2001), Review of cholera epidemic in South Africa, with focus on KwaZulu – Natal province, Working Paper.

Özler, B. (2007), Not Separate, not Equal: Poverty and Inequality in Post-Apartheid South Africa, *Economic Development and Cultural Change*, 55 (3), pp. 487-529.

Paes de Barros, R., F.H.G. Ferreira, J.R. Molinas Vega and J. Saavedra Chanduvi, (2009), Measuring Inequality of Opportunities in Latin America and the Carribean, The World Bank, Washington, D.C..

Piraino, P., and R. Haveman, (2006), Generational Income Mobility: Review Article, *Review of Income and Wealth*, 52 (3) (September): 477-486.

Rawls, J. (1971), A Theory of Justice, Harvard University Press, Cambridge.

Roemer, J. E. (1998), Equality of Opportunity. Cambridge, MA: Harvard University Press.

Roemer, J. E. (2006), Review Essay: The 2006 World Development Report: Equity and Development, Journal *of Economic Inequality* 4 (2): 233–44.

Sen, A. (1980), Equality of what? In: McMurrin, S. (ed.) Tanner Lectures on Human Values. Cambridge University Press, Cambridge.

Woolard, I. and S. Klasen, (2005), Determinants of Income Mobility and Household Poverty Dynamics in South Africa, *Journal of Development Studies*, 41(5), pp. 865-897.

World Bank, (2010), How Far Are We From Ensuring Opportunities for All? The Human Opportunity Index.

World Bank, (2012), South Africa, Focus on Inequality of Opportunity, Economic Update: 71553.

6 Appendix

Figure 10: HOI for access to selected key basic goods for children age 10-14

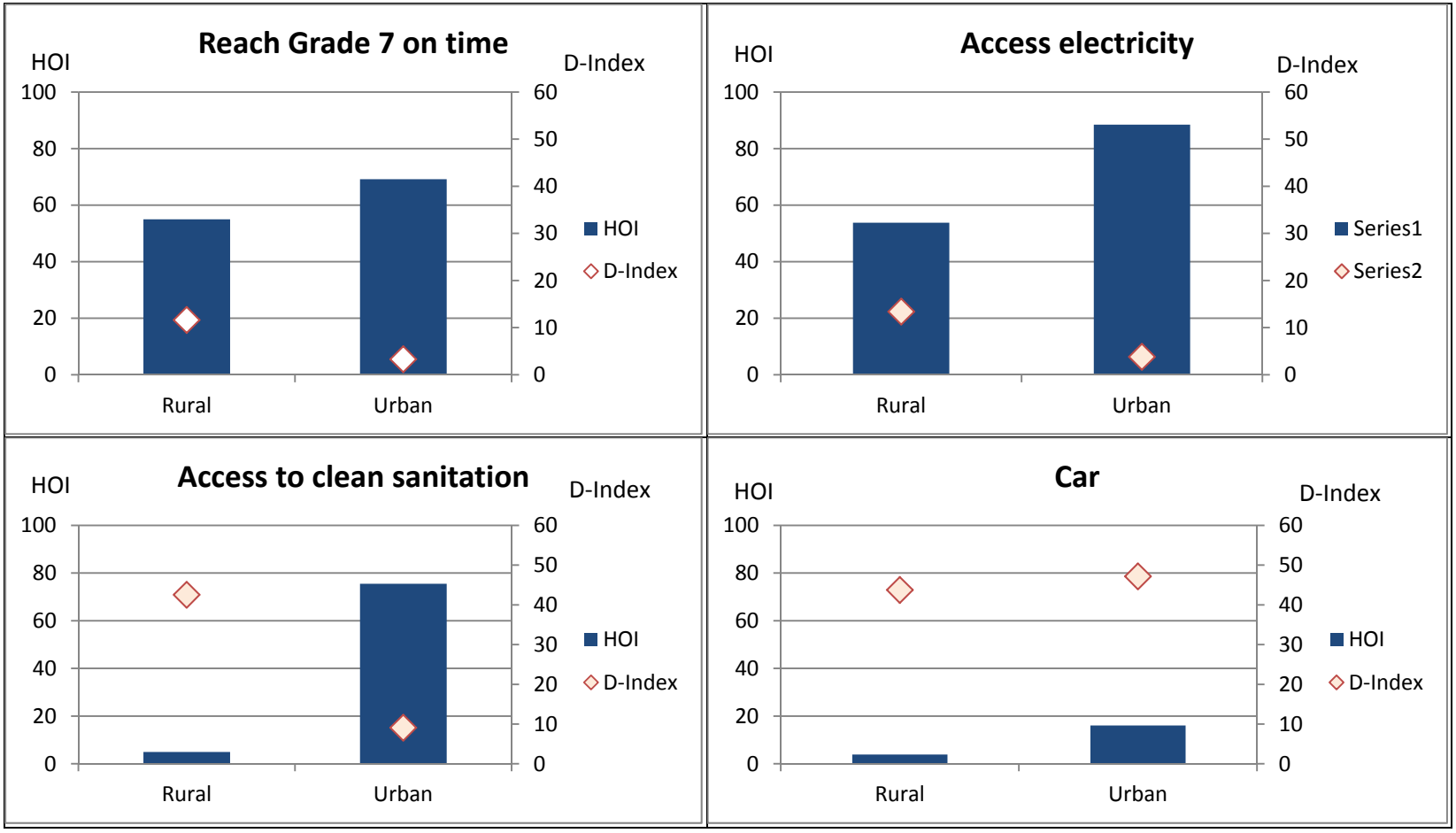


Table 4: Logit school regression

Variables	(1) Age 10-14 Grade7	(2) Age 19-20 Matric
Mother lives in the Household	0.0331	0.310
	(0.131)	(0.262)
Mother's years of education	-0.0781	-0.102
	(0.0503)	(0.0861)
Mother's years of education2	0.0137***	0.0151**
	(0.00396)	(0.00631)
Father lives in the Household	0.280*	0.332
	(0.154)	(0.298)
Father's years of education	0.0280	0.100***
	(0.0176)	(0.0334)
Log of per capita HH income	0.00601	0.295**
	(0.0852)	(0.133)
HH has female head	0.0178	0.693***
	(0.135)	(0.265)
Number of children in HH	-0.0482	-0.117*
	(0.0310)	(0.0675)
Coloured	0.790***	-0.683*
	(0.284)	(0.413)
Indian	2.405***	-2.193**
	(0.811)	(0.857)
White	0.555	-0.362
	(0.601)	(0.513)
Female	0.926***	0.902***
	(0.122)	(0.216)
Tribal	0.0379	-0.904**
	(0.240)	(0.419)
Urban formal	-0.0748	0.214
	(0.276)	(0.455)
Urban informal	0.239	-0.00280
	(0.342)	(0.550)
Best age in years	-0.138***	
	(0.0404)	
Constant	1.517*	-4.488***
	(0.809)	(0.993)
Observations	3,142	1,151

Not listed dummies for mother & father education missing and provinces.
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 5: Panel regression (based on NIDS 2008 & 2010)

VARIABLES	(1) OLS Reach matric	(2) OLS Get into tertiary education
Mother's years of education	0.00712	0.00779**
	(0.00474)	(0.00376)
Father's years of education	0.00699	0.00404
	(0.00485)	(0.00366)
Log of per capita hh income	0.0435**	0.0732***
	(0.0201)	(0.0165)
HH has female head	0.0242	-0.0313
	(0.0433)	(0.0334)
Number of children in HH	-0.0103	-0.00527
	(0.00946)	(0.00602)
Coloured	0.0495	-0.144**
	(0.0880)	(0.0689)
Indian	0.141**	0.0629
	(0.0717)	(0.236)
White	-0.174	-0.172
	(0.137)	(0.124)
Female	0.0273	-0.0292
	(0.0345)	(0.0277)
Tribal	-0.0853	0.000384
	(0.0789)	(0.0491)
Urban formal	0.00447	0.124**
	(0.0837)	(0.0591)
Urban informal	0.0762	0.146*
	(0.0999)	(0.0748)
Constant	0.0630	-0.512***
	(0.187)	(0.138)
Observations	1,467	1,467
R-squared	0.076	0.131

Not listed dummies for mother & father education missing and province dummies
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1