Inter-Generational Transfer of Household Poverty in KwaZulu Natal: Evidence from KIDS (1993-2004)

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Work-in-progress....

1. Introduction

Ravallion (1994:3) defines a person as poor when that person does not attain a reasonable minimum level of economic well-being. To attain this reasonable minimum level is not an easy task. Despite many policies that focus on the alleviation and eradication of poverty, several elements can influence their effectiveness. One such factor is the inter-generational transfer of poverty.

Several times poverty is transferred from one generation to another, resulting in the younger generation being unable to escape poverty. This is usually due to a lack of human-, financialand social capital. Therefore, these households grow up in a culture of poverty, adjust to deal with this poverty, and at the end are incapable of breaking this structure of chronic poverty.

This paper aims to investigate the existence of inter-generational transfer of poverty in KwaZulu Natal. The study employs the 1993, 1998 and 2004 surveys of the KwaZulu Natal Income Dynamic Study (KIDS) for this purpose. It focuses on the transfer of poverty from core households to their next generation dynasty households and concentrates on possible solutions to eliminate this transfer of poverty.

2. Literature Review

Poverty and the alleviation thereof has been the focus of many policy frameworks around the globe. One of these policy frameworks is The United Nations Millennium Development Goals (MDGs), which were adopted by the United Nations' General Assembly. One of the aims of the MDGs is to halve poverty by 2015 (UNDP, 2003). The most recent policy that focuses on poverty in South Africa is the Accelerated and Shared Growth Initiative of South Africa (ASGISA) which was initiated by the South African Government. ASGISA also has the ultimate objective of halving poverty in South Africa, but in this case by 2014 (Office of the President, 2006).

To reach the goal of reduced levels of poverty poses a few problems. In addition to many factors that policies can focus on, the existence of poverty traps hinders the effectiveness of policies. Carter and May (2001:1988) which uses the 1993 and 1998 KwaZulu-Natal Income Dynamics Study data indicates that around 60% of South Africa's poor households are caught in a structural, post-apartheid poverty trap. This entails a structural position from which households are unable to move. This study of Carter and May shows that many poor households are unable to build up assets or to achieve higher levels of well-being over time and are therefore caught in this inescapable poverty trap.

The Inter-Generational Transfer (IGT) of poverty can also be seen as a trap that prevents a household from increasing their well-being. Moore (2001:4) defines IGT of poverty as poverty that spans over generations and is both a characteristic and a cause of chronic poverty.

The distinguishing feature of chronic poverty is its extended duration. Chronically poor people remain poor for much of their life and may even "pass it on" (Inter-Generational Transfer of poverty) to subsequent generations. The chronically poor usually experience not only shortages in terms of income, but also other capability deprivations, making it extremely difficult to emerge from poverty (Hulme & Sheperd, 2003:405-407; Hulme, Moore & Sheperd, 2001:2). On the other hand, transient poverty or transitory poor are households that fluctuate between poor and non-poor categories (Carter & May, 2001:1991).

Both chronic and transient poverty can be assessed in either absolute or relative terms. The most common method for measuring poverty is the use of poverty lines. Poverty lines represent the cost of buying a basket of essential items that allows one to meet or satisfy certain basic needs (Rio Group, 2006). This study therefore makes use of poverty lines to investigate the possible transfer of poverty from one generation to another.

3. The Data

This study uses the KwaZulu-Natal Income Dynamics Study (KIDS) data to investigate the inter-generational transfer of household poverty in KwaZulu Natal.¹ KIDS is a longitudinal survey study that follows a random sample of individuals who lived in KwaZulu-Natal (KZN) in 1993 (KIDS overview, 2005). Those individuals interviewed in the 1993 wave of the study (known as the Project for Statistics on Living Standards and Development) (PSLSD) were re-interviewed in 1998 and again in 2004. Due to the KZN population consisting largely out of Africans (85%) and Indians (12%), Whites and Coloureds were not included in either the 1998 and 2004 sample of individuals interviewed (although included in the PSLSD).

In 1998 all the "core members" (see Figure 1) of the African and Indian households that were interviewed in 1993, were re-interviewed. Due to aging and the effect of HIV/AIDS on these "core members", the 2004 wave also re-interviewed the "next generation" households (new households formed by the sons and daughters of the 1993 "core members") as well as "foster children" households of the 1993 "core" household members. This was done to refresh the panel of data and also to establish a generational transition (KIDS, 2006).

Therefore, these "next generation" and "foster" children households were therefore only interviewed in the 2004 wave of the KIDS survey. It enables this paper to link all these next-generation and foster children to their original 1993 core household. By linking these households to their core counterparts, the role of the next-generation and foster households' background in determining their poverty status can be investigated. In this way, the intergenerational transfer of poverty and the specific determinants of household poverty of these split-off households can be examined. This study employs all three these waves (1993, 1998 & 2004) of the KIDS data sets.

¹ "The KwaZulu-Natal Income Dynamics Study (KIDS) was a collaborative project between researchers at the University of KwaZulu-Natal, the University of Wisconsin, London School of Hygiene & Tropical Medicine, International Food Policy Research Institute (IFPRI), the Norwegian Institute of Urban and Regional Studies and the South African Department of Social Development. In addition to support from these institutions, the following organizations provided financial support: UK Department for International Development; the United States Agency for International Development (USAID); the Mellon Foundation; and National Research Foundation/Norwegian Research Council grant to the University of KwaZulu-Natal."

4. Methodology

In 1993, a total of 1558 African and Indian households were interviewed. KIDS was able to re-interview 1212 of them in 1998. Due to aging and the effect of HIV/AIDS on these households (and therefore on the sample size), not only the core households, but also the next-generation and foster headed households who originally lived in the 1993 households were interviewed in 2004. This 2004 sample comprises of 1426 households which included 865 "core" households, 319 "next generation" households, 193 "foster child" households and 49 "extinct core death" households. As all the members in an extinct core household passed away between the periods 1993 and 2004, no data was collected for these households in 2004. These extinct core households are excluded from the analyses. For the purpose of this study, both "next generation" and "foster child" households were combined in the "dynasty" household category to represent the younger generation split-offs of the original core households. Figure 1 indicates the distribution of households between the different years and generations.

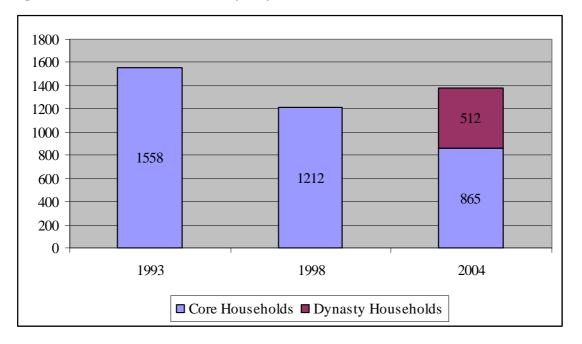


Figure 1: Distribution of Core and Dynasty households

The division of the data is given in Table 1. To analyse the different levels, determinants and inter-generational transfer of household poverty of the 2004 dynasty households in KZN,

the 2004 KIDS household data was divided between "core" and "dynasty" households (Table 1).

Туре	Description of individuals or households
Core members	Those individual household members which were interviewed in the first 1993 survey which formed the basis for the 1998 & 2004 survey
Next generation households	New households formed by the sons and daughters of the 1993 "core members"
Foster households	New households formed by the foster sons and -daughters of the 1993 "core members"
Dynasty households	Include both the next generation- and foster households

Table 1: Description of individuals or households included in the study

The core households include those who were originally interviewed in 1993 and traced in 1998 and 2004 for re-interviewing. The next-generation- and foster households are those children and foster children who lived in the original 1993 core household, but since then split-off from the original 1993 core household. This study combined both these newly formed next-generation- and foster headed households in a group "dynasty". In this way, the influence of these core households on the dynasty poverty status can be examined.

To establish the levels of poverty, this study uses poverty lines based on adult equivalent household sizes. Household expenditure is regarded as more stable over time than household income and a better indicator to use for poverty line comparisons (Ravallion, 1994: 15 & 81). The poverty line used is an amount of R250 per person per month (2000 prices). Van der Berg and Louw (2004) used this poverty line in a study that focuses on the 1995 and 2000 Income and Expenditure Surveys (IES).

The monthly poverty line of R250 per person per month was inflated by using an annual consumer price index (CPI) published by Statistics South Africa (StatsSA). This way a 2004 monthly poverty line of R310 per person was calculated. The same CPI index was used to calculate the poverty lines of R153.00- and R225.50 per person per month for 1993 and 1998 respectively. The paper also uses adult equivalent household sizes in conjunction with the individual poverty lines to calculate the household poverty lines. Household expenditure was

compared to these household poverty lines to identify the poverty status of each household. This was done for both core and their split-off dynasty generations.

A panel data set was compiled for all the core households over 1993, 1998 and 2004. This data set was used to investigate poverty dynamics and determine transition probabilities. The core households, together with all these dynamic characteristics and transition probabilities, were linked to their split-off dynasty household to investigate poverty in these dynasty households.

Probit regression models are used on this dynasty household data set to investigate the effect of inter-generational transfer of poverty on these dynasty households. In those cases where a dynasty household has multiple cores (for instance where the parents of the dynasty household split into two different households), the dynasty household were duplicated to investigate the effect of both backgrounds on the probability that the dynasty household will be poor. This resulted in the sample size of 512 dynasty households being extended to 576 observations due to the duplication of some of the dynasty households. In those cases where one core household had multiple dynasties (for instance where the parents have two or three next-generation or foster children that split-off and created their own households), the core characteristics were duplicated to link them to both dynasty households. Consequently the regression results had to be adjusted for clustering.

In the probit regression models, the independent variables chosen were compared between the two generations to identify possible differences in their roles on the probability that the dynasty household will be poor. In addition, this paper estimated a pooled model which includes both the core and split-off households' characteristics to investigate dynasty poverty.

5. The Results

This section gives an overview of the two generations of households that are interviewed in the KwaZulu Natal Income Dynamic Study (KIDS).

Figure 2 presents both the levels of income and expenditure for the 1993, 1998 and 2004 core households as well as for the 2004 dynasty households. Only those core households with 2004 dynasty split-off households were included in this study. Figure 2 indicates that the dynasty households have significantly higher levels of both monthly income and expenditure than the core households. One possible explanation for the higher levels of income and expenditure by the dynasty households may be their higher levels of education.

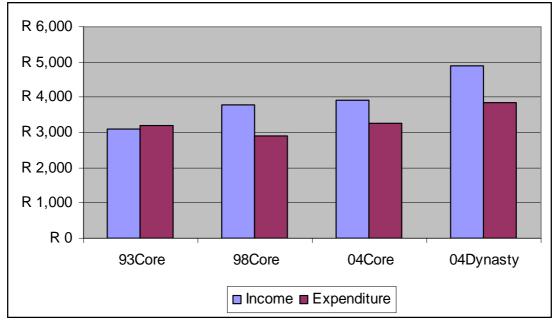


Figure 2: Difference in income and expenditure levels

All expenditure levels significantly different at a 1% level of significance. All income levels significantly different at a 10% level of significance.

Figure 3 summarises these higher levels of education between the dynasty households and the 1993 core households. The dynasty households have more people with some secondary, matric- and post-secondary education. These higher levels of education may explain part of the higher levels of income and expenditure by the dynasty households which may result in lower levels of poverty.

Figure 4 depicts the poverty status for both the core and dynasty households. The left part of the graph shows the levels of poverty for the core households in 1993, 1998 and 2004, while the right hand side of the graph shows the level of poverty for the dynasty households in 2004.

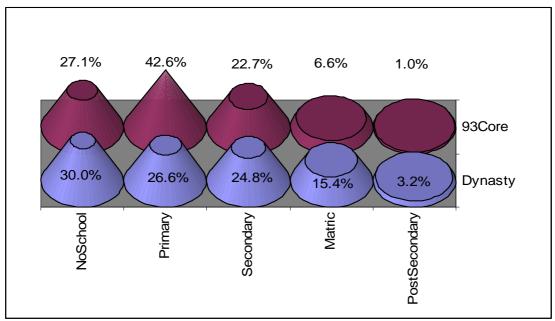


Figure 3: Differences in the levels of education between the 1993 Core & 2004 Dynasty households.

All differences statistically significant at a 1% level of significance

Figure 4 depicts that the 2004 level of poverty for the dynasty households is significantly lower than for the core households, independent the year of reference.

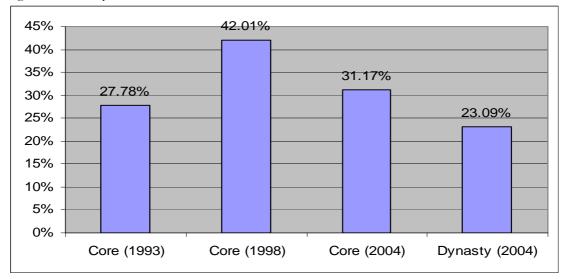


Figure 4: Poverty status of households

Difference between 2004 dynasty- & 1993 core households significant at 10% level of significance. Differences between 2004 dynasty- & both the 1998 & 2004 core households significant at 1% level of significance. The core households can be divided into three poverty categories given the background of their poverty status. The first group include those core households that were never poor under any of the three years under consideration, 1993, 1998 or 2004. The second group comprises those households who can be regarded as transitory poor. This includes households that fluctuate between poor and non-poor categories during the three time periods. The last group include households who can be regarded as chronically poor, which include those households that were poor in all three the years under consideration. Figure 5 summarises 446 core households that were interviewed in all three periods into these three groups.

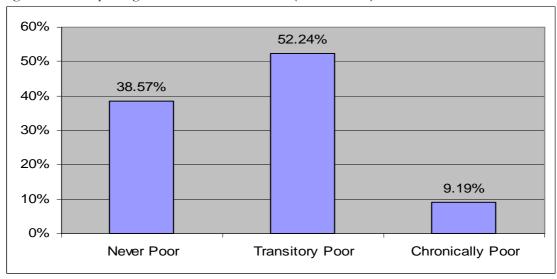


Figure 5: Poverty categories of core households (1993 – 2004)

Figure 5 shows that around 39% of the core households were neither poor in 1993, 1998 or 2004, while a total of 52% moved between a status of poor to non-poor or from a non-poor position to a poor position. A total of 9% of the households were chronically poor, indicating that they were poor in 1993, 1998 and 2004.

6. The Regression Analysis

A probit regression model is used to estimate the determinants of- and the inter-generational transfer of household poverty in the dynasty households. This model is estimated for the split-off dynasty households. Pooled models that include characteristics of both the generations of households are also estimated. The model is specified as:

where: Poverty is a dummy variable with a value equal to 1 if household expenditure falls below the poverty line and a value of 0 otherwise: X is a vector of explanatory variables.

The explanatory variables are divided between core and dynasty characteristics. The dynasty explanatory variables include the following:

hhsize_Dynasty represents the size of a dynasty household;

Dependants_Dynasty indicates the number of dependants in a dynasty household, where dependants is defined as persons below 15 years of age as well as those above 65 years of age.

MigrationDummy_Dyn has a value of 1 for dynasty households that migrated during the period 1998 and 2004 while a value of 0 was assigned to a household that did not migrate between these periods.

RemittanceReceiveDummy_Dyn is also a dummy variable with a value of 1 allocated to a dynasty household if that specific dynasty household received remittance income from an outside source.

The different education variables are as follow: NoSchool_Dyn indicates the number of persons in the dynasty household with no schooling; Primary_Dyn represents the number of persons in the dynasty household with primary education (those between grade 1 and grade 7). Secondary_Dyn shows the number of persons in the dynasty household with secondary education, excluding those who completed grade 12, while Matric_Dyn refers to those persons in a dynasty household who completed grade 12 education. Lastly, the variable PostSecondary_Dyn represents the number of persons in the dynasty household with post-secondary education.

The different sources of income variables are as follow: EmploymentY_Dyn represents the monthly employment income received by the dynasty household, while AgricultureY_Dyn indicates the monthly agriculture income received by the dynasty household. RemittanceY_Dyn shows the monthly remittance income

received by the dynasty household while SubsidyY_Dyn represents the monthly income received by dynasty households from different subsidies. Lastly, OtherY_Dyn includes those monthly incomes received by a dynasty household that was not specified under any of the other income categories.

The core household explanatory variables include the following:

The following variables represent the same variables as above, but represent the 1993 Core households: hhsize_93Core, Dependants_93Core, NoSchool_93Core, Primary_93Core, Secondary_93Core, Matric_93Core, PostSecondary_93Core, EmploymentY_93Core, AgricultureY_93Core, RemittanceY_93Core, SubsidyY_93Core, OtherY_93Core

The model also includes transition probabilities and the changes in the variables over time with the prefix "Diff" that represents the dynamic changes in the core households between the period 1993 and 2004.

The last model focuses on poverty dynamics of the core households. All three the following variables have a value of 1 if the household fall in the category and a value of 0 if the household does not fall into the category. The variables are: NeverPoor which refers to households that were never poor in any of the three time periods (1993, 1998 & 2004) while TransitoryPoor include those households that fluctuated between the poor and non-poor categories. The last variable includes those households that were chronically poor and were identified as poor in 1993, 1998 and in 2004 and are represented in the variable ChronicallyPoor.

Table 2 summarizes the probit regression results for two models: education and sources of income. The first model focuses on education in the dynasty households while the second right-hand side model focuses on the different sources of income in the dynasty household. The binary poverty variable for a dynasty household is the dependant variable and a variety of dynasty characteristics are included as independent variables. All these models use robust standard errors to adjust for heteroscedasticity. These standard errors were also adjusted for clustering since many of the dynasty households have the same parents.

The Whald Chi² tests together with their probability values of both models indicate that both these models are overall a good fit. This means that at least some of the independent variables explain part of the probability that a dynasty household is poor. In addition, all the statistically significant variables have the expected signs.

The first model indicates the importance of education on the probability to be poor, but also include a few other explanatory variables. In this model, the migration dummy included in the model is statistically significant at a 10% level of significance. It can be concluded that that a dynasty households that migrated between the period 1998 and 2004 has a 7.8% lower probability to be poor than a dynasty household that did not migrate. This was expected since migration literature suggests that a household usually migrate to higher earning areas.

(Poverty X)	Dynasty (dF/dx)	Dynasty (dF/dx)
	(Education)	(Income)
hhsize_Dynasty	0.0118	0.0219**
Dependants_Dynasty	-0.0076	0.0376**
MigrationDummy_Dyn	-0.0781*	-0.0763**
RemittanceReceiveDummy_Dyn	-0.0496	
NoSchool_Dyn	0.0701***	
Primary_Dyn	0.0332*	
Secondary_Dyn	0.0013	
Matric_Dyn	-0.0211	
PostSecondary_Dyn	-0.1474***	
EmploymentY_Dyn (R100)		-0.0023*
OtherY_Dyn (R100)		-0.0083***
AgricultureY_Dyn (R100)		0.0025
RemmittanceY_Dyn (R100)		-0.0189**
Obs	573	573
Wald chi2	83.36 (0.0000)	70.75 (0.0000)
Pseudo R2	0.2279	0.2275
Correctly classified	81.33%	79.93%
Std.errors adjusted for clusters	355	355

Table 2: Regression results with dynasty characteristics

The most important part of this model focuses on the influence of education on the poverty status of a dynasty household. This model indicates that higher levels of education reduce the probability to be poor. For every additional person in a dynasty household with no schooling, the probability to be poor increases by 7%, while if this household has an additional person with a post-secondary education, the probability to be poor decreases by

14.7%. This model emphasises the importance of education on the probability that a household is poor. This is also consistent with the results of Anyanwu (2005:446) in his study on the influence of education on poverty in Nigeria.

The second model focuses on the influence that the different sources of income have on the probability that a dynasty household is poor. Both the size of the household and the number of dependants in the dynasty household has a positive influence on the probability that the household is poor. An increase of one more member in the household will lead to a 2% increase in the probability to be poor, while an extra dependant in the household will lead to a a nincrease of 3.7% in the probability that the household will be poor. As in the previous model, the migration status of the dynasty household will have a negative and significant effect on the probability that the dynasty household is poor.

As expected, the employment income will decrease the probability to be poor since literature indicates that employment income is the biggest contributor to household per capita income and household poverty avoidance (Bhorat et al., 2001 & Yaqub, 2002). The individual magnitudes of the sources of income were surprising. As indicated in the model, an increase of one hundred Rand in employment income will decrease the probability that the dynasty household is poor by 0.2% which is relatively small compared to the other sources of income. The same one hundred Rand increase in remittance income will decrease the probability to be poor by 1.8%. This larger influence of remittance income may be explained given the employment and education background of the dynasty households.

Table 3 summarises the same two models, but this time with only the core household characteristics included as independent explanatory variables. This table indicates that, when including only core household characteristics, the number of variables that significantly influence the probability that the dynasty household is poor are limited.

Only the changes in the number of dependants and the changes in the number of persons in the core households with no education over the period 1993 to 2004 are statistically significant in explaining the probability that a dynasty household is poor.

(Poverty X)	Core (dF/dx)	Core (dF/dx)
	(Education)	(Income)
hhsize_93Core	0.2213	0.0071
Dependants_93Core	-0.0391	0.0086
DiffDependants_9304	-0.0450**	0.0049
NoSchool_93Core	-0.1815	
Primary_93Core	-0.1898	
Secondary_93Core	-0.2336	
Matric_93Core	-0.2988	
PostSecondary_93Core	-0.3065	
DiffNoSchool_9304	0.0520***	
DiffPrimary_9304	0.0220	
DiffSecondary_9304	0.0102	
DiffMatric_9304	-0.0083	
DiffPostSecondary_9304	-0.0511	
EmploymentY_93Core (R100)		-0.0137***
SubsidyY_93Core (R100)		-0.0696
OtherY_93Core (R100)		-0.0220**
AgricultureY_93Core (R100)		0.0008
RemittanceY_93Core (R100)		0.0045
DiffEmploymentY_9304 (R100)		-0.0004
DiffSubsidyY_9304 (R100)		-0.0417
DiffOtherY_9304 (R100)		-0.0048*
DiffAgricultureY_9304 (R100)		0.0026
DiffRemittanceY_9304 (R100)		0.0014
Obs	446	446
Wald chi2	37.95 (0.0003)	45.66 (0.0000)
Pseudo R2	0.1169	0.1230
Correctly classified	76.01%	75.34%
Std.errors adjusted for clusters	276	276

Table 3: Regression results with core characteristics

The negative effect of the change in the number of dependants was unexpected. This means that an increase of one additional dependant in the core household over the period 1993 to 2004 will actually decrease the probability that the dynasty household will be poor and not increase the probability as would be expected. A possible explanation may be that higher dependency may be associated with Government subsidies. This will result in higher monthly income and expenditure levels.

Regarding the change in the number of persons in the core household with no education over the same period will increase the probability that a dynasty household is poor by 5.2%. Given the sources of income for the core households, the employment income of the 1993 core household, other sources of income for the 1993 core household and the changes over

the period 1993 to 2004 in the other sources of income category are statistically significant in explaining the probability that the dynasty household is poor. Although these variables have only marginal effects on the probability that the dynasty household is poor, the per cent correctly classified by the model is between 75% and 76% of the households. These two models emphasise that the core characteristics alone do not solely influence the probability that a dynasty household is poor. Therefore a pooled model is needed. Table 4 summarises these pooled models.

(Poverty X)	(dF/dx)	(dF/dx)
	(Education)	(Income)
hhsize_Dynasty	0.0250	0.0283*
Dependants_Dynasty	-0.0137	0.0375**
NoSchool_Dynasty	0.0674**	
Primary_Dynasty	0.0287	
Secondary_Dynasty	-0.0054	
Matric_Dynasty	-0.0108	
PostSecondary_Dynasty	-0.1626***	
hhsize_93Core	-0.0021	-0.0026
Dependants_93Core	0.0174	0.0057
DiffNoSchool_9304	0.0243***	
DiffPrimary_9304	-0.0029	
DiffSecondary_9304	0.0012	
DiffMatric_9304	-0.0144	
DiffPostSecond_9304	-0.0894*	
EmploymentY_Dynasty (R100)		-0.0022*
OtherY_Dynasty (R100)		-0.0065**
AgricultureY_Dynasty (R100)		0.0004
RemittanceY_Dynasty (R100)		-0.0226**
DiffEmplY_9304 (R100)		0.0000
DiffSubsidyY_9304 (R100)		-0.0065
DiffOtherY_9304 (R100)		-0.0009
DiffAgricY_9304 (R100)		0.0007
DiffRemittanceY_9304 (R100)		-0.0045
Obs	446	446
Wald chi2	76.90 (0.0000)	50.77 (0.0000)
Pseudo R2	0.2582	0.2337
Correctly classified	79.60%	78.92%
Std.errors adjusted for clusters	276	276

Table 4: Pooled models: combining dynasty- and core household characteristics

These two pooled models on average predict between 78% and 80% of the dynasty households correctly as either poor or non-poor. The pooled model confirms the

importance of education on the poverty status of a household. Higher levels of education in both the dynasty and core households are associated with lower probabilities that the dynasty household will be poor. One additional member in the dynasty household with a post-secondary education will lower the probability that this household is poor by 16.3%, while an additional member in the core household with a post-secondary education over the period 1993 to 2004 will lower the probability that the dynasty household is poor by 8.9%.

Regarding the different sources of income model, again the size of the dynasty household as well as the number of dependants in the dynasty household will be associated with higher probabilities that the dynasty household is poor. The core household characteristics do not play a significant role in the probability that the dynasty household is poor. As in the case above, the magnitude of a one hundred Rand increase in dynasty remittance income will decrease the probability to be poor by around 2.3% while the same increase in employment income of the dynasty household will decrease the probability to be poor by 0.2%.

Table 5 summarises the last model and focus on poverty dynamics. This model emphasises the importance of inter-generational transfer of household poverty from one generation to another. The model indicates that the probability that a dynasty household will be poor will increase by 14.8% if the core household linked to this dynasty household was transitory poor between the periods 1993 to 2004. What is important is the influence of a chronically poor core household on the probability that the split-off dynasty household will be poor. Table 5 indicates that if this split-off dynasty household was linked to a core household that was chronically poor over the period 1993 to 2004, the probability that the dynasty household will also be poor increases by 41.3%. Inter-generational transfer of poverty is therefore a reality and is not easy to escape since a household cannot change its background.

(Poverty X)	(dF/dx)
hhsize_Dynasty	0.0302**
Dependants_Dynasty	0.0350*
TransitoryPoor	0.1487***
ChronicallyPoor	0.4131***
Obs	446
Wald chi2	53.29 (0.0000)
Pseudo R2	0.2056
Correctly classified	80.04%

Table 5: Inter-generational transfer of poverty

Std.errors adjusted for clusters	276
Statement adjusted for elasters	

7. Conclusion and policy recommendations

Poverty alleviation and the eradication thereof is the focus of many policy frameworks. The Accelerated and Shared Growth Initiative of South Africa (ASGISA) has the ultimate objective of halving poverty in South Africa by 2014. Despite these policy frameworks, many factors hinder the effectiveness of these policies. One such factor is the existence of poverty traps. This entails a position that blocks the household from escaping poverty. These poverty traps result in long-term poverty which may even be passed on to the next generation of the household (inter-generational transfer of poverty). This paper aimed to investigate this inter-generation transfer of poverty in KwaZulu Natal.

This study uses the 1993, 1998 and 2004 waves of the KwaZulu Natal Income Dynamics Study to investigate the poverty status of core households and how this poverty status influence the poverty position of the next-generation split-off households. The 2004 data was divided between these "core" households (that were also interviewed in 1993 and 1998) and their split of next-generation "dynasty" households. Poverty dynamic variables were estimated by using a compiled panel data set for the core households that were used in probit regression models that determines the probability that these dynasty households are poor.

The results revealed that, despite that the core household characteristics on their own do not significantly influence the poverty status of a dynasty household, the background of the core household does. It was indicated that low levels of education in both the core and dynasty households will result in a higher probability that the dynasty households are poor, while higher levels of education (in both generations) will result in lower probabilities that the dynasty households are poor.

As expected, the poverty status of a core household has a large and significant influence on the probability that their next-generation split-off household will also be poor. Table 5 indicated that, despite the other explanatory variables, a core household that moved in and out of poverty (during the periods 1993 to 2004) will increase the probability that their splitoff dynasty household is poor by 14.8%. The worst case was indicated with a chronically poor core household. In cases where the core household was chronically poor during the period 1993 to 2004, the probability that their split-off dynasty household will be poor increases by 41.3%. This emphasises the existence of the inescapable inter-generational transfer of poverty.

In such a case, given the regression results above, it seems that the only possible solution to alleviate or eradicate poverty in the dynasty household is to focus on education. Higher levels of education can decrease the probability that these dynasty households are poor. In this manner, the transfer of poverty from one generation to another may be eliminated. Although education is not the only possible solution to poverty alleviation and eradication, the regression results indicate that it may be a starting point for policy makers.

8. Bibliography

- Anyanwu, J. 2005. <u>Rural Poverty in Nigeria: Profile, Determinants and Exit Paths.</u> African Development Bank. Blackwell Publishing, Oxford. USA
- Bhorat, H., Leibbrandt, M., Maziya, M., Van der Berg, S., Woolard, I., 2001. *Fighting Poverty: Labour markets and inequality in South Africa.* UCT Press, Cape Town.
- Carter, M. & May, J. 2001. <u>One Kind of Freedom: Poverty Dynamics in Post-apartheid South Africa.</u> World Development Vol. 29, No.12.
- Hulme, D. & Shepherd. A. 2003. <u>Conceptualizing Chronic Poverty.</u> World Development Vol.31, No.3. Great Britain.
- Hulme, D. Moore, K. & Shepherd, A. 2001. <u>Chronic poverty: meanings and analytical frameworks.</u> International Development Department School of Public Policy. University of Birmingham. CPRC Working Paper 2,
- KIDS Overview. 2006. <u>KwaZulu-Natal Income Dynamics Study (KIDS) Overview</u>, <u>Third wave:</u> <u>2004</u>: Public Release Version 1.1. University of KwaZulu-Natal, University of Wisconsin-Madison, London School of Hygiene & Tropical Medicine and International Food Policy Research Institute, March.
- Moore, K. 2001, <u>Frameworks for understanding the inter-generational transmission of poverty and wellbeing in developing countries.</u> International Development Department School of Public Policy. University of Birmingham. CPRC Working Paper 8,
- Office of the president. 2006. <u>A catalyst for accelerated and shared growth (ASGISA)</u>. Parliamentary media briefing, February
- United Nations Development Programme (UNDP), 2003. <u>South Africa Human Development</u> <u>Report 2003</u>. The Challenge of Sustainable Development in South Africa: Unlocking People's Creativity. Oxford University Press.
- Van der Berg, S. & Louw, M. 2004. <u>Changing patterns of South Africa income distribution: Towards</u> <u>time series estimates of distribution and poverty.</u> Conference paper.
- Ravallion. 1994. <u>Poverty Comparisons.</u> Fundamentals of pure and applied economics. Harwood Academic Publishers.

- Rio Group. 2006. <u>Compendium of best practices in poverty measurement.</u> Expert group on poverty statistics. Rio de Janeiro, September.
- Yaqub, S. 2002. <u>Chronic poverty: scrutinizing estimates, patterns, correlates, and explanations.</u> Chronic Poverty Research Centre. Working paper no.21.