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The Links between Labor Migration and Human Capital Formation in Malawi

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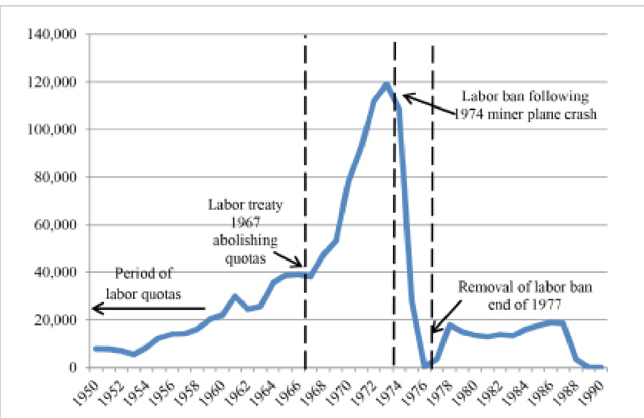
Circular labor migration increases educational attainment in origin communities in the long run.

Topic at a Glance

Circular migration across national borders is a long-standing feature of labor markets in sub-Saharan Africa. Close to 70% of all international migration from the region is between African countries. Yet we know surprisingly little about how this migration affects sending communities, and what we do know is limited to short run effects. Research has shown that migrant families experience immediate improvements in income, consumption, assets and wellbeing as a result of migrant earnings. But these families may also start to make different choices about educational investments, with consequences for human capital development over the longer run. For example, families receiving remittances may reduce their demand for child labor on farms and send children to school more frequently; alternatively, they may use more child labor to replace the missing migrant workers. So it is an open question as to whether circular labor migration has positive or negative long-run effects on education levels in sending regions.



Caption: The Figure shows number of workers contracted to work on South African mines each year. The three dotted lines represent (from left to right) the abolition of labor quotas in August 1967, the moratorium on migration after the April 1974 Malawian plane crash and the legal resumption of mine migration in 1978.

New Insights

Malawi provides a uniquely advantageous setting for addressing questions about the long run effects of labor migration on education levels in sending communities. Throughout the twentieth century it was one of the primary suppliers of unskilled workers for South African mines. By the late 1970s, one in five Malawian men had worked abroad, typically on a series of two-year labor contracts that diverted two-thirds of their earnings ('deferred pay') to be paid on their return to Malawi. These men could not choose when to return, nor could they choose the amount of deferred pay to send. By entering into an institutionalized system of circular labor migration, the Malawian government ensured that a large share of incomes earned abroad would return home and that labor resources would not be forever lost to the country.

To study the net impact of this labor migration on education, we addressed the two main issues that always arise in migration research: (i) how to isolate causal effects of migration, and (ii) how to find good data on migration, remittances, and relevant economic outcomes.

To address the first issue, we studied a set of events that generated large, relatively exogenous district-level shocks to the number of migrants, and amounts of money flowing back to Malawi. Figure 1 shows a 200% increase in the number of migrants following the removal of a national labor quota for Malawian workers in 1967. In some communities, over 20% of the working age male population was working on a South African mine. In April 1974, a plane of returning miners crashed, killing over seventy workers. Then President Banda recalled all miners to Malawi and banned recruiting indefinitely. Levels of migration to South African mines never recovered after the ban was lifted in 1977 because mining companies redirected their hiring policies away from foreign labor.

The beginning and end of the migration surge shown in Figure 1 brackets our "treatment": a concentrated period of shocks to migration and migrant earnings. Districts with pre-existing recruiting stations, established by the mining companies as early as the 1930s, were most affected by this treatment because they made it easier to sign up for a mine job. That is, after 1967 when the option to migrate was opened to all, more of the men living in districts with recruiting stations responded to this new opportunity.

To address the lack of data common in migration work, we assembled several waves of Census data – some newly digitized – and matched this with archival data we found on district-specific flows of migrant money, and recruiting station locations. Because historical placement of these stations was not related to district characteristics that might have influenced education directly, we compared educational attainment among cohorts eligible for primary school during the migration shocks across districts with and without recruiting stations. We also constructed a second comparison of education gaps using differences between districts with and without stations among older cohorts who would not have been eligible for primary school during the shocks.

We found no difference in the educational attainment of older cohorts – those ineligible for school at the time of the migration shocks – across districts with high versus low exposure to the migration shocks. In contrast, among those who were age-eligible for schooling during the migration shock period, cohorts in recruiting station districts gained between 0.12 and 0.18 more years of education, relative to cohorts of the same ages in districts without recruiting stations. These education gaps persisted (0.14 years) among the youngest cohorts. Given that the average adult in our sample had completed 2.5 years of education, these gains in years of schooling were relatively large (a 4.6-6.9% gain).

Our estimates of the long run elasticity of education with respect to migration are somewhat smaller than existing positive estimates of the shorter run effects of migration and remittances estimated in Asian and Latin American settings. In addition to the overall positive impacts that we estimate, we found that the migration shock had smaller positive long run impacts on education for those cohorts eligible for school during the labor expansion period, when migrants were still leaving Malawi each year. Effects were larger for cohorts eligible for school during the labor ban years, when all migrants had returned and collected their earnings.

We also found that the largest long run impacts were in districts without agricultural estates, a proxy for districts where child labor was least valuable, and where the opportunity costs of going to school were lowest. Importantly, because mine work did not require any education, the improvements in schooling we found were not because children wanted more education in order to get a mining job. Children of the next generation –both males and females – attained more education in the wake of the migration shocks, largely because of positive income effects from migrant earnings.

Policy Recommendations

Using newly collected administrative data and exploiting a natural experiment in shocks to labor migration, this paper provides direct evidence on one of the channels through which circular migration positively affects the lives of those families and communities that are 'left behind'. Our evidence shows that the immediate impacts of circular labor migration on school enrolment translate into long-run improvement in human capital. Twenty to thirty years later, adults in rural origin communities most affected by the migration shocks have higher levels of education.

Given the centrality of human capital accumulation in the development process, the findings of this paper suggest that better access to foreign work opportunities and foreign incomes could enable poor, rural communities to lift themselves out of poverty and lay the foundations for economic growth by investing in the education of the next generation.

More specifically, the results of this work highlight a number of issues that are relevant and important for future policy formulation:

- First, even in countries where children do participate in the labor market, the positive income effects of labor migration on the demand for education outweigh any potential negative substitution effects of this migration on the demand for child labor.
- Second, the return of remittances from migration is key. Facilitating and reducing the cost of returning remittances is likely to be important for maximizing the positive impacts of circular labor migration.
- Third, policymakers should consider experimenting with guest worker programs to provide pathways out of poverty for families and sending communities. Modern guest worker programs have many similarities with the organized mine migration – for example, limited-time work contracts, in-built circular migration flows and periodic labor bans. Our work shows that there may be scope for modern guest worker programs to have positive, long-lasting impacts on human capital in sending regions, contributing to the development impacts of international labor migration.

Limitations

Although this new evidence from Malawi shows that international labor migration raised human capital profiles of future workers in sending areas, rather than crowding out school enrolment, there is some indication that the long-run impacts of labor migration on human capital of the next generation are muted in places where the 'shadow' value of child labor is relatively high. There is also some evidence that when the shock ends – and specifically, when migrant earnings dry up – the effects on education dissipate.

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