

# How does migration affect child labor in sending countries?

## Emigration from developing countries can change local labor market conditions and children's work time

Keywords: international migration, labor market, child labor, developing countries

### ELEVATOR PITCH

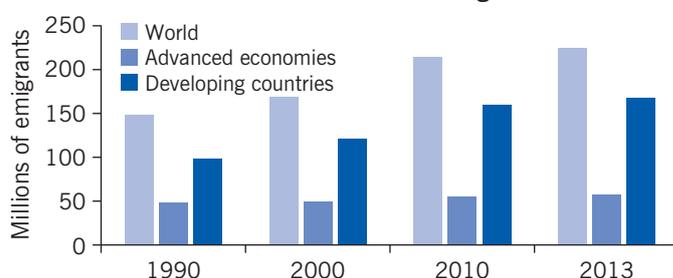
International labor mobility has resulted in sweeping socio-economic changes in many developing countries. When a family member migrates for work and sends back remittances, household income may rise, and with it investment in children's schooling. Emigration flows may also alter local labor market conditions and wage rates, which can in turn affect children's labor supply. Whether there is more or less child labor as a result of migration may depend on the skill composition of the migrants and on how family members respond to wage changes.

### KEY FINDINGS

#### Pros

- + Through remittances, labor migration may provide additional income to household members left behind, which may reduce the household's need for child labor.
- + Wages in the home labor market may rise following labor outflows, raising the income of some adult workers and thus reducing the need for their children to work.
- + Since child labor is more common in poor households that depend on unskilled labor, the positive income effects will be stronger when the share of unskilled labor is higher among migrants than stayers.

The international stock of emigrants from developing countries has been rising



Source: Calculations based on UN migration data. Online at: <http://www.un.org/en/development/desa/population/migration/data>

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#### Cons

- Migration of some family members withdraws human capital and labor from the sending household, a loss that may be compensated for by increasing child labor in the home and in the labor market.
- Adults may work less in response to a migration-induced rise in local wages, potentially requiring their children to work more.
- Depending on the skill composition of migrants and on the responsiveness of the adult labor supply to wage changes, higher local wages may increase the incentives for children to work.

### AUTHOR'S MAIN MESSAGE

International labor mobility affects both family members left behind and workers in migrant-sending countries. Family members benefit from remittances, which raise household income and may alter resource and time allocations. Non-migrant workers are also affected, through changes in local labor markets. The effect on child labor depends, in part, on the skill composition of migrants and on adult responsiveness to wage changes. Understanding these effects helps to inform policies that can enable developing countries to break out of the vicious cycle of poverty resulting from underinvestment in education, a low-skilled labor force, and child labor.

## MOTIVATION

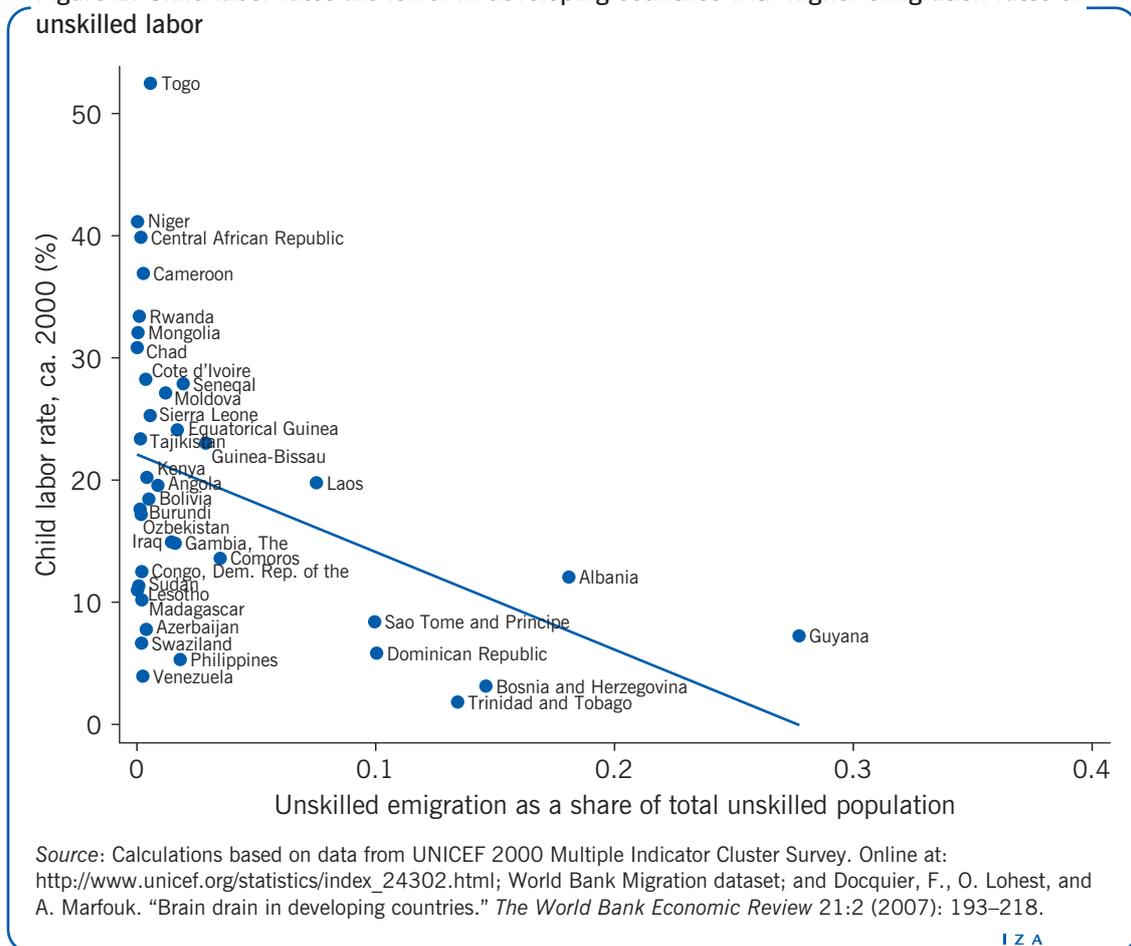
Child workers aged 5–14 account for almost 11% of the global population of children. The literature discusses several drivers of child labor, including the recent effects of globalization and market integration that are changing labor markets and social and cultural norms in many developing countries [1], [2]. Both international trade and migration have been proposed as influencing child labor in low-income settings through their impacts on local labor markets [3], [4]. In particular, international migration has risen steadily in recent decades, and some developing countries have lost a substantial share of their working-age population to emigration, with important consequences for their own labor markets [5]. While most of the attention has gone to the impacts on adult workers, less is known about how emigration-induced changes in household income and wages have affected children’s work in migrant-sending regions.

## DISCUSSION OF PROS AND CONS

### Child labor and the labor market

Data show a statistically significant negative correlation between unskilled emigration rates (the stock of primary-school-educated emigrants relative to the share of primary-school-educated workers in the total population) and child labor in a number of developing countries (as unskilled emigration rates rise, child labor falls; Figure 1). Child labor is a

Figure 1. Child labor rates are lower in developing countries with higher emigration rates of unskilled labor



poverty-related phenomenon that is driven largely by how well parents fare in the labor market [2]. In the most general household economics framework, parents care about their own consumption and that of their children and decide to send their children to work if the household needs the additional income that working children can provide (in economic terms, the household cannot afford to have its children consume leisure by not working). When parents' earnings are low, and they are unable to borrow to meet their consumption needs, the value they assign to their children's time allocation changes [6]. In turn, high levels of child labor affect the persistence of poverty in developing countries by reducing children's education (their human capital accumulation) and thereby future wages [7]. Many children in developing countries both work and go to school, but working while attending school can reduce educational performance. And sometimes children even have to work in order to afford to go to school.

A seminal model which examined the relationship between child labor and poverty showed that when wages are high, parents are able to keep their children in school and out of the labor market; but when wages are low and families are poor, parents send their children to work, thereby generating a vicious circle of underinvestment in education, a low-skilled labor force, and child labor [8]. Along similar lines, there is a critical level of adult wages below which households send their children to work. Thus, changes in adult income or wage rates are likely to have an impact on children's time allocation through either an income effect (increases in family income reduce the demand for child labor) or a substitution effect (increases in local wages increase the opportunity cost of children's time and thus may increase the demand for child labor).

One of the earliest and strongest demonstrations of the link between adult wages and child labor supply used late-19th-century US census data for Philadelphia. The study found less child labor in families where fathers' wages were higher, and concluded that an income effect leads to an increase in the demand for children's leisure and schooling and a decrease in the demand for children's labor [9]. Similar findings are reported using aggregate data for rural India in the 1960s [10] and individual-level data for modern Egypt [11]. Overall, there is limited but consistent evidence showing that adult wages are key determinants of child labor and that changes in local labor demand play a significant role in shaping children's time allocation and labor supply [12].

A more recent study uses data on agricultural shocks to local economic activity in Brazil to distinguish between the effects of increases in household income and increases in the opportunity cost of children's time (the substitution effect). While the study finds that higher parental wages and household wealth are associated with lower rates of child labor and higher school attendance, it also finds that, holding family income and socio-economic status constant, temporary increases in local economic activity are associated with increased opportunity costs of children's time and, therefore, with more child labor [7]. These results are consistent with the labor market theory of income and substitution effects acting in opposite directions on the working time decisions of the local labor force.

### **Impact of international labor mobility on labor markets and child labor**

The labor market consequences of international migration have inspired intense debate. Almost all the research has focused on the impact of migration inflows on the labor

market and wage structure in destination countries. More recently, though, as more data on labor market conditions in developing countries have become available, studies have begun to examine the labor market effects on migrant-sending economies.

The labor market effects of migration—in both sending and receiving countries—occur because large outflows or inflows of workers change both labor supply and the skill mix of the labor force, and these effects may have large consequences for wages. For origin countries, if labor migration outflows are associated with a rise in local wage rates, the local labor force may increase the time it spends working to earn more income. At the same time, however, an increase in the wage rate may boost labor income, leading workers to cut back on their labor supply. In developing countries, these income and substitution effects apply to both adults and children. In low-income contexts, children are both a household “consumption good,” in that they increase parents’ “utility,” and an asset in which parents may invest (by sending children to school, for example) and from which they may receive transfers (by sending children to work, for example).

Therefore, changes in local wage rates are likely to affect the labor supply of both adults and children. To the extent that labor emigration induces higher wages for parents, children’s labor market participation should fall [4], [8]. On the other hand, to the extent that emigration is also associated with a rise in children’s wages, child labor may rise [6], [12]. Because children typically supply unskilled labor and child labor is most common in countries abundant in unskilled workers, the degree to which emigration directly affects the wages of children depends on the relative skill mix of emigrants compared with stayers [13]. Therefore, if emigrants are relatively low-skilled, their departure will increase the wages of unskilled workers, including adults (parents) and children, thereby altering the incidence of child labor through either the income or the substitution effect described above. The relative strength of these competing forces affecting child labor in migrant-sending regions is ultimately an empirical question, whose identification remains a challenge.

### **Empirical evidence on the labor market impact of emigration on adults and children in the origin country**

There is a growing literature on the labor market impact of emigration on non-migrant workers in migrant-sending countries [4]. A seminal empirical study used annual time series data from 1946 to 1978 on sectoral wages and employment, finding that the emigration of mine workers from Malawi and Mozambique to South Africa raised agricultural wages in both sending countries. Using an aggregate approach, other studies find evidence that Mexican states with higher emigration rates to the US have enjoyed faster growth in average income and labor earnings than states with low emigration flows.

Another study, taking a more disaggregated approach, used US and Mexican census data and exploited variations in labor supply shifts across skill groups induced by migration from Mexico to the US. The study finds that a 10% increase in emigration, on average, increases wages in Mexico by almost 4%. A growing body of work has applied a similar approach to other countries, finding that emigration flows have a positive and significant impact on wages in origin countries, ranging from 4% to 10%. However, few studies have examined the degree to which this emigration-induced change in wage rates affects the labor supply decisions of adults and fewer yet have examined the impact on children’s labor supply.

A recent cross-country empirical investigation of the labor market effect of international emigration on the incidence and intensity of child labor in migrant-sending countries used detailed individual-level data on child labor at ages 5–14 in a wide range of developing countries [4]. Accordingly, child labor seems to be reduced if family earnings rise due to an emigration-induced shock in the supply of adult labor. In particular, it finds that although low-skilled parents are more likely to send their children to work, child labor among these households is more likely to decline when unskilled workers make up a larger share of emigrants than their share in the local labor markets. The finding that cross-country variation in the correlation between parental skill and child labor is related to differences in the skill composition of emigrant workers relative to resident workers points to a significant role for international migration flows in reducing child labor in disadvantaged households [4].

### **Income gains to households and children in origin countries**

The emigration of one or more household members may have a significant impact on household members left behind through changes in time allocation, income flows, access to finance, and risk-bearing capacity. A large body of work has documented the effect of migration and remittances on children left behind in many countries and contexts. The focus has been primarily on the migrant-sending household's productive investment of remittances in children's schooling. Less attention has been paid to the effects of emigration on child labor.

Theoretical analysis suggests different mechanisms, related to time and resource allocation, through which the emigration of household members can affect children who remain behind, either increasing or decreasing their likelihood of working. On the one hand, the migrant's absence from the household involves a loss of time-inputs, including child care and home production, and labor supply, which necessitates a reallocation of time and resources across household members at home. In this context, migration has typically been conceived as having a disruptive effect, with family members left behind, typically women and children, compensating for the loss of working-age household members. Accordingly, the forgone labor supply and care due to emigration may increase the employment of children in the household or in the labor market.

On the other hand, remittances sent home by emigrants can raise the household's income, thus easing budget constraints and raising the wage level at which other adults and children would consider going to work or working more (the reservation wage). This income effect can easily change both investment and time-allocation decisions among household members, including those of children. Higher remittances and additional income in migrant-sending households may enable larger investments in children's human capital and lower engagement of children in work outside the household.

Emigration may also change the decision-making process in the origin household. If mostly men emigrate, the women who remain behind may have greater decision-making power over the use of the extra income stream represented by remittances. Women may decide to invest more of their household income in children's education, shifting children's time allocation away from working in the household or the labor market. A robust body of evidence has shown that women tend to invest more in children's human capital and welfare than men do.

## Evidence of the impact of migration on children left behind

Several empirical studies have investigated the impact of adult family members' emigration on children's time allocation (labor and schooling), mainly through an increase in household income from remittances and changes in intra-household time and decision-making allocations. Using different methods and covering several countries, studies are broadly consistent in finding that remittances reduce both whether children work and how long they work. However, evidence for Mexico shows less positive effects of emigration on children's labor market outcomes, possibly due to the low return to Mexican education in the US labor market and, thus, to the greater likelihood that people with the lowest level of skills will migrate to the US (negative selection). Recent evidence for Mexico shows that, in the short term, a father's emigration increases the labor market participation and number of working hours of older sons (12–15 years old) and reduces school enrolment and study time of younger children (under 12).

This conflicting evidence points to the importance of contextualizing migration studies and jointly examining the micro-level and aggregate-level economic effects of international labor mobility. Indeed, if emigration raises the wage structure of the local labor force in the migrant-sending country, the incentives influencing adult and child labor supply decisions will shift in both migrant and non-migrant families, even after controlling for the effect of remittances.

## LIMITATIONS AND GAPS

The literature on the economic consequences of migration for origin countries has focused mainly on either the migrants themselves (the selection process determining who decides to leave) or the household members left behind. Much less is known about the impacts of emigration on the non-migrant population in the origin country. While some recent studies examine the aggregate effects of emigration on wages and labor supply in local labor markets, the focus is mainly on adults. But an important mechanism through which the local economy adjusts to migration flows in developing countries is child labor and youth employment. The lack of evidence about this dimension is a major gap in the literature. A crucial constraint to investigating this issue is the lack of suitable, high-quality data on both emigration and child labor (and child time allocation in general) in developing countries.

Despite considerable progress, some basic challenges also remain in identifying international migrants in developing countries, including both their numbers and their demographic, personal, and human capital characteristics. Most migration data come from host countries, because it is easier to collect information on migrants at their destination than before their departure. But because most migrant data come from destination countries, researchers have difficulty studying some policy-relevant questions, such as the impact of emigration on households and communities in migrant-sending countries, including the effects on the local labor market and children's time allocation. While censuses and administrative records in origin countries may provide some information on migration, especially in the recent past, most data come from surveys with special questions or modules on migration. The challenge with such data is that questions about migrants are not homogeneous across countries, and some crucial information about migrants' characteristics (which are typically reported by a family member because the migrant is absent) is missing for some migrants or is not collected at all.

Another limitation is the need to identify emigration shocks in order to explore the causal impact of labor mobility on child labor in origin countries. Individuals and households typically do not select randomly into migration, and potential omitted variables (or shocks) may determine both migration outflows and child labor. This source of bias affects both household- and aggregate-level analyses. For example, if a family member decides to migrate because the household experienced a “positive shock” (for example, because it was selected as a beneficiary of a social service program), any positive effect of remittances on child labor that might be observed could be the result of other socio-economic features of the household or the parents rather than the remittances themselves. Similarly, if migrants leave areas that are experiencing a particularly positive economic shock, the finding of a positive association between emigration and child labor that does not account for the positive shock may be the result of an omitted variable bias.

Overall, studies of the impact of international migration on child labor need to take into account both the micro-level effects of remittances on origin countries’ households and communities and the aggregate effects of emigration on local labor market conditions and wage structures. Such changes are likely to affect parents’ wages and, in turn, to shift children’s time allocation.

## SUMMARY AND POLICY ADVICE

The economic literature on international migration has expanded considerably in recent years due to the integral yet contentious role of international labor flows in globalization. Only recently has the focus shifted from the study of the economic consequences of immigration for receiving countries to the important role of emigration in the economic growth and development of origin countries. Emigrants, especially those migrating from poor to rich countries, enjoy large income gains, and family members at home often share in these gains through remittances. Remittances, in turn, can be productively invested in children’s human capital, helping to reduce child labor. Moreover, non-migrating workers in the emigrant-sending country may enjoy higher wages because of the drop in local labor supply, an effect that may also lead to higher investments in their children’s schooling and less household reliance on child labor.

Several policy implications arise from studying these effects. For example, whether minimum wage laws that increase wages for non-migrant workers can reduce child labor depends on the sensitivity of child labor to adult wages and to the effects of globalization on local labor demand. In addition, monitoring the labor market effects of emigration across adults and children in the origin country can shed light on the multiple mechanisms through which the local economy may adjust to integration with the global economy. In developing countries, this economic adjustment typically goes beyond the response of individual adults and includes shifts in time and resource allocations within households, including those of children.

Finally, understanding the effects of emigration on child labor helps in the design of programs (including labor and migration policies) to reduce child labor and poverty, ultimately enabling developing countries to break out of the poverty cycle of underinvestment in education, a low-skilled labor force, and child labor.

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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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## REFERENCES

### Further reading

- Cigno, A., and F. C. Rosati. *The Economics of Child Labour*. Oxford: Oxford University Press, 2005.
- Mishra, P. "Emigration and wages in source countries: Evidence from Mexico." *Journal of Development Economics* 82:1 (2007): 180–199.

### Key references

- [1] Dinopoulos, E., and L. Zhao. "Child labor and globalization." *Journal of Labor Economics* 25:3 (2007): 553–580.
- [2] Edmonds, E., and N. Pavcnik. "Child labor in the global economy." *Journal of Economic Perspectives* 19:1 (2005): 199–220.
- [3] Cigno, A., F. C. Rosati, and L. Guarcello. "Does globalization increase child labor?" *World Development* 30:9 (2002): 1579–1589.
- [4] DePaoli, A., and M. Mendola. "International migration and child labour in developing countries." *The World Economy* (Forthcoming).
- [5] Docquier, F., B. L. Lowell, and A. Marfouk. "A gendered assessment of highly skilled emigration." *Population and Development Review* 35:2 (2009): 297–322.
- [6] Edmonds, E. "Child labor." In: Shultz, T. P., and J. Strauss (eds). *Handbook of Development Economics Volume 4*. Amsterdam: North-Holland Elsevier, 2007; pp. 3607–3700.
- [7] Kruger, D., R. Soares, and M. Berthelon. "Household choices of child labor and schooling: A simple model with application to Brazil." *Journal of Human Resources* 47:1 (2012): 1–31.
- [8] Basu, K., and P. H. Van. "The economics of child labor." *American Economic Review* 88:3 (1998): 412–427.
- [9] Goldin, C. "Household and market production of families in a late nineteenth century city." *Explorations in Economic History* 16:2 (1979): 111–131.
- [10] Rosenzweig, M. R., and R. Evenson. "Fertility, schooling, and the economic contribution of children of rural India: An econometric analysis." *Econometrica* 45:5 (1977): 1065–1079.
- [11] Wahba, J. "The influence of market wages and parental history on child labour and schooling in Egypt." *Journal of Population Economics* 19:4 (2006): 823–852.
- [12] Manacorda, M., and F. Rosati. "Local labor demand and child labor." In: Akee, R. K. Q., E. Edmonds, and K. Tatsiramos (ed.). *Child Labor and the Transition between School and Work (Research in Labor Economics, Volume 31)*. Bingley: Emerald Group Publishing, 2010.
- [13] Borjas, G. J. "The economic analysis of immigration." In: Ashenfelter, O., and D. Card (eds). *Handbook of Labor Economics Volume 3*. Amsterdam: North-Holland Elsevier, 1999; pp. 1697–1760.

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