Urban Advantage? The Effect of Migration on Children's School Participation in Kenya.

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In Least Developed Countries (LDCs), urbanization has invariably been intertwined with internal migration (White & Lindstrom 2005). While there is no question that these countries are rapidly becoming urbanized, questions linger on whether urban residence in these countries is more beneficial to various important life outcomes as compared to rural residence. Further, do intrinsic factors associated with migrants' partly explain observed positive life outcomes for rural to urban migrants as compared to rural non-migrants? Few studies have grappled with these questions in LDCs located in sub-Saharan Africa. Where they have done so, the focus has mainly been on children's health as the outcome (Konseiga et al. 2009; Brockerhoff 1994a; Brockerhoff 1994b). However children's education is an important dimension that has great bearing on the life course too yet has been understudied.

In this study, we investigate school participation amongst children of primary school ages (6 to 14 years of age) in Kenya. Our main objective is to examine if there are differences in school participation rates of children residing in urban locations as compared to children in rural areas. In addition, we probe for differences based on the migration status of their mothers[1] that should give us insights on the role played by migration status on school participation.

Theoretical Underpinning

The theoretical foundation for this study first draws from the Urban Bias theory (Lipton 1977). In general, it is made up of two main propositions: (i) that the development process in LDCs is systematically biased against rural locations, and (ii) that this bias is deeply embedded in the political structure of these countries that are dominated by urban groups. As a result, urban locations are predicted to have better infrastructure and amenities amongst other advantages that improve life outcomes of urban dwellers as well as induce rural to urban migration. In these circumstances, we would expect better school conditions and outcomes for children in urban settings compared to their counterparts in rural settings.

However, some questions have been raised about this rosy picture for the urban dwellers in LDCs given the context of rapid urbanization in these countries that has unfolded alongside high unemployment and poverty rates, decay of infrastructure that cannot keep pace with rising population in urban areas and the mushrooming of informal settlements (White& Lindstrom 2005; Kasarda & Crenshaw 1991). Do these developments have a negative bearing on the school participation of children in urban locations? Are they still better off despite these challenges compared to their counterparts in rural locations?

The other theoretical foundation on which this study is based focuses on the three mechanisms through which migration impacts on life course outcomes:

(i) Disruption: The main take on this mechanism comes from a social capital perspective that contends that migration negatively impacts schooling outcomes of children since moving often damages and sometimes completely severs important social ties that inhere in family relations and in community organization and that are useful to the cognitive or social development of children (Hagan et al., 1996; Pribesh & Downey, 1999).

(ii) Selection: It is generally accepted that migrants are a peculiar group of people who are selected on such characteristics as education, skills, occupation, ambition, gender and age (Feliciano, 2005). Although

[1] The dataset utilized does not have information on the children's migration status but we are fairly confident that most of these children given their young ages are most likely to accompany their mothers in the case of migration.

complicated and inconclusive, empirical evidence suggests that migrants select positively on education, skills, occupation and ambition. If this is the case, then we expect that migrant parents in LDCs are likely to be positively selected on these characteristics. This is particularly with reference to rural to urban migrants. These traits may have a bearing on the education outcomes of their children that is likely to be positive

(iii) Adaptation: Migration to a new location offers a new set of opportunities and constraints and a new context for behavior to which migrants may need time to adapt to (Chattopadhyay et al. 2006). On this basis, a prediction that children of migrants might initially differ from children of non-migrants in their school participation rates but that these would converge with time can be tested.

Data and Methods

The data for this analysis comes from the Kenya Demographic and Health Survey (KDHS) conducted in 2003. The survey is a nationally representative, stratified, probability sample of women aged 15-49 years. A total of 10,000 households within 400 clusters were targeted for the survey. Of these, 129 clusters were classified as urban and 271 as rural. For all the households, the dataset has information on the current school enrollment status of members who are children. The analysis is restricted to children who are aged between 6-14 years (the official ages for primary school participation in Kenya). For the specific selection for the analysis, all children in the national sample aged 6-14years who are living in the same household with their mothers at the time of the survey were picked. These data have shortcomings and the main one encountered is that migration histories for the children are not collected and neither could such data be derived. However, migration status for the mother can be derived. Therefore the assumption being made here is that these children migrated alongside their mothers. A final sample of 6,371 children was arrived at for the analysis.

Variables

The main outcome variable of interest that measures primary school participation is *current enrollment status*. This is a dichotomous variable coded 1 if the answer to the question of whether a child is currently enrolled in school at the time of the survey is affirmative and 0 if not enrolled in school.

Independent and Control variables

Migration status: This is my main predictor variable. It is captured as a series of dummy variables to capture the migration status of the mothers of all children selected for analysis as follows: Non-migrant urban mother, Non-migrant rural mother, Rural-urban migrant mother, Urban-rural migrant mother, Urban-urban migrant mother and Rural-rural migrant mother. It is important to note that this variable also captures the current residential location of the child in the analysis models.

Other variables include *Child's Sex, Child's Age, Mother's education, Sex of the head of household, Age of the head of household, Household size, Household wealth* and *Duration.* The duration variable captures the length of time in completed years in which the mother has been in the particular location. We will utilize this variable to test the adaptation hypothesis.

Methods

The first part of the analysis involves describing the variables, followed by bivariate analysis of the relationship between migration status and children's' education outcomes.

This is then followed by a multivariate analysis that fits logit models in which the outcome is the probability of enrollment in school as a function of a set of covariates that include migration status, individual characteristics and household variables.

In general the model takes the form expressed below:

Eqn : $\text{logit}(p) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \ldots\ldots\ldots\ldots\ldots + \beta_k x_k + \varepsilon,$

Where p is the probability of enrollment in school, bounded between 0 and 1. The logit is defined as the natural log of the odds of the outcome i.e. $\ln(p/[1-p]$.

All the analyses are weighted to the national level to reflect survey sampling and non-response. In addition for the multivariate analysis we utilize the cluster command in Stata 10 to obtain robust standard errors.

Preliminary findings

Table 1 below presents results of the bivariate relationship between current enrollment status and mother's migration status.

TABLE 1: PRIMARY SCHOOL PARTICPATION BY MOTHER'S MIGRATION STATUS FOR CHILDREN AGED 6-14 YEARS, KENYA HEALTH AND DEMOGRAPHIC SURVEY (KDHS), 2003

Mother's Migration Status	CURRENT ENROLLMENT (%)		
	No	**Yes**	
Rural non-migrant	18.41	81.59	100.00
Urban non-migrant	10.18	89.82	100.00
Rural to Urban migrant	6.47	93.53	100.00
Urban to Rural migrant	4.06	95.94	100.00
Rural to Rural migrant	7.78	92.22	100.00
Urban to Urban migrant	6.13	93.87	100.00
Total	9.06	90.94	100.00

$p<0.001$

Overall most children of primary school going age were enrolled in school in 2003 irrespective of their mother's migration status. This ranges from a high of almost 96 percent for children of urban-to-rural migrant mothers to a low of 82 percent for children of rural non-migrants. Differences are significant at $p<0.001$. This generally high rate of enrollment is most likely a result of the Free Primary Education policy instituted by the government in 2003. An immediate spike in enrollment as a result of the policy has been documented with the Primary School National Gross Enrollment Ratio (GER) that had been stable at about 93 percent between 1999 and 2002 shooting up to 104 percent in 2003 (Government of Kenya, 2005).

Of greater interest however, is the fact that the two non-migrant categories are the ones associated with the lowest enrollment rates and are the only ones with more than 10 percent of the children out of school. This lends some preliminary support to the notion that migrants are a selective group and that there are some unobservable characteristics that might account for the better school participation outcomes of their children.

For the preliminary multivariate analysis, model 1 in the table below the migration status dummies are the only predictor variables acting on school participation. The reference category is rural non-migrant mother. We do not find a significant difference in the probability of a child of a non-migrant urban mother being in school as compared to the child of a rural non-migrant mother. However for each of the other categories, their children when each compared to the reference category are more likely to be enrolled in school. These results are all statistically significant. A child of a rural-to-urban migrant has 3.262 ($p<0.001$) times the odds of being enrolled in school as compared the child of a rural non-migrant mother. The odds for enrollment for the child of an urban-to-rural migrant mother is 5.328 ($p<0.001$), that of the child of a rural-to-rural migrant mother is 2.675 ($p<0.001$), and that of the child of an urban-to-urban migrant mother is 3.447 ($p<0.01$). All these are when compared to the child of the rural non-migrant mother.

These findings support the earlier bivariate analysis results lending some credence to the selection hypothesis.

INDEPENDENT VARIABLE	MODEL 1	MODEL 2
Mother's migration status		
(Ref: rural non-migrant)		
Urban non-migrant	0.688	-0.712*
	(0.520)	(0.357)
Rural to Urban migrant	1.182***	-0.949**
	(0.334)	(0.294)
Urban to Rural migrant	1.673***	0.959**
	(0.350)	(0.351)
Rural to Rural migrant	0.984***	0.639**
	(0.235)	(0.223)
Urban to Urban migrant	1.237**	-1.527***
	(0.383)	(0.367)

Model 2 reflects the obtained results once other independent variables (not shown in table) have been included. It is instructive to note that the earlier relationships have significantly changed. We surmise that attenuation of the coefficients in model 2 reflect in particular but not entirely the effect of urban bias. With the key variable of household wealth controlled for, we have taken account of the additional opportunities and advantages such as higher wealth status enjoyed by the urban dwellers that may give their children a significant edge in school participation compared to children in rural locations. A further step in the analysis will be to investigate the effect of the duration of residence and confirm whether or not the adaptation concept is supported.

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