# The Other Face of Migration: How Do Labor Migration and Remittances Affect Children's Education in South Africa?

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#### Abstract

This paper studies the effect of remittances sent home by South African labor migrants beyond higher levels of consumption on socioeconomic outcomes, children's schooling in particular. We use cross-sectional data from the 1993-1994 Integrated Household Survey, and panel data from 2002 and 2003 Labor Force Survey. We find that migration and remittances practices are largely restricted to Blacks. In recipient households, remittances substantially increase the likelihood that children are in school through three pathways associated with increased household income: increasing household educational spending, reducing child labor and mitigating the negative effect of parental absence due to out-migration. Also, migrant households without remittances are distinguished from remittances households. Children in these households are shown to be disadvantaged compared to recipient households, and sometimes even worse-off than their counterparts in nonmigrant households, primarily due to the deleterious effect of parental out-migration with no economic compensation. Sensitivity tests (fixed-effect modeling using panel data) show that the migration and remittances effect is robust to endogeneity, and relatively consistent across subsamples and over time, albeit the negative effect of being in migrant households with no remittances is largely reduced over time along with relaxing migration policies. The paper also includes analyses designed to assess the social consequences of the remittances effect. We find that remittances help reduce intra-familial gender inequalities, as well as inter-familial racial and SES (income and rural/urban residence) inequalities in schooling among recipient households.

#### Introduction

According to the World Bank (2003), remittances have become a rising source of external funding for developing countries, reaching 80 billion dollars in 2002. An understanding of how migration and remittance flows affect migrants' origin households, therefore, is a core element in the assessment of the consequences of labor migration. When high levels of earnings from migrant workers are remitted to the families they leave behind, the assumption is that out-migration benefits individuals, families, and communities economically. However, very little research examines the impact of migration and remittances on origin families, and even fewer studies whether the benefits extend beyond higher levels of consumption to include productive investments reflected in improved socioeconomic outcomes, such as human capital and health status. This paper seeks to establish a link between migration remittances and children's schooling in South Africa, a country with a clear SES hierarchy and distinctive labor migration patterns by race.

Labor migration has long been an integral feature of the South Africa economy. Given Blacks' disadvantaged socioeconomic position and limited economic opportunities at origin (which reflects in part the relocation during the *apartheid* period of a substantial fraction of the Black population to marginally productive rural areas), a large number of Blacks, mostly

men, work as temporary labor migrants in mines and cities, leaving their families behind (Mazur 1998; Tomlinson 1990; Posel 2001). A substantial fraction of these labor migrants send remittances back to their families at origin (Cross 2003; Wilson and Ramphele 1989).

While these remittances have been found to increase familial financial resources and help improve levels of consumption in migrants' origin households (Cross 2003), the role of remittances in children's welfare has not been adequately examined. To remedy this gap, we study the effect of labor migration and remittances on children's schooling in South Africa. Examining the effects of migration on schooling is critical in South Africa, where rural-urban migration is a long-standing tradition (especially for Blacks) and stark inequities in educational outcomes are commonplace. Also, we focus on children's educational outcomes, considering the universally acknowledged importance of education in individual's upward mobility and in societal development as a whole.

In principle, there are several mechanisms in which labor migration may influence children's education. On the one hand, significantly increased household income through remittances may allow parents to purchase more schooling (during the period studied here almost all Black schools required fees, even at the primary level) and may reduce the need for child labor. On the other hand, the shortage of household labor due to out-migration may place greater demands on child labor to assist in supporting the household, especially when the amount remitted is small, which in turn may negatively affect children's education. Still another possibility is that the disruption of family life due to parent's labor migration may have a detrimental effect on children's schooling.

In this paper, using a nationally representative sample that covered approximately 9,000 households in South Africa during 1993-1994, we first evaluate the above three mechanisms to obtain a better understanding of the social impact of migration and remittances in migrant-sending communities. Given the distinctive migration patterns by race, racial differences in this effect are examined. We further conduct sensitivity tests to assess the potential selection bias generated by unmeasured household characteristics that are associated with both migration/remittances status and children's schooling. This is achieved by using another dataset, a two-wave longitudinal sample that covers more than 20,000 households in 2002 and 2003. The use of this dataset also helps to evaluate the robustness of the migration/remittances effect across independent samples and over time (a 10-year period). We finally assess the implications of migration and remittances for educational inequalities: with respect to within-household disparities, we study whether remittances reduce the gender gap in schooling, on the hypothesis that increased income may lead to less selective household investment; additionally, we evaluate the role of remittances in inter-household educational inequalities with respect to economic status.

### Data

The cross-sectional data set are from the Project for Statistics on Living Standards and Development (PSLSD), a nationally representative sample that covered approximately 9,000 households across all demographic areas of South Africa during 1993-1994. It was established by the World Bank as one of the cross-country Living Standards Measurement Study (LSMS) survey projects. The survey was based on a two stage sampling design, and it was relatively comprehensive in that it gathered detailed information on individuals'

demographic characteristics, education, migration, employment and occupational status, as well as households' income and expenditures. Community data that can be linked to households were also collected.

Regarding education, the survey contains information on the highest level of education for all household members and current enrollment status of each household member age 6-24. With respect to migration and remittances, it contains information on the migration status of individual household members; specifically, it identifies the absence of a household member during the 12 months prior to the study, along with details of the reason for absence. Given that the majority of labor migrants in South Africa are circular migrants within a short period of time, this information is relatively sufficient to identify household migrants. The data also include detailed module on remittances received in households: whether the household had received remittances either in money or in kind from household members, and the amount of remittances received in the last 12 months.

Although the 1993 PSLSD collected comprehensive information on labor migration, a few limitations should be acknowledged. Because the sender of remittances is not identifiable in the household roster, it is impossible to identify which labor migrant remitted what income to which household member, as well as the characteristics and conditions of the remitter at destination. Additionally, no information on the spending of remittances is available, thereby limiting direct analysis as to whether remittances are spent on children's education.

To conduct sensitivity tests, a second data set is used. The data are from South Africa Labor Force Survey (LFS), a biannual rotating panel survey starting from 2002 that primarily focuses on a variety issues related to the labor market (a rotation of 20% of households each time). It collects a national representative sample of about 100,000 individuals in 30,000 households, based on a two-stage sampling design.

The LFS data are not as comprehensive as PSLSD, thus it only permits examining the overall effect of migration and remittances on children's enrollment. The data set contains information on the highest educational level and school enrollment status for each household member. There is also a specific section collecting data on migration workers, which are defined as persons separated from the household for more than 5 days a week on average in the past 4 weeks. Remittances, both in money and in goods, sent back to the household in the last 12 months were also recorded.

The longitudinal nature of the data is well suited to establish the true migration effect. Specifically, we use the September 2002 and September 2003 waves to estimate repeated-measure FE and RE models, because the survey starts to collect migration information in every September wave only since year 2002. Multiple measures of migration/remittances status and school enrollment permit the use of difference-in-difference modeling (FE modeling) that purges out potential endogeneity.

## **Preliminary Summary**

Results show that the effect of migration and remittances are restricted to the Black population. Black children in recipient households fare significant better in school enrollment than their counterparts in other households. When examining various pathways in detail, we find the positive effect of remittances largely results from increased level of educational expenditure, reduced level of child labor, and the buffered detrimental effect of parental

absence, associated with increased level of income from remittances. By contrast, migrant without remittances (MNR) households are disadvantaged in providing children with education than remittances household due to the lack of extra income together with household labor shortage. These households are also worse off than nonmigrant (NM) households in enrolling their children. Yet the negative effect is mainly driven by MNR households where parents migrated, whereas in terms of education spending and child labor, MNR households do not systematically different NM households.

Importantly, FE and RE modeling suggests that the remittances effect is not likely to be biased by endogeneity. Also, this effect is relatively consistent across subsamples and across independent samples over time. In contrast, the negative effect of being in MNR households disappears over time, which might result from changing migration patterns along with relaxing migration policies and technology advancement after *apartheid*.

Further analyses show that remittances tend to reduce within-household gender inequalities and between-household inequalities regarding economic status among recipient households, due to increased level of household income. That is, remittances have led to an improvement in enrollment for males, for rural children and for children from poor households, who are in the greatest need of such income transfer. Above all these findings, the positive effect of household educational level remains, suggesting the importance of human capital (mostly non-material resources) that is unaffected by enhanced material resources through remittances. Additionally, because the remittances effect is observed only for Blacks, the most poorly educated portion of the population, remittances thus help to reduce racial disparities in schooling among recipient households. Overall, our estimates demonstrate that remittances can help Blacks, rural children, and children from poor households to obtain more schooling, as their advantaged counterparts do.