

Migration and families left behind

Families that stay behind when a member migrates do not clearly benefit

Keywords: labor migration, sending communities, left-behind population, developing economies

ELEVATOR PITCH

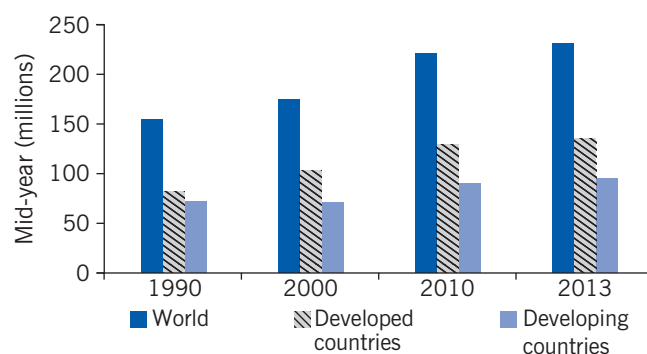
About a billion people worldwide live and work outside their country of birth or outside their region of birth within their own country. Labor migration is conventionally viewed as economically benefiting the family members who are left behind through remittances. However, splitting up families in this way may also have multiple adverse effects on education, health, labor supply response, and social status for family members who do not migrate. Identifying the causal impact of migration on those who are left behind remains a challenging empirical question with inconclusive evidence.

KEY FINDINGS

Pros

- + The migration of a family member brings additional income through remittances, which can support household consumption and investment.
- + This income effect can reduce the need for child labor and increase children's schooling, notably for girls in developing countries.
- + Remittances can improve families' sanitation, health care, and nutrition and fill in for missing formal health insurance in the short term.
- + Remittances can enable remaining family members to engage in higher-risk, higher-return productive activities.
- + Where most migrants are men, the bargaining power of women who stay behind may be strengthened.

The international migrant stock has grown rapidly since 1990



Source: Calculations based on data from <http://www.un.org/en/development/desa/population/migration/data/index.shtml>

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Cons

- The migration of an economically active family member places a heavier burden on those who stay behind, who must make up for the lost employment and spend more time on household chores.
- The absence of the main caregiver can increase children's probability of dropping out of school and delay school progression.
- Disrupted family life can lead to poor diets and increased psychological problems.
- Migration may reduce incentives for education when perceived future returns to education are low because of expectations of migration.
- Migration can reduce labor force participation for family members left behind, especially for women.

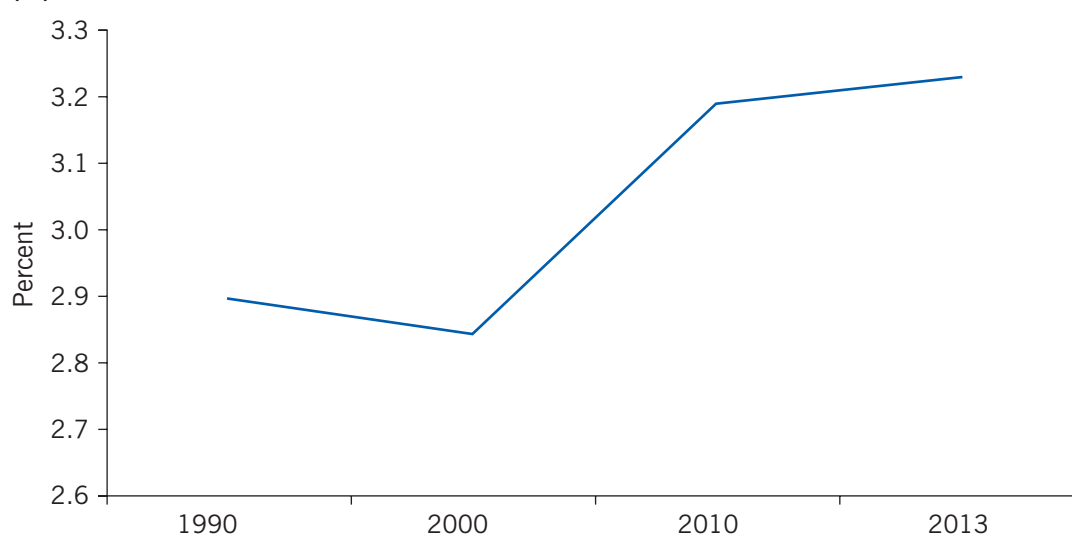
AUTHOR'S MAIN MESSAGE

The effect of a family member's migration on those who stay behind can be either positive or negative, depending on individual circumstances. Although remittances are a potentially important means of easing family budget constraints and alleviating poverty, the most vulnerable populations may be hurt by a family member's migration. Policymakers need to consider the specific circumstances behind the migration and of the family members in the home country. Support systems for these families may need to be bolstered to help them cope with any detrimental impacts of migration, especially its effect on education and human capital accumulation.

MOTIVATION

The number of people migrating from their country of origin or from one region to another within it has been growing dramatically in recent decades. The UN estimates that about 232 million people live and work outside their country of birth and that 763 million people live and work outside their region of birth within their home country. Since 2000, the international migrant stock has been growing faster than the total world population, and it now accounts for 3.2% of the world population (Figure 1).

Figure 1. The international migrant stock accounts for an increasing share of the world population



Source: Calculations based on data from UN Department of Economic and Social Affairs. *Trends in International Migrant Stock: The 2013 Revision* (UNDatabase, POP/DB/MIG/Stock/Rev.2013). Online at: <http://www.un.org/en/development/desa/population/migration/data/index.shtml>

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International migrants and internal migrants together account for one in seven people worldwide. These migrants do not always move with their entire family. More often, they leave the rest of their family behind: their spouse, children, and parents. Rigid migration policies, uncertain living conditions in the destination country or region, and the high cost of migration are among the reasons why many people migrate alone. In China, individuals who have migrated from rural areas to cities have left behind an estimated 61 million children, 47 million wives, and 45 million elderly relatives [1]. In the Philippines, one of the largest sources of migrant laborers worldwide, around nine million children are growing up without at least one of their parents because of migration.

The impact of migration on sending communities, especially on family members left behind, has long been debated. On the one hand, labor migration is viewed as economically benefiting the family in the home country through financial transfers. Remittances can ease liquidity and budget constraints and thereby improve households' long-term welfare through investments in health care and education. On the other hand, many studies have pointed out the social cost that migration imposes on families left behind. In particular, the physical absence of the migrant may have multiple adverse effects on family members' education, health, labor supply response,

and social status. Thus, identifying the impact of migration on family members who remain is an open empirical question with inconclusive evidence.

DISCUSSION OF PROS AND CONS

The main channels: Remittances and household time allocation

When people migrate for work, the groups that are most likely to be left behind are women, children, and the elderly. Two primary mechanisms associated with migration can affect those staying behind. Most important, the migration of a family member usually brings additional income to the family through remittances and can therefore ease the budget constraint for family members in the home country or region. In particular, the income effect can enable larger investments in education and health care, create new opportunities to invest in businesses, and raise the reservation wage (the lowest wage at which a person is willing to accept a job) of family members who remain behind. Yet migration also entails the absence of an economically active family member and the loss of that member's time inputs to both market and household production. In particular, this absence may translate into disrupted personal care for dependent family members, including children and the elderly, and a greater burden of responsibility for work and household chores among family members. The forgone market and household production (including both labor force participation and care) may be substantial and may outweigh the gains from remittances. Since these two mechanisms work in opposite directions, the impact of migration on family members left behind can only be determined empirically.

Another dimension to consider when assessing the relationship between migration and the family left behind is the duration of migration [2]. The expected impact is ambiguous in both the short term and the long term. In the short term, migration may have a disruptive effect on the family because of reduced inputs to market and household production. As migration is costly and does not necessarily lead to immediate employment at destination, it may even translate into reduced income for the family that has to finance the migrant. In the long term, the forgone market and household production may be compensated for by a reallocation of labor among family members who stay behind. Yet, whether financial transfers rise or fall with the duration of migration is uncertain. Long-term migrants are likely to earn a higher income and as a consequence may be able to afford to send larger remittances. However, their commitment to their family may weaken over time, leading to reduced financial transfers.

Thus the impact of migration on the family in the home country or community is complex, multi-channeled, and context-dependent. It ultimately depends on who migrates and who is left behind (gender and age are key dimensions here) and on the duration of migration. Given the complexity of the relationship, empirical studies are needed to clarify a net impact that is ambiguous a priori.

Measuring the causal impact of migration is challenging

Empirical work is made possible by the availability of household survey data that account for internal and international migration flows. The standard research strategy is to compare outcomes of interest for migrant-sending households and for non-

migrant-sending households. But there are important methodological problems that may limit the scope of the findings and to some extent explain their inconclusiveness. The main difficulty arises from the fact that migration is a choice variable, which plagues the empirical literature with important selection and reverse-causality problems.

Selection bias, which complicates analyses of migration, can arise for a number of reasons: individuals (or households) are not randomly selected but self-select into migration; they choose how many family members will migrate; they choose when to migrate and for how long (including whether to return); and they choose whether to send remittances and how much to send. In this context, omitted variables that are correlated with both the migration decision and its outcomes for family members who are left behind may cause endogeneity problems and bias estimates of the impact of migration on the family left behind [2]. For instance, wealthier households may be able to afford to send family members abroad for work and still have enough money to pay for the education or health care expenses of the rest of the family. In that case, comparing migrant-sending households with non-migrant-sending households may capture differences in wealth rather than the effect of migration. In addition, endogeneity may also result from reverse causalities between some of the outcomes of interest and migration. Because parental health can be part of the migration cost, having parents in poor health may outweigh the economic benefit of migration and may therefore reduce the likelihood that their children will migrate. A careful identification strategy that takes into account this possible reverse causality is required in order to estimate the causal impact of children's migration on parental health.

Researchers have applied various methods to correct for multiple selection and reverse causality biases in observational data. Typical methods include the use of instrumental variables (variables that are correlated with the migration decision but uncorrelated with the outcome of interest outside of its impact on migration), selection-correction models, natural experiments, and matching methods (which assume that selection into migration depends on observable characteristics only and match migrants with comparable non-migrants based on these observable characteristics).

Finding valid instruments is a major difficulty, and while using experimental data is a promising approach, such data are rarely available and may be very costly to construct [3]. Nonetheless, a few recent studies have taken advantage of data on policy experiments in New Zealand, which introduced immigration-visa lotteries for selecting applicants from Samoa and Tonga. The studies then compared households with a lottery winner (with migrants) with households with a lottery loser (without migrants) [2], [4], [5]. This strategy solves the problem of self-selection into migration because households in both groups had members who were willing to migrate. In the same vein, a study used the US diversity visa lottery to estimate the impact of migration to the US on the consumption and health of household members staying in Ethiopia.

Evidence of the impacts on education

The impact of migration on the school attainment and education performance of children left behind is the most documented dimension of the link between migration and the family left behind. One difficulty in measuring this impact is that parental

migration is likely to be correlated with unobserved factors that may also explain the education outcomes of the children. For instance, if migrants are positively selected (more skilled and educated than the average person in the home country or community), households with migrants may have stronger preferences for investment in education, in which case the analysis may be identifying the effect of education preferences rather than of migration.

There are several main channels where a parent's migration may affect children's education. On the positive side, remittances sent back home can ease the household budget constraint by making more resources available. As a direct consequence, families have less need of child labor, which frees up children's time for school. On the negative side, the disruption to family life as a result of a parent's migration, especially the lack of a parent's care and supervision, might negatively affect children's school performance.

A third, complementary channel is the possibility of a child's own (future) migration, which might either encourage or discourage a child's education, depending on perceived returns to education in prospective jobs. Studies for Mexico have pointed out that families with higher probabilities of migrating to the US invest less in education, an outcome that is attributed to the low return to Mexican education in the US labor market.

Finally, a parent's migration may lead to a redistribution of decision-making and responsibilities within the household, which can affect child schooling, either because the new decision-maker (for example, the other parent or an older child) cares more or less about investment in education than the migrating parent or because the redistribution of roles puts more pressure on children to help in the household.

The literature offers inconclusive evidence on whether migration has a net positive or net negative impact on education outcomes of children who are left behind [1], [6]. Most empirical studies highlight heterogeneous impacts that depend on the gender, age, and sibling birth order of the children left behind, as well as on the gender of the parent migrant and whether one or both parents are absent.

Focusing on the short-term direct effect of remittances on household decisions, some studies provide evidence of a positive impact of remittances on schooling in the Philippines [7] and in Mexico [8]. Other studies that have assessed the negative consequences of parental absence have found that parental migration increases the probability of a child's dropping out of school and of delayed school progression and has a negative impact on children's school performance.

Evidence for Mexico also reveals gender-based differences [9]. Parental migration significantly increases educational attainment for girls, lowers the probability of boys completing junior high school and of boys and girls completing high school, and, when the migrant was a caregiver, raises the probability that boys and girls will have academic difficulties. For girls, especially in developing countries, the income effect appears to dominate: remittances, by easing family budget constraints, open up greater education opportunities for girls, who are more likely to be deprived of educational investments when family finances are constrained. For older boys, however, alternatives to education, particularly their own migration, tend to overcome the income effect and drive boys away from school.

Evidence of the impacts on health

The impact of migration on the health of family members left behind has received relatively little attention. Estimating health effects also faces selection and reverse causality problems. For instance, adult children whose parents are in bad health and in need of care might be less likely to migrate. At the other end of the health spectrum, migrants may share a genetic predisposition to good health with their children and their parents.

The channels through which migration behavior may affect the health and nutrition status of family members left behind are similar to those highlighted for education. In the long-term, the income effect of remittances may be large if they contribute to better sanitation, improved food habits, and more health-seeking behaviors. In the short-term, migrants may also make up for missing formal health insurance mechanisms by sending larger financial transfers back home when they are needed.

Working in the opposite direction, however, is the household time reallocation necessitated by a migrant's absence, which may negatively affect the health of family members left behind. Family members may have to take on more housework (including farm work in rural areas), may suffer greater psychological pressure, or may eat more poorly, especially in the case of children, because of the absence of the main caregiver. In rural societies, migration may also disrupt traditional kinship systems and care structures, to the detriment of the most vulnerable groups. And as in the case of education, the relationship between migration and the health status of those who are left behind also differs by gender and age.

A growing literature is analyzing the causal effect of parental migration on children's health and nutrition. Migration seems to improve the nutritional status of very young children, measured by birth weight, infant mortality rate, or weight-for-age [10]. However, a study that exploits New Zealand's migration lottery program to capture the causal effect of migration from Tonga finds worse diets and lower height-for-age in the short term among children under the age of 18 who are left behind when a parent migrates compared with children whose parents applied but did not win the migration lottery [5].

Another set of studies, some using careful instrumental variable approaches, has empirically assessed the impact of the migration of adult children on the health of their elderly parents. Again, the evidence is mixed. In both China and Mexico, the migration of adult children has been found to result in lower self-reported health status among elderly parents. In contrast, a study for Moldova finds evidence of a beneficial impact of the migration of adult children on the physical health of elderly family members who stay behind and finds no significant impact on their mental health or cognitive capacity. These findings are attributed mostly to a strong income effect: remittances contribute to a more diversified diet and allow for changes in household time allocation toward more leisure and sleep. If anything, the inconclusiveness of the recent empirical literature on the health effects of migration reveals that whether migration is detrimental or beneficial to the health of those who are left behind is deeply context-dependent.

Evidence on the labor supply response to migration

As with education and health, migration affects the labor allocation decisions of the family members left behind through two main channels. First, the availability of remittances may change labor supply responses in potentially competing ways. On the one hand, financial transfers from migrants can enable family members who stay behind to enter riskier, higher-return activities by easing household financial constraints. If this effect dominates, then migration will lead to a diversification of economic activities among family members who are left behind and possibly to increased income from local activities in the long term. On the other hand, the increase in disposable income brought by remittances may dampen the incentives to work of non-migrating family members, in particular if the financial transfers raise the reservation wage of family members and lower the opportunity cost of leisure [11]. In that case, the increase in income from remittances may reduce the labor force participation of family members, and in the long term it may create dependency on income from remittances.

Second, migration results in the loss of the migrant's local labor, which may strongly constrain the labor supply response of non-migrating members in the short term. In particular, when labor markets are imperfect, as is typically the case in developing countries, family members who are left behind may not be able to hire labor to compensate for the lost contributions from the migrant. In rural areas, this lost labor may force other family members to increase the time devoted to (subsistence) farming.

In addition to these two main channels, migration may also affect a spouse's labor market participation by affecting productivity in the home. If the inputs of spouses in the home production function are complements, then migration will lower the productivity of the spouse who remains behind; if the inputs are substitutes, the opposite will hold. As is the case for education and health, the net effect of migration on labor supply depends on the relative magnitudes of the remittances-related effect and the lost-labor effect. Moreover, the net effect may vary across different subgroups of people, depending on the age and the gender of the household members, their employment sector, the seasonal or permanent nature of migration, the household's assets, and on how binding liquidity constraints are for the household [12].

Research on the labor supply responses of family members to international migration consistently finds evidence of decreasing labor force participation of women who are left behind, be they Albanian, Egyptian, Mexican, or Nepalese [11]. The only increase in labor supply comes from an increase in unpaid family work and subsistence work, particularly in rural areas. In rural China, internal migration is found to increase farm work for all family members who remain behind (women, the elderly, and children), and return migration does not seem to reverse these labor allocation changes [12].

Evidence of impacts on intra-family roles and the transfer of norms

A straightforward extension of the analysis of the labor supply responses of family members left behind is to investigate the reallocation of intra-family roles and the possible strengthening of the bargaining power of certain members who stay behind, as this affects decision-making and the control and allocation of resources.

In patriarchal societies, where most migrants are men, migration may influence not only the labor supply in communities of origin but also the position of women who remain behind [13]. In Albania, less educated women in households from which men have migrated are more likely than their peers in households without a male migrant to gain access to remunerative employment, which could empower them to make resource-allocation decisions within the household. Changes in intra-family roles can also be observed among siblings: in China, older sisters are found to have a positive influence on their younger siblings in households from which a parent has migrated.

Finally, a recent strand of the literature focuses on the transfer of norms, looking in particular at how political norms and behavior at home change with migration. Migrants may transfer not only financial resources to the family left behind but also political knowledge, preferences, and practices absorbed in their host country. In transition or developing countries, where institutions are weak, the diffusion of political norms through communication between migrants and their family back home has the potential to boost demand for political accountability and promote democracy. Using a voting experiment to capture the individual demand for better governance in Cape Verde, a study provides evidence of a positive impact of the proportion of international migrants in an individual's locality on the demand for political accountability. International migration is also found to affect political behavior and voting: in Mexico and Moldova, there is evidence of a positive impact of migration on votes for opposition parties.

LIMITATIONS AND GAPS

The literature on migration and the family left behind recognizes the difficulty of measuring a causal impact. This is both a clear limitation and a major challenge to researchers. Most studies rely on data from home-country household surveys, making it difficult to overcome the problem of the non-random selection of individuals into migration. Unresolved endogeneity problems are among the reasons why studies report mixed results of the impact of migration on the education, health, and labor supply of family members who stay behind. The recent use of experimental approaches, through policy experiments such as visa lotteries and natural experiments, is leading the way to promising solutions to these difficulties. Collecting such data is particularly challenging, however, and often depends on the willingness of policymakers to share the data with researchers.

There is also a need for better survey data, notably for richer longitudinal data sets that simultaneously survey migrants abroad and sending households. Although studies using such data sets would still not be as good as randomized controlled studies, they would help researchers and policymakers learn more about the mechanisms through which migration affects family members who do not migrate.

Another limitation is that most studies have investigated specific settings, so the results may not be generalizable. In particular, the impact of migration may vary considerably depending on the type of migration and on the source and destination countries analyzed. For instance, the loss of parental supervision and interaction might be much more detrimental for international migration, with long-distance travel and infrequent returns, than for short-distance internal migration.

Another source of cross-study variability may be the family's income level before migration, which can influence whether the net effects are positive or negative. In particular, for poor households in poor countries the income effect of remittances would be expected to be stronger and more likely to counteract the negative effects associated with the absence of the migrant.

SUMMARY AND POLICY ADVICE

With about one billion international and internal migrants worldwide, the relationship between migration and the family left behind is an important policy question. Labor migration is conventionally viewed as economically benefiting the family left behind. Remittance transfers can ease budget constraints and thereby increase spending on health care and education, improving households' long-term welfare in the source country. However, the migrant's absence might also have negative consequences for non-migrants, be they children, the elderly, or a spouse.

Policymakers need to account for differences in the situations of migrants and their families who stay behind and bolster support systems in education and health care to help families cope with the detrimental effects of migration on the accumulation of human capital. If migration implies lower education or health status or more child labor, the potentially long-term costs of migration need to be mitigated through appropriate home country policies. Population aging is another issue to consider.

Many migrant-sending developing countries have inadequate social safety nets, especially in rural areas. Countries may need to establish supportive institutions that can help families who stay behind adapt to the loss of an economically active member or caregiver through migration. Policy options for developing countries include improving the functioning of labor markets (notably in rural areas, to facilitate the hiring of local labor when a family member migrates), strengthening formal insurance and credit markets, facilitating the transmission of remittances by lowering remitting costs, and increasing access to education and health care. More specifically, ways to mitigate the impact of migration on human capital include offering access to better education locally at primary and secondary school levels, including providing additional tutoring for children left behind, and building social safety nets to provide pensions and affordable health care for the elderly.

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Competing interests

The IZA World of Labor project is committed to the *IZA Guiding Principles of Research Integrity*. The author declares to have observed these principles.

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