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Are young internal migrants 'favourably' selected? Evidence from four developing countries[11]

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ABSTRACT

Young people[2] are more likely to migrate than older people. During the transition to adulthood, they make important choices regarding education, labour force participation, and family formation. Using a unique panel dataset on youth born in 1994–95 in Ethiopia, India, Peru, and Vietnam, this paper investigates whether young migrants are 'positively' self-selected in observable characteristics, specifically on educational attainment. First, I document patterns on prevalence, frequency, timing, reasons and streams of migration. Second, I describe the factors associated with young people's reasons for migrating. Results suggest that 'favourable' self-selection only holds for those moving for education: a year of schooling is associated with a higher probability of moving for studies, while an extra year of education is correlated with a lower probability of moving for family formation. In sum, migrants are a heterogeneous group: there are systematic differences in the characteristics across them depending on their reasons for moving.

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Introduction

Migration is much more than the reallocation of labour: it constitutes a fundamental process of social and economic transformation as it consists of a movement of agents who often have different preferences than the native population. Thus, migration has the potential to reconfigure societies and, recently, it has become a much-contested topic due to its implications for economic and social development, especially in less developed countries. However, there are two stylised facts that are generally accepted by the migration literature. First, internal migration is a very prevalent phenomenon. Based on a sample of approximately 70 countries, Bell and Charles-Edwards (2013) showed that in 2005, 12% of the global population were internal migrants. Second, young people have a higher likelihood of migrating than older people do. Using data from more than 65 developing countries, Young (2013) found that most adult internal migrants had moved during their early to mid-twenties.

These two facts motivate the study of the drivers of internal migration among young people not only because this phenomenon is widespread, but also because youth migration is unique: it greatly overlaps with other transitions to adulthood,[3] during which young people take on new roles and responsibilities and make important choices (Zenteno et al., 2013). Despite this, the literature on youth migration is still scant and the nuances of young people's movement are less known. In this article, I focus on young internal migrants in four developing countries in order to shed light on the inner workings of this less-studied process.

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Different theories provide distinct explanations for the fact that young people are remarkably mobile. According to the human capital model of migration led by Sjaastad (1962), migration is seen as an individual investment and, thus, the sooner the migrant moves, the greater the benefits of migrating. In addition, Borjas et al. (1992) pointed out that since young people have not yet accumulated significant job- and location-specific human capital, they are especially responsive to economic incentives for migration. In contrast, Stark and Bloom (1985) argued that migration decisions are often made jointly by the migrant and a group of non-migrants, generally the family, in order to mitigate income risks. In this context, children become natural candidates for migrating and, therefore, remitting back to their families which enhances, what Stark and Bloom call, the dynamic comparative advantage of the family.

Furthermore, from a sociological standpoint, the intention to migrate relies on the perception that accomplishing important life goals may be more achievable in a different place than the current one (Kley, 2011). Therefore, migration decision-making is likely to be highly influenced by life course events (Geist & McManus, 2008), such as the transition to adulthood. The latter is characterised by decision-making about education, labour force participation, and family formation, which are closely linked to the decision to move (Kley & Mulder, 2009). In fact, during late adolescence, the decision to migrate is more complex than during adulthood as young people are also experiencing biological, cognitive, psychosocial and interpersonal changes that will shape their future as adults (Rice & Dolgin, 2011).

The challenge for young migrants relies not only on the move itself – which can be difficult on its own right – but also on the integration into their host society, which crucially depends on their individual characteristics. For example, previous empirical work has documented that individuals self-select into internal migration, mainly on the basis of educational attainment (Agesa, 2001; Bernard & Bell, 2018; Lanzona, 1998) or, more specifically, on skills (Borjas et al., 1992; Miguel & Hamory, 2009; Young, 2013). However, the direction of self-selection in observable characteristics may be different for young people than for the overall population, since they often migrate for non-work-related reasons, such as education, family formation, and family reunion. Due mainly to data limitations, little is known about whether young internal migrants in developing countries are 'favourably' self-selected (Chiswick, 1999), namely that they are better-educated than those who choose to stay in their places of origin. This paper addresses this gap by investigating the systematic differences in educational attainment between young migrants and non-migrants in low- and middle-income countries.

This article builds on the work by Juarez et al. (2013) and Bernard et al. (2014) by providing quantitative evidence on the relationship between transitions to adulthood and youth migration in developing countries. This study also speaks to the strand of the economics literature devoted to explain differences in labour productivity across sectors and areas (Gollin et al., 2014; Hamory et al., 2017; Lagakos & Waugh, 2013), since they look at selection as a factor that may potentially explain these gaps.

Statistics on internal migration are in general sparse (Bell & Charles-Edwards, 2013) and they fail to focus on young people (McKenzie, 2008). Thus, I draw on data from the older cohort of Young Lives, a unique longitudinal study on more than 3,000 adolescents born in 1994–95 in Ethiopia, India (Andhra Pradesh and Telangana), Peru, and Vietnam. Given the remarkable richness of the data, the goal of this paper is not to identify causality of any sort, but to describe the major empirical regularities in a systematic way. In particular, I argue that 'favourable' self-selection (Chiswick, 1999; Todaro, 1980) in observable characteristics is not systematic across young migrants since during transitions to adulthood, they choose different pathways over their life course. In order to synthesize this fluid process, I categorise migrants by reasons for moving and then I look at differences in characteristics among them compared to non-migrants using a Multinomial Logit Model (where no migration is the base category). I focus on educational attainment as a key driver of migration (Thornton et al., 2019).

The main finding of this article is that there is great heterogeneity among young internal migrants and 'favourable' self-selection in observable characteristics only holds for those that move for education: adolescents with one more year of schooling are between 3 and 13 percentage points more likely to move for studies. On the contrary, an extra year of education reduces the likelihood of moving for family formation in 1 to 2 percentage points. Moreover, an important stylised fact about gender equality and migration is found: young girls are not only more likely to move for marriage than boys, but they are also less likely to move for studies and for work. These results have important implications to understand what the effects of migration are among youth – although this goes beyond the scope of this paper. More importantly, this will put us in a better position to propose more effective policies that target young migrants' wellbeing in developing countries.

Data

The data used in this study are drawn from the Young Lives survey, which includes information on a sample of individuals from Ethiopia, India (Andhra Pradesh and Telangana), Peru, and Vietnam from childhood through early adulthood. In particular, the Young Lives quantitative data include extensive information at the individual, household, and community levels on two cohorts through 4 rounds between 2002 and 2013. The analysis here is restricted to data on individuals from the older cohort of the study, who were born between 1994 and 1995, and were followed, approximately, from ages 8 to 19.

Although Young Lives' samples were not designed to be nationally representative (except for Peru), they cover the diversity of children in each study country. Loosely speaking, this survey is representative of poor youth. The sampling methodology consisted on a multi-stage sampling procedure: the first stage consisted in selecting 20 sentinel sites[4] according to a set of pro-poor criteria[5] that ensured to account for each country's ethnic and geographic diversity, as well as urban and rural differences. The second stage consisted in randomly choosing households within a sentinel site conditional on having a child of the required age. Unlike other panel surveys, Young Lives is better suited for my analysis as it has the specific objective of collecting comprehensive information on the characteristics, environments, and outcomes of poor children across four different countries over different stages of their life course (Escobal & Flores, 2008; Kumra, 2008; Nguyen, 2008; Outes-Leon & Sanchez, 2008).

Moreover, one of the major advantages of the Young Lives data is its longitudinal nature, as it tracks the index children since early ages over a long period,[6] and thus it allows one to study how an individual's history relates to different migration aspects. In comparison with similar surveys, as shown in Outes-Leon and Dercon (2008), Young Lives has a low level of attrition. It varied between 3% and 9% between rounds 3 and 4 (see, Table 1), and it was mainly driven by the 'untraceable' children, those who were not found and could not be tracked because their key contacts did not know where they lived. However, in Ethiopia, attrition between these two rounds is mainly explained by the share of children who emigrated (5%) – mainly to the Gulf countries. Therefore, it must be

Table 1. Young lives sample and attrition rates.

	Ethiopia	India	Peru	Vietnam
Round 1 (2002)	1,000	1,008	714	1,000
Round 2 (2006)	979	994	685	990
Round 3 (2009)	974	977	678	976
Round 4 (2013)	908	952	619	887
In Rounds 3 and 4	905	951	615	882
Attrition between R3 and R4	6.8%	2.6%	8.7%	9.1%
Attrition due to emigration	5.2%	0.4%	1.8%	0.6%

Note: This table is based on the number of *children* interviewed (i.e. number of child questionnaires administered in each round). Attrition rates include deaths.Source: Franco Gavonel (2017)

noted that the migration rates presented in this study, especially for Ethiopia, do not represent overall mobility, but only internal migration – as it was intended in this paper in the first place.

Following the United Nations (1970) and Lucas (2000) and given the available data, I define migration as any domestic move outside the 'locality' of residence for at least 3 months,[7] that was made between rounds 3 (2009) and 4 (2013) – a period during which individuals in the sample were between 15 and 19 years old. *Locality* is a kebele in Ethiopia, a village/ward in India, a district in Peru, and a commune in Vietnam. The sample is restricted to adolescents who participated in both the 2009 and 2013 surveys. Table 2 shows the prevalence of migration in the Young Lives sample across rounds. Most of the moves took place between rounds 3 and 4, when these children entered adolescence.

These migration rates are relatively high in comparison to the available national figures, partly due to different definitions of migration defining area, usual place of residence, and migration interval. Table 3 describes the general characteristics of children and households in the sample at baseline (2009).

Patterns of youth migration

Figure 1 presents the distribution of the number of moves per migrant. Around half of migrants in three of the four countries moved more than once. However, based on these migration histories

Table 2. Migration rates between rounds.

	Ethiopia	India	Peru	Vietnam
Ever moved in any round	0.28	0.46	0.51	0.42
Moved between R1 and R2	0.03	0.04	0.23	0.02
Moved between R2 and R3	0.07	0.02	0.19	0.01
Moved between R3 and R4a	0.23	0.43	0.32	0.40
Moved between R3 and R4b	0.33	0.50	0.33	0.49
N	905	951	615	882

Source: Young Lives Rounds 1 to 4.

aThis rate defines migration as a change in the locality of residence at the time of the survey in rounds 3 and 4, irrespective of whether the individual moved *between* rounds.

bThis rate defines migration as *any* change in the locality of residence that took place between rounds 3 and 4 and for which the migrant stayed in the destination place at least 3 months.

Table 3. Child and household characteristics of Young Lives sample before migration (2009).

	Ethiopia			India			Peru			Vietnam		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.54	0.50	905	0.49	0.50	951	0.53	0.50	615	0.48	0.50	882
Age of YL Child (in months)	179.81	3.64	905	179.18	4.13	951	178.72	4.63	615	180.45	3.84	882
First born	0.19	0.39	905	0.28	0.45	951	0.32	0.47	615	0.37	0.48	882
Living with both parents	0.60	0.49	905	0.85	0.36	951	0.67	0.47	615	0.88	0.32	882
Living with one of the parents	0.28	0.45	905	0.12	0.33	951	0.27	0.44	615	0.09	0.29	882
Father's years of schooling	4.33	3.85	905	4.73	5.05	951	9.24	4.65	615	8.01	5.04	882
Caregiver's years of schooling	2.91	3.53	905	2.93	4.29	951	7.44	4.27	615	6.84	4.21	882
Wealth index	0.35	0.17	905	0.52	0.17	951	0.59	0.18	615	0.62	0.19	882
Owns land (in hectares)	0.79	0.86	905	1.67	21.25	951	2.57	26.05	615	0.64	3.36	882
Owns livestock	0.71	0.45	905	0.43	0.50	951	0.63	0.48	615	0.40	0.49	882
Number of siblings	4.02	2.21	905	1.89	1.11	951	1.96	1.36	615	1.81	1.23	882
Urban	0.42	0.49	905	0.25	0.43	951	0.77	0.42	615	0.19	0.39	882
Currently enrolled	0.90	0.31	905	0.77	0.42	951	0.93	0.25	615	0.78	0.42	882
Highest grade attained	5.50	2.10	905	8.09	1.86	951	7.71	1.38	615	8.24	1.45	882
Employed in the last 12 months	0.43	0.50	905	0.38	0.48	951	0.50	0.50	615	0.35	0.48	882
Work in agricultural act.	0.57	0.50	390	0.65	0.48	357	0.44	0.50	308	0.75	0.44	307
Self-employed in non-agri. act.	0.14	0.35	390	0.07	0.26	357	0.32	0.47	308	0.21	0.40	307
Wage-employed in non-agri. act.	0.12	0.33	390	0.27	0.45	357	0.22	0.42	308	0.17	0.38	307
YL Child's educational aspirations	14.60	2.94	905	14.59	2.32	951	15.41	1.85	615	14.48	2.96	882
Caregiver's educational aspirations	14.97	2.27	905	13.32	3.54	951	15.26	1.79	615	13.99	1.23	882

Source: Young Lives Round 3.

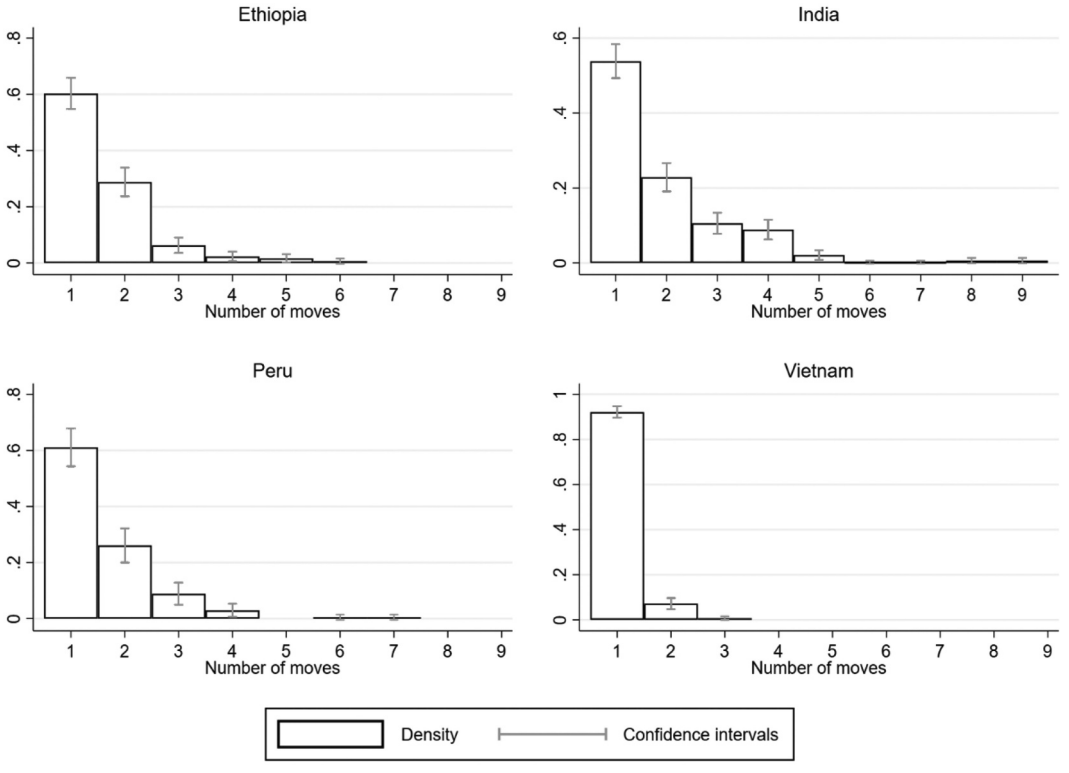

Figure 1. Distribution of number of moves per migrant. Source: Young Lives Round 4.

only, it is not possible to disentangle whether these moves represent return, sequential, or seasonal migration (Crivello et al., 2012; Pessino, 1991; Smita, 2008).

Note: This figure reflects the number of moves divided by the total number of migrants.

In order to document trends related to the timing of the moves (Bernard, 2017), I calculate the age of the movers at the time when each movement occurred – for all moves reported. Figure 2 summarises the average number of moves per age, by gender.[8] Boys are more mobile than girls, although both moved frequently during school-age years, which is key to understand educational performance.

In order to present the characteristics of the movement, I defined as 'relevant move' the most recent move reported. The reasons for moving were grouped as follows: i) to study; ii) to work – includes those who found a job, look for work, lost their job and were posted on a job; iii) for family formation – includes marriage, cohabiting, following a spouse/partner and for pregnancy/birth; iv) to follow/join family – includes following relatives (excluding spouse/partner), and visiting/staying with friends/family; v) other.

In the case of young people, the decision to migrate may greatly vary between boys and girls not only because transitions to adulthood differ by gender (Morrow, 2013), but also because parents may have different incentives for encouraging migration between them (World Bank, 2007). Table 4 summarises the reasons of the last move,[9] by gender. Overall, the main reason for moving in all countries is study-related, although the shares vary across countries. In the case of Peru, 17% of the moves correspond to various reasons grouped under *Other*, being 'looking for better housing' the most prevalent reason among these.

However, several differences emerge by gender. Females in Ethiopia moved mainly to study, while males moved both to study and to follow/join family. These facts are consistent with the National Labour Force Survey (NLFS), which reports that the most prevalent reason for moving

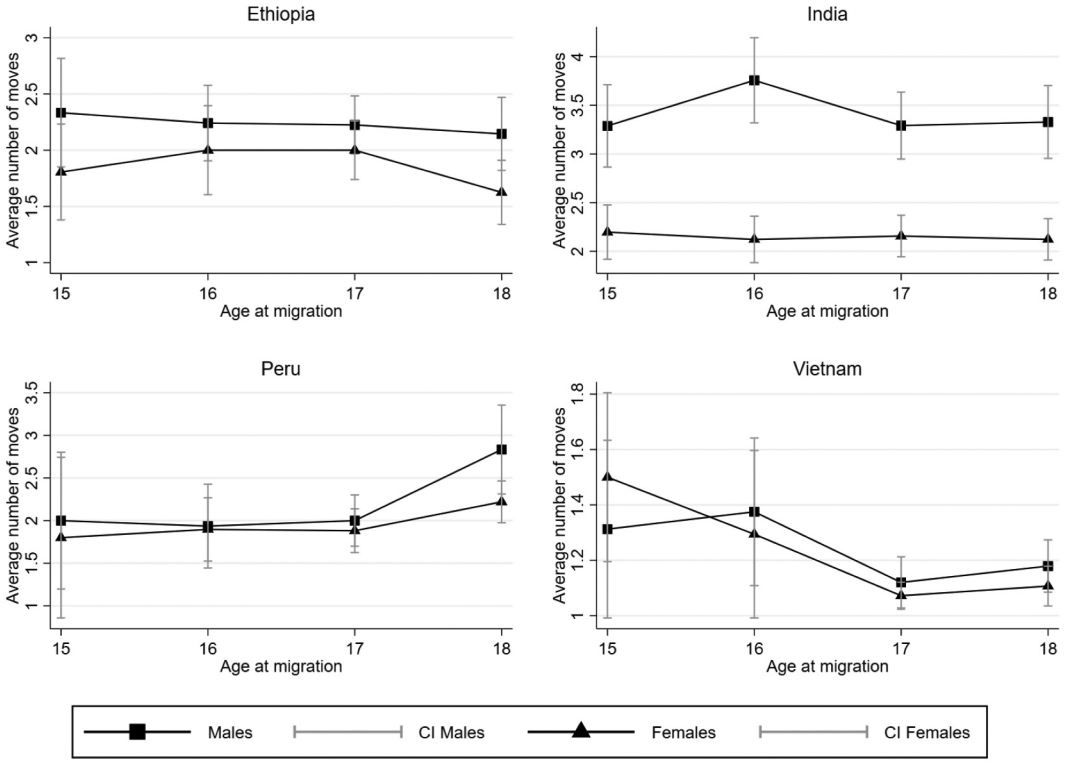

Figure 2. Average number of moves and age at migration, by gender. Source: Young Lives Round 4. Note: Average number of moves is defined as the number of moves at a given age divided by the number of migrant children at that age.

between 15 and 19 year olds is to move along with family (33%; Central Statistical Agency, 2014). Although early marriage is very prevalent in Ethiopia (Boyden et al., 2012), only a few moves were marriage-related.[10] In India, most males moved to study, while females moved mainly for marriage. This is consistent with Rajan (2013), who found that the most prevalent reason for moving among youth aged 15 to 19 in India is marriage (28%). In particular, Rosenzweig and Stark (1989) point out that migration in India is mainly 'a marital phenomenon,' particularly for women as they practice patrilocal patterns of social organisation. However, it is still worth noting that 33% of female migrants in India moved to study. In Peru and Vietnam, the main reason for migration for both boys and girls is education-related, followed by work-related moves.

Within the internal migration literature, rural-urban migration has been a major source of interest for researchers and concern for policymakers. However, this is not the most frequent type of movement in developing countries, but rather rural-rural migration is more prevalent (Lucas, 1997). Table 5 shows that in terms of spatial mobility, there are less gender disparities in all countries, except for India, where girls moved mainly from rural to rural areas, whereas males moved from urban to urban areas. In Ethiopia and Vietnam, rural-urban and urban-urban moves are more frequent among boys and girls, which resembles the pattern presented in Deshingkar and Grimm (2005). In Peru, males and females moved mainly from urban to urban areas, which is generally consistent with the fact that the sample was primarily concentrated in cities in 2009.

Methods

It is well established that migrants do not constitute a random sample of the general population (Lucas, 1997). Movers differ systematically from stayers for reasons other than their migration

Table 4. Reasons for moving, by gender.

	Ethiopia			India			Peru			Vietnam		
	Female	Male	P-value Dif	Female	Male	P-value Dif	Female	Male	P-value Dif	Female	Male	P-value Dif
To study	0.44	0.32	0.0406	0.33	0.58	0.0000	0.38	0.37	0.9421	0.56	0.53	0.4690
To work	0.13	0.27	0.0026	0.09	0.32	0.0000	0.22	0.27	0.4167	0.20	0.39	0.0000
For marriage/birth	0.12	0.00	0.0000	0.50	0.00	0.0000	0.13	0.00	0.0001	0.18	0.01	0.0000
To follow/join family	0.24	0.31	0.2294	0.03	0.04	0.5192	0.11	0.17	0.2698	0.02	0.00	0.0400
Other	0.07	0.10	0.2620	0.05	0.05	0.8482	0.15	0.19	0.5343	0.04	0.07	0.0764
N	148	154	302	245	227	472	98	102	200	255	177	432

Source: Young Lives Round 4.

Note: Each cell shows the probability of each row conditional on each column. For example, the probability of moving for studies conditional on being a female in Ethiopia is 0.44. Therefore, the sum of the cells under each column is 1.

Table 5. Streams of migration, by gender.

	Ethiopia			India			Peru			Vietnam		
	Female	Male	P-value Diff	Female	Male	P-value Diff	Female	Male	P-value Diff	Female	Male	P-value Diff
Rural-Rural	0.24	0.16	0.0777	0.56	0.3	0.0000	0.02	0.10	0.0140	0.21	0.16	0.1633
Rural-Urban	0.38	0.33	0.3929	0.19	0.29	0.0116	0.21	0.18	0.5530	0.67	0.68	0.7766
Urban-Rural	0.13	0.18	0.2578	0.07	0.06	0.5907	0.10	0.10	0.9496	0.02	0.02	0.6012
Urban-Urban	0.26	0.34	0.1252	0.18	0.36	0.0000	0.66	0.61	0.4291	0.10	0.14	0.2836
N	148	154	302	245	227	472	98	105	203	255	177	432

Source: Young Lives Rounds 3 and 4.

Note: Each cell shows the probability of each row conditional on each column. For example, the probability of moving from a rural area to an urban area conditional on being a female in Ethiopia is 0.38. Therefore, the sum of the cells under each column is 1.

status. Understanding the self-selection of migrants is vital to assess the effects of migration on a young person's wellbeing. Given the heterogeneity across migrants, it is useful to understand the differences in characteristics between movers and stayers depending on their reasons for migrating. In order to account for this, I follow McFadden (1974) as cited in (Greene, 2014, p. 803) to estimate a Multinomial Logit model as follows:

$$P[Y_{it} = j|\boldsymbol{X_{it-1}}] = P_{itj} = \frac{\exp\left(\boldsymbol{X_{it-1}^{'}\beta_j}\right)}{1 + \sum_{k=1}^{J} \exp\left(\boldsymbol{X_{it-1}^{'}\beta_k}\right)} \tag{1}$$

where $j = 0, 1, \ldots, J$ and $\boldsymbol{\beta}_0 = 0$.

Y_{it} is a categorical variable that takes the value of 0 if the child did not migrate (the base category), 1 if the child migrated to study between time $t-1$ and t (between the ages of 15 and 19 years, respectively), 2 if the child migrated to work, 3 if the child migrated for family reasons, and 4 if the child migrated for other reason; X_{it-1} is a vector of individual, household, and community characteristics at time $t-1$, which includes education-related covariates; and $\boldsymbol{\beta}_j$ where j = 1, …, 4 are vectors of parameters. Standard errors are clustered at the community level in order to account for potential correlation among unobserved components of outcomes from observations corresponding to children living in the same community (Abadie et al., 2017).

Equation (1) implies that the J log-odds can be computed as:

$$\ln\left[\frac{P_{itj}}{P_{itk}}\right] = \boldsymbol{X_{it-1}^{'}}\left(\boldsymbol{\beta_j} - \boldsymbol{\beta_k}\right) = \boldsymbol{X_{it-1}^{'}\beta_j}\ if\ k = 0 \tag{2}$$

Here, we report the partial effects of a given characteristic included in vector X_{it-1} on the probabilities P_{itj} as in (Greene, 2014, p. 804):

$$\delta_{itj} = \frac{\partial P_{itj}}{\partial X_{it-1}} = P_{itj}\left[\boldsymbol{\beta}_j - \sum_{k=0}^{J} P_{itk}\boldsymbol{\beta}_k\right] \tag{3}$$

Vector contains four sets of predictors. The first one relates to individual characteristics of the young person: gender, ethnicity, age (in months), and birth order. The second set consists of household characteristics, which include caregiver's education, household's wealth, and land and livestock ownership. The third set relates to community characteristics, such as the type of locality and the region where the young person lived in 2009. The fourth set of predictors relates to the child's education (highest grade attained), an interaction of gender and child's education, and the educational aspirations of both the child and the caregiver, that is, the ideal number of years of schooling that the child and the caregiver, respectively, would like the child to attain. There is a growing literature around the role of aspirations as predictors of later outcomes (Favara, 2016; Serneels & Dercon, 2014; Singh & Espinoza Revollo, 2016). In the case of young people, the transition to adulthood is very much shaped by previous experiences and events during childhood and earlier adolescence, as well as by 'what lies ahead' (Lloyd, 2005). Czaika and Vothknecht (2014) found that migrants in Indonesia reported strikingly higher levels of aspirations for the future than non-migrants, while Crivello (2011) argued that bundled aspirations about migration and education among youth might shape their willingness to migrate.

In multinomial choice models, the individual chooses among more than two unordered alternatives, making the choice that provides the greatest utility. The operability of these models depend on the particular choice of distribution of disturbances. On one hand, due to the need to evaluate multiple integrals of the normal distribution, the probit model has not been as widely used as the logit model (Greene, 2014, p. 801). On the other hand, the Multinomial Logit model has as a key limitation its reliance on the assumption of Independence from Irrelevant Alternatives (IIA), whereby the odds ratios $\left(\frac{P_{itj}}{P_{itk}}\right)$ are independent of the other alternatives (Greene, 2014, p. 807).

This implies that adding an alternative or changing the characteristics of a third alternative does not affect the relative odds between alternatives, which is generally implausible for cases with very similar choices (Wooldridge, 2002, p. 501). In this application, the reasons for migrating are quite different from each other and, therefore, are not expected to be substitutable among themselves. Moreover, the IIA follows from the initial assumption that disturbances are independent and homoscedastic (Greene, 2014, p. 807). Here, conditioning on a set of individual, household, and community characteristics is expected to control for individual heterogeneity that protects from the violation of the latter assumption, which is sufficient for IIA to hold.

The main limitation of this approach is that, as mentioned before, this study does not aim to fully address endogeneity concerns. If, for example, the utility resulting from moving for studies depends on the educational attainment of the individual, and this, in turn, depends on unobserved characteristics that simultaneously affect the utility function – as in Bertoli et al. (2010), the coefficient of educational attainment could be biased. However, I do account for concerns on reverse causality arising from unobserved factors affecting the decision to migrate that are unanticipated at the time education is observed. The fact that educational attainment is observed prior to migration $(t-1)$ ensures that these concerns are appropriately dealt with.

Results

Although the focus of this paper is to unpack the heterogeneity of migrants, I start the analysis with a regression on the decision to migrate. Table A1 presents these results and shows that migrants have no systematic characteristics in terms of education and gender across all countries, but they are context-specific. In Ethiopia and Vietnam, children who are more educated are more likely to migrate; in India, girls and more educated boys have a higher probability to move; and in Peru, relatively poorer children are more prone to engage in migration.

In Multinomial Logit models, the estimated coefficients do not reflect the partial effects of each regressor on the dependent variable. Instead, marginal effects averaged over individuals are a better indicator of this (Cameron & Trivedi, 2005). Table 6 shows the average marginal effects of the model for each country and Table A2 shows the results expressed in relative risk ratios. Hereafter, I follow Long and Freese (2014) and do not refer to the base category of the dependent variable in the interpretation of marginal effects. I find that in all countries one additional year of schooling is associated with a higher probability of moving for studies. This could be explained in two ways. On the one hand, this suggests that children who complete secondary school are more likely to continue in higher education compared to children who do not complete secondary school: it is very likely that due to a lack of supply of higher education institutions in their place of residence, they would have had to move. This is consistent with Dustmann and Okatenko (2014), who finds that contentment with local public services is negatively associated with the likelihood of migration. On the other hand, this result also allows for the possibility that children who are more educated are more likely to change schools, especially to attend secondary school, as has been previously documented by Boyden (2013). The latter explanation seems to be more plausible for countries with a higher share of children living in rural areas, such as Ethiopia, India, and Vietnam, where 60% to 87% of children are still enrolled in school. In Peru, where most of the children in the sample are based in urban areas, the former may hold: 81% of children are enrolled in tertiary education. Under either of these potential explanations, children that are more educated at baseline are more likely to continue education, which implies that they would have had to move to do so.

In India and Vietnam, the caregiver plays an important role. In the former, the caregiver's years of schooling and her educational aspirations for the child are associated with a greater likelihood of moving to study. In the latter, the caregiver's education and the child's educational aspirations are positively correlated with the probability of migrating for this reason. Overall, the average characteristics of migrants that move for studies are very similar across countries.

Nonetheless, the profile of the average migrant that moved for work is different. Columns (5) to (8) in Table 6 show that child's education is not a predictor of moving for work in any of the four countries. Except for Peru, boys are more prone to move for work. In India, the caregiver's aspirations are negatively associated with the probability of migrating for work. In both India and Vietnam, young people living in relatively poorer households are more likely to move for this category.

Columns (9) to (12) in Table 6 show the characteristics of migrants that moved for family reasons. In all countries, except for Ethiopia, children who are less educated are more likely to move for family reasons. Vulnerability is accentuated in this group as girls are 23 and 10 percentage points more likely to move for marriage than boys in India and Vietnam, respectively. This is consistent with Rosenzweig and Stark (1989), who points out that the main reason for migrating in India is marriage, especially among girls, as it is the result of an implicit inter-household arrangement aimed at smoothing consumption in the presence of spatially covariant risks. Similarly, Coxhead et al. (2016) point that in Vietnam the second most important reason for migrating is for marriage, and they find that moving for non-work reasons is mainly carried out by young girls living in rural areas.

Moreover, Singh and Espinoza Revollo (2016) finds that child's education and teenage marriage in India are strongly negatively correlated as parents often see higher education and marriage as substitutes. Coxhead et al. (2016) and Guilmoto and De Loenzien (2014) produce similar results in Vietnam. These patterns provide evidence of an important stylised fact about gender equality and migration: young girls are not only more likely to move for marriage, but they are also less likely to move for studies and for work. Thus, the potential channels through which they could build on their human capital – through education or on-the-job training – have only a narrow chance of happening.

Table 6. Marginal effects of multinomial logit model for the reasons for moving.

	Moved for studies			
	Ethiopia	India	Peru	Vietnam
	(1)	(2)	(3)	(4)
Male	−0.042	0.082**	−0.010	−0.047
	(0.022)	(0.025)	(0.025)	(0.027)
Highest grade completed by child	0.050***	0.026***	0.039*	0.133***
	(0.010)	(0.008)	(0.016)	(0.025)
Age in R3 (months)	0.004	−0.005	−0.002	0.002
	(0.002)	(0.003)	(0.002)	(0.004)
First born	−0.045*	0.031	−0.082***	−0.027
	(0.022)	(0.032)	(0.023)	(0.020)
Caregiver's years of schooling	0.001	0.013***	−0.000	0.013*
	(0.004)	(0.003)	(0.004)	(0.006)
Household's wealth	0.034	0.218*	−0.017	0.152
	(0.076)	(0.105)	(0.093)	(0.114)
Own land (hectares)	0.020	0.003	−0.000	0.013***
	(0.018)	(0.003)	(0.000)	(0.003)
Own livestock	0.012	0.071*	0.081**	0.055
	(0.028)	(0.029)	(0.028)	(0.047)
Urban	−0.075*	−0.200***	−0.032	0.150
	(0.037)	(0.032)	(0.039)	(0.189)
YL Child's educational aspirations	0.011	0.009	0.014	0.044***
	(0.007)	(0.008)	(0.020)	(0.009)
Caregiver's educational aspirations	−0.002	0.028***	0.010	0.035
	(0.006)	(0.006)	(0.009)	(0.026)
Number of movers	115	213	75	236
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education.

(Continued).

	Moved for work			
	Ethiopia	India	Peru	Vietnam
	(5)	(6)	(7)	(8)
Male	0.041*	0.134***	0.008	0.048*
	(0.019)	(0.025)	(0.019)	(0.024)
Highest grade completed by YL Child	0.003	0.000	−0.008	−0.017
	(0.004)	(0.005)	(0.010)	(0.012)
Age in R3 (months)	−0.001	0.002	0.001	0.003
	(0.002)	(0.002)	(0.002)	(0.003)
First born	0.023	−0.034	0.015	−0.003
	(0.019)	(0.019)	(0.025)	(0.017)
Caregiver's years of schooling	−0.001	−0.004	−0.003	−0.004
	(0.004)	(0.004)	(0.003)	(0.003)
Household's wealth	0.010	−0.132*	−0.121	−0.463***
	(0.080)	(0.061)	(0.094)	(0.095)
Own land (hectares)	−0.035*	−0.004	−0.000	−0.008
	(0.017)	(0.007)	(0.000)	(0.012)
Own livestock	0.039	−0.046*	0.049*	0.056*
	(0.022)	(0.022)	(0.023)	(0.023)
Urban	−0.040	−0.077***	−0.011	0.031
	(0.029)	(0.021)	(0.026)	(0.100)
YL Child's educational aspirations	−0.003	−0.005	−0.014	−0.012**
	(0.002)	(0.004)	(0.009)	(0.004)
Caregiver's educational aspirations	−0.002	−0.011***	0.017	−0.001
	(0.003)	(0.003)	(0.009)	(0.007)
Number of movers	60	94	50	119
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education.

(Continued).

	Moved for family reasons			
	Ethiopia	India	Peru	Vietnam
	(9)	(10)	(11)	(12)
Male	0.008	−0.229***	0.005	−0.102***
	(0.022)	(0.018)	(0.015)	(0.021)
Highest grade completed by child	0.002	−0.012*	−0.014*	−0.015*
	(0.006)	(0.005)	(0.007)	(0.007)
Age in R3 (months)	0.003	0.003	0.000	0.002
	(0.003)	(0.002)	(0.002)	(0.002)
First born	0.028	0.009	0.022	0.023
	(0.020)	(0.017)	(0.016)	(0.022)
Caregiver's years of schooling	0.004	−0.006	0.003	−0.002
	(0.003)	(0.003)	(0.002)	(0.003)
Household's wealth	0.025	−0.035	−0.156**	−0.100
	(0.067)	(0.067)	(0.054)	(0.083)

(*Continued*)

(Continued).

Own land (hectares)	−0.014	−0.001	−0.000	−0.002
	(0.015)	(0.002)	(0.001)	(0.002)
Own livestock	0.015	0.014	0.006	−0.044*
	(0.021)	(0.018)	(0.023)	(0.018)
Urban	−0.031	−0.048	0.005	−0.233***
	(0.026)	(0.029)	(0.020)	(0.009)
YL Child's educational aspirations	−0.007*	−0.003	−0.002	−0.006
	(0.003)	(0.003)	(0.005)	(0.003)
Caregiver's educational aspirations	0.005	−0.010***	−0.003	−0.000
	(0.005)	(0.003)	(0.006)	(0.008)
Number of movers	83	123	28	77
Observations	905	951	612	882

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education. Moving for family reasons include moving to follow family (Ethiopia and Peru) and moving for family formation (India and Vietnam).

(Continued).

	Moved for other reasons		
	Ethiopia	India	Peru
	(13)	(14)	(15)
Male	−0.028	0.012	−0.037
	(0.019)	(0.014)	(0.021)
Highest grade completed by child	0.001	0.014	−0.003
	(0.005)	(0.009)	(0.009)
Age in R3 (months)	0.003*	−0.002	0.003
	(0.002)	(0.002)	(0.002)
First born	−0.029	0.008	0.011
	(0.015)	(0.015)	(0.022)
Caregiver's years of schooling	0.003	0.002	−0.001
	(0.003)	(0.002)	(0.003)
Household's wealth	−0.006	−0.008	−0.092
	(0.062)	(0.045)	(0.080)
Own land (hectares)	−0.008	−0.004	0.000
	(0.015)	(0.006)	(0.000)
Own livestock	−0.008	−0.016	−0.042
	(0.021)	(0.015)	(0.030)
Urban	−0.032	−0.025	0.002
	(0.034)	(0.016)	(0.038)
YL Child's educational aspirations	−0.004**	−0.001	0.008
	(0.001)	(0.003)	(0.006)
Caregiver's educational aspirations	−0.004	−0.004*	−0.005
	(0.002)	(0.002)	(0.006)
Number of movers	44	42	47
Observations	905	951	612

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education. Vietnam does not have the outcome alternative 'Moved for other reasons' because only a few observations reported this option. Therefore, these were grouped under 'Moved for family reasons.'

The final category, presented in columns (13) to (15), shows the average characteristics of migrants that moved for other reasons. Although there are no cross-country patterns, this group is mainly characterised by attributes that are negatively correlated with wealth, such as lower educational aspirations.

As mentioned in the previous section, Multinomial Logit models crucially rely on the IIA assumption. In models where the dependent variable is the location of destination, such as in Grogger and Hanson (2011) and Bertoli et al. (2010), the IIA tends to fail because the decision to migrate and the location chosen are nested choices and, therefore, the disturbances are likely to be correlated across alternatives. However, in this application, the dependent variable is the reasons for migrating, which is not a nested choice as these may not necessarily be sequential in their timing. Yet, in order to test for the robustness of our results, I conduct a Hausman-McFadden test for IIA – see results in Table A3. This test failed to reject the null hypothesis of independence of alternatives, implying that a Multinomial Logit model would be appropriate for this exercise.[12] Additionally, a Multinomial Probit model – which does not rely on the IIA assumption – was estimated and similar results were obtained (see Table A4), suggesting that the IIA may not be a concern in this application.

As another robustness check, I changed the definition of migration to account only for moves that lasted double the current duration (at least 6 months). Table A5 shows that the patterns on highest grade achieved and movement for studies do not change. However, in India, the association between educational attainment and movement for marriage is not significant anymore. This suggests that in India these results only hold for short-term moves.

In sum, these findings show that not all young migrants self-select in the same direction. In the case of young people, internal migrants are not systematically positively self-selected in terms of education. In fact, the only sub-group of migrants that is positively self-selected is composed of those who move for studies. Finally, choices made during the transition to adulthood shape youth's migration patterns and, therefore, migrants are a very heterogeneous group as there are systematic differences in the characteristics among them depending on their reasons for moving. These results should be taken cautiously since, as mentioned before, the aim of this article is not to identify causal effects, but mainly key associations that can shed light on an important issue, such as self-selection into migration.

Conclusion

In this paper, I use data from the Young Lives study to document patterns and drivers of internal migration among youth in Ethiopia, India, Peru, and Vietnam. The analysis suggests that young migrants are a very heterogeneous segment of the population and it would be a mistake to label them as one single group. Life course decisions made during the transition to adulthood shape their migration patterns; therefore, young people move for a variety of reasons that go beyond the work-related ones, follow different streams apart from rural-urban moves, and show many other patterns described in this study that confirm that young migrants constitute a diverse group.

As mentioned above, during the studied age range, young people make important choices regarding education, labour force participation, and family formation, which are closely linked to the decision to migrate. As a result, I found systematic differences in observable characteristics depending on young people's reasons for moving. Better educated young people are more likely to move for studies and less likely to move for family formation.

Overall, it is important to document the patterns and determinants of youth migration because they provide a better insight on the migration process in different contexts between late adolescence and early adulthood. In fact, its analysis goes beyond looking at individuals of a particular age range, but youth migration must be understood through the prism of a complex set of patterns that illustrate the heterogeneity of this segment of the population.

It must be noted that the results presented in this article can only be extrapolated to the population of poor young people in each study country. Still, rather than a limitation, this could be seen as a strength of the paper in that it sheds light on a group that is generally marginalised and excluded from most analyses.

The evidence provided in this study is of paramount importance to understand how young people self-select into internal migration, which constitutes an important input to understand what the effects of migration are among youth – although this goes beyond the scope of this paper. More importantly, this will put us in a better position to propose more effective policies that target young migrants' wellbeing in developing countries.

Notes

1. This paper was developed from an earlier working paper 'Patterns and drivers of internal migration among youth in Ethiopia, India, Peru and Vietnam' (Franco Gavonel, 2017). Parts reproduced here with permission of *Young Lives*.
2. I use the United Nation's definition of 'youth' as individuals between the ages of 15 and 24 years (United Nations).
3. For a discussion on the suitability of this term applied to the context of developing countries, see, Morrow (2013).
4. A sentinel site corresponds to a district in Peru and a sub-district in Ethiopia (kebele), India (mandal), and Vietnam (commune).
5. This purposeful sampling is deemed to represent a particular segment of the population (in this case, poor young individuals) and is expected to show early signs of the impact of trends that affect them. It must be noted that in the case of Peru, the Older Cohort sample is smaller and mainly urban due to resource constraints (Escobal et al., 2003).
6. The tracking rule in Ethiopia, Peru and Vietnam is to follow the index child as long as the child lives within the country. In the case of India, the rule is to follow children within the limits of Andhra Pradesh and Telangana and to neighbouring states.
7. This time frame aims to exclude pendular migration (Skeldon, 1977).
8. Given the timing of the survey administration in both rounds, not all children were 14 and 19 years old. Thus, I removed these values from Figure 1 as they would show misleading trends.
9. These shares do not change dramatically when the reasons for migrating are analysed for all moves reported – instead of the last move.
10. In this sample, only 6% of the young people in Ethiopia at age 19 reported to be married or cohabiting.
11. In the case of Ethiopia and Peru, this reason corresponds to the category 'Moved to follow/join family', whereas in the case of India, it corresponds to the category 'Moved for family formation' instead due to a higher prevalence of this reason for migration. In the case of Vietnam, this group corresponds to the combination of both reasons together with 'Others' category due to little variation in the latter; however, the most prevalent reason in this group is 'Moved for family formation'. Hereafter, this category will be interpreted as the latter.
12. It must be noted that Hausman and McFadden (1984) acknowledge that negative values of the test are possible, and they conclude that these would suggest that IIA has not been violated.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

Abadie, A., Athey, S., Imbens, G., & Wooldridge, J. M. (2017). *When should you adjust standard errors for clustering?* NBER Working Paper Series. National Bureau of Economic Research. Cambridge, Massachusetts.

Agesa, R. (2001). Migration and the urban to rural earnings difference: A sample selection approach. *Economic Development and Cultural Change*, *49*(4), 847–865. https://doi.org/10.1086/452527

Bell, M., & Charles-Edwards, E. (2013). *Cross-national comparisons of internal migration: An update on global patterns and trends* (Vol. 2013/1). United Nations Department of Economic and Social Affairs.

Bernard, A. (2017). Cohort measures of internal migration: Understanding long-term trends. *Demography*, *54*(6), 2201–2221. https://doi.org/10.1007/s13524-017-0626-7

Bernard, A., & Bell, M. (2018). Educational selectivity of internal migrants: A global assessment. *Demographic Research*, *39*, 835–854. https://doi.org/10.4054/DemRes.2018.39.29

Bernard, A., Bell, M., & Charles-Edwards, E. (2014). Life-course transitions and the age profile of internal migration. *Population and Development Review*, *40*(2), 213–239. https://doi.org/10.1111/j.1728-4457.2014.00671.x

Bertoli, S., Fernandez-Huertas Moraga, J., & Ortega, F. (2010). Crossing the border: Self-selection, earnings and individual migration decisions, 1–47 , CREAM Discussion Paper Series 11/10.

Borjas, G., Bronars, S., & Trejo, S. (1992). Self-selection and internal migration in the United States. *Journal of Urban Economics*, *32*(2), 159–185. https://doi.org/10.1016/0094-1190(92)90003-4

Boyden, J. (2013). 'We're not going to suffer like this in the mud': Educational aspirations, social mobility and independent child migration among populations living in poverty. *Compare: A Journal of Comparative and International Education*, *43*(5), 580–600. https://doi.org/10.1080/03057925.2013.821317

Boyden, J., Pankhurst, A., & Tafere, Y. (2012). Child protection and harmful traditional practices: Female early marriage and genital modification in Ethiopia. *Development in Practice*, *22*(4), 510–522. https://doi.org/10.1080/09614524.2012.672957

Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: Methods and applications*. Cambridge University Press.

Central Statistical Agency. (2014). Statistical report on the 2013 national labour force survey. In *Statistical Bulletin* (pp. 1–480).

Chiswick, B. (1999). Are immigrants favorably self-selected? *The American Economic Review*, *89*(2), 181–185. https://doi.org/10.1257/aer.89.2.181

Coxhead, I., Cuong, N. V., & Vu, L. H. (2016). Migration in Vietnam: New evidence from recent surveys, 1–34, MPRA Paper 70217, Munich Personal RePEc Archive.

Crivello, G. (2011). "Becoming somebody": Youth transitions through education and migration in Peru. *Journal of Youth Studies*, *14*(4), 395–411. https://doi.org/10.1080/13676261.2010.538043

Crivello, G., Vennam, U., & Komanduri, A. (2012). Ridiculed for not having anything': Children's views on poverty and inequality in rural India. In J. Boyden & M. Bourdillon (Eds.), *Childhood Poverty* (pp. 218-236). Palgrave Macmillan.

Czaika, M., & Vothknecht, M. (2014). Migration and aspirations - are migrants trapped on a hedonic treadmill? *IZA Journal of Migration*, *3*(1), 1–21. https://doi.org/10.1186/2193-9039-3-1

Deshingkar, P., & Grimm, S. (2005). Internal migration and development: A global perspective, 1–79, IOM Migration Research Series No. 19.

Dustmann, C., & Okatenko, A. (2014). Out-migration, wealth constraints, and the quality of local amenities. *Journal of Development Economics*, *110*, 52–63. https://doi.org/10.1016/j.jdeveco.2014.05.008

Escobal, J., & Flores, E. (2008). An assessment of the young lives sampling approach in Peru, 1–32, Young Lives Technical Note No. 3.

Escobal, J., Lanata, C., Madrid, S., Penny, M., Saavedra, J., Suarez, P., Verastegui, H., Villar, E., & Huttly, S. (2003). *Young Lives Preliminary Country Report: Peru*. Oxford, UK: Young Lives.

Favara, M. (2016). Do dreams come true? Aspirations and educational attainments of Ethiopian boys and girls, 1–31, Young Lives Working Paper No. 146.

Franco Gavonel, M. (2017). Patterns and drivers of internal migration among youth in Ethiopia, India, Peru and Vietnam, 1–46, Young Lives Working Paper No. 169.

Geist, C., & McManus, P. A. (2008). Geographical mobility over the life course: Motivations and implications. *Population, Space and Place*, *14*(4), 283–303. https://doi.org/10.1002/psp.508

Gollin, D., Lagakos, D., & Waugh, M. E. (2014). The agricultural productivity gap. *The Quarterly Journal of Economics*, *129*(2), 939–993. https://doi.org/10.1093/qje/qjt056

Greene, W. H. (2014). *Econometric analysis* (7th) ed.). Pearson Education.

Grogger, J., & Hanson, G. H. (2011). Income maximization and the selection and sorting of international migrants. *Journal of Development Economics*, *95*(1), 42–57. https://doi.org/10.1016/j.jdeveco.2010.06.003

Guilmoto, C., & De Loenzien, M. (2014). Shifts in vulnerability landscapes: Young women and internal migration in Vietnam. *Genus*, *LXX*(1), 27–56. https://www.jstor.org/stable/10.2307/genus.70.1.27

Hamory, J., Kleemans, M., Li, N. Y., & Miguel, E. (2017). *Reevaluating agricultural productivity gaps with longitudinal microdata*. (NBER Working Paper No. 23253, pp. 1–42). Cambridge, MA: National Bureau of Economic Research.
Hausman, J., & McFadden, D. (1984). Specification tests for the multinomial logit model. *Econometrica*, *52*(5), 1219–1240. https://doi.org/10.2307/1910997
Juarez, F., LeGrand, T., Lloyd, C., Singh, S., & Hertrich, V. (2013). Introduction: Youth migration and transitions to adulthood in developing countries. In F. Juarez, T. LeGrand, C. Lloyd, S. Singh, & V. Hertrich (Eds.), *Youth migration and transitions to adulthood in developing countries* (Vol. 648, pp. 6–15). The American Academy of Political and Social Science.
Kley, S. (2011). Explaining the stages of migration within a life-course framework. *European Sociological Review*, *27* (4), 469–486. https://doi.org/10.1093/esr/jcq020
Kley, S., & Mulder, C. H. (2009). Considering, planning, and realizing migration in early adulthood. The influence of life-course events and perceived opportunities on leaving the city in Germany. *Journal of Housing and the Built Environment*, *25*(1), 73–94. https://doi.org/10.1007/s10901-009-9167-8
Kumra, N. (2008). An assessment of the young lives sampling approach in Andhra Pradesh, India, 1–12, Young Lives Technical Note No. 2.
Lagakos, D., & Waugh, M. E. (2013). Selection, agriculture, and cross-country productivity differences. *American Economic Review*, *103*(2), 948–980. https://doi.org/10.1257/aer.103.2.948
Lanzona, L. (1998). Migration, self-selection and earnings in Philippine rural communities. *Journal of Development Economics*, *56*(1), 27–50. https://doi.org/10.1016/S0304-3878(98)00051-0
Lloyd, C. (2005). *Growing up global: The changing transitions to adulthood in developing countries*. The National Academies Press.
Long, J. S., & Freese, J. (2014). *Regression models for categorical dependent variables using Stata* (Third edition) ed.). Stata Press.
Lucas, R. E. B. (1997). internal migration in developing countries. In M. R. Rosenzweig & O. Stark (Eds.), *Handbook of population and family economics* (pp. 721–798). Elsevier Science.
Lucas, R. E. B. (2000). Migration. In M. Grosh & P. Glewwe (Eds.), *Designing household survey questionnaires for developing countries* (Vol. 1, pp. 49–82). The World Bank.
McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In P. Zarembka (Ed.), *Frontiers in Econometrics* (pp. 105–142). Academic Press.
McKenzie, D. (2008). A profile of the world's young developing country migrants. *Population and Development Review*, *34*(1), 115–135. https://doi.org/10.1111/j.1728-4457.2008.00208.x
Miguel, E., & Hamory, J. (2009). Individual ability and selection into migration in Kenya, 1–51, MPRA Paper No. 19228, Munich Personal RePEc Archive.
Morrow, V. (2013). Troubling transitions? Young people's experiences of growing up in poverty in rural Andhra Pradesh, India. *Journal of Youth Studies*, *16*(1), 86–100. https://doi.org/10.1080/13676261.2012.704986
Nguyen, N. P. (2008). An assessment of the Young Lives sampling approach in Vietnam, 1–17, Young Lives Technical Note No. 4.
Outes-Leon, I., & Dercon, S. (2008). Survey attrition and attrition bias in Young Lives, 1–23,Young Lives Technical Note No. 5.
Outes-Leon, I., & Sanchez, A. (2008). An Assessment of the Young Lives sampling approach in Ethiopia, 1–23, Young Lives Technical Note No. 1.
Pessino, C. (1991). Sequential migration theory and evidence from Peru. *Journal of Development Economics*, *36*(1), 55–87. https://doi.org/10.1016/0304-3878(91)90005-G
Rajan, I. (2013). Internal migration and youth in India: Main features, trends and emerging challenges, 1–34, UNESCO Discussion Paper.
Rice, P., & Dolgin, K. G. (2011). *The adolescent: Development, relationships, and culture* (13) ed.). Allyn & Bacon.
Rosenzweig, M., & Stark, O. (1989). Consumption smoothing, migration and marriage: Evidence from rural India. *Journal of Political Economy*, *97*(4), 22. https://doi.org/10.1086/261633
Serneels, P., & Dercon, S. (2014). Aspirations, poverty and education: Evidence from India 1–27, Young Lives Working Paper No. 125.
Singh, A., & Espinoza Revollo, P. (2016). Teenage marriage, fertility, and well-being: panel evidence from India, 1–30, Young Lives Working Paper No. 151.
Sjaastad, L. (1962). The costs and returns of human migration. *Journal of Political Economy*, *70*(5), 80–93. https://doi.org/10.1086/258726
Skeldon, R. (1977). The evolution of migration patterns during urbanization in Peru. *Geographical Review*, *67*(4), 394–411. https://doi.org/10.2307/213624
Smita, S. (2008). Distress seasonal migration and its impact on children's education, 1–40, CREATE Research Monograph No. 28.
Stark, O., & Bloom, D. (1985). The new economics of labour migration. *The American Economics Review*, *75*(2), 173–178. https://www.jstor.org/stable/1805591.

Thornton, A., Williams, N., Bhandari, P., Young-DeMarco, L., Sun, C., Swindle, J., Hughes, C., & Xie, Y. (2019). Influences of material aspirations on migration. *Demography*, *56*(1), 75–102. https://doi.org/10.1007/s13524-018-0751-y

Todaro, M. (1980). Internal migration in developing countries: A survey. In R. Easterlin (Ed.), *Population and Economic Change in Developing Countries* (pp. 361–402). University of Chicago Press.

United Nations. (1970). Methods of measuring internal migration. In *Manuals on methods of estimating population* (pp. 1–72). United Nations.

United Nations. (2013). *Fact Sheet: Definition of Youth*. https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf

Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. MIT Press.

World Bank. (2007). *2007 world development report: development and the next generation*. https://documents.worldbank.org/curated/en/556251468128407787/World-development-report-2007-development-and-the-next-generation

Young, A. (2013). Inequality, the urban-rural gap, and migration. *The Quarterly Journal of Economics*, *128*(4), 1727–1785. https://doi.org/10.1093/qje/qjt025

Zenteno, R., Giorguli, S., & Gutierrez, E. (2013). Mexican adolescent migration to the United States and transitions to adulthood. In F. Juarez, T. LeGrand, C. Lloyd, S. Singh, & V. Hertrich (Eds.), *Youth Migration and Transitions to Adulthood in Developing Countries* (Vol. 648, pp. 18-37). The American Academy of Political and Social Science.

Appendix

Table A1. Linear probability model of the decision to migrate.

	Ethiopia (1)	India (2)	Peru (3)	Vietnam (4)
Male	−0.039	−0.382**	0.038	0.051
	(0.100)	(0.148)	(0.234)	(0.170)
Highest grade completed by child	0.050***	−0.009	0.001	0.047***
	(0.016)	(0.012)	(0.032)	(0.015)
Male*Grade	0.005	0.047***	−0.008	−0.019
	(0.015)	(0.017)	(0.030)	(0.020)
Age in R3 (months)	0.008***	−0.002	0.005	0.011**
	(0.003)	(0.004)	(0.005)	(0.005)
First born	−0.029	0.020	−0.036	−0.005
	(0.036)	(0.032)	(0.036)	(0.027)
Caregiver's years of schooling	0.007*	0.009**	0.000	0.013**
	(0.004)	(0.004)	(0.006)	(0.006)
Household's wealth	0.080	0.041	−0.400***	−0.345**
	(0.113)	(0.126)	(0.151)	(0.157)
Own land (hectares)	−0.043**	0.000	−0.001*	−0.001
	(0.018)	(0.000)	(0.000)	(0.002)
Own livestock	0.053	0.020	0.077*	0.078
	(0.033)	(0.037)	(0.044)	(0.052)
Urban	−0.208***	−0.359***	−0.060	0.087
	(0.076)	(0.049)	(0.081)	(0.196)
YL Child's educational aspirations	−0.009	0.003	−0.009	0.012**
	(0.007)	(0.008)	(0.012)	(0.006)
Caregiver's educational aspirations	−0.005	−0.010*	0.017	0.014
	(0.008)	(0.005)	(0.015)	(0.011)
Observations	905	951	612	882

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1
All equations include ethnicity and region as controls.

Table A2. Relative risk ratios of a multinomial logit for the reasons to migrate.

	Moved for studies			
	Ethiopia	India	Peru	Vietnam
	(1)	(2)	(3)	(4)
Male	−0.300	0.411	−0.200	3.551*
	(0.893)	(0.956)	(1.731)	(2.131)
Highest grade completed by child	0.598***	0.217***	0.373*	1.164***
	(0.140)	(0.0834)	(0.196)	(0.185)
Male*Grade	−0.0150	0.0109	0.00682	−0.461*
	(0.147)	(0.110)	(0.211)	(0.239)
Age in R3 (months)	0.0526**	−0.0336	−0.0138	0.0266
	(0.0208)	(0.0239)	(0.0272)	(0.0338)
First born	−0.512*	0.200	−0.922***	−0.168
	(0.271)	(0.222)	(0.289)	(0.148)
Caregiver's years of schooling	0.0235	0.0840***	−0.00382	0.0897*
	(0.0393)	(0.0237)	(0.0423)	(0.0468)
Household's wealth	0.453	1.330*	−0.857	−0.315
	(0.812)	(0.804)	(1.008)	(0.977)
Own land (hectares)	0.118	0.00242***	−0.00412	0.0741***
	(0.192)	(0.000799)	(0.00483)	(0.0287)
Own livestock	0.232	0.426**	0.995***	0.468
	(0.302)	(0.210)	(0.346)	(0.350)
Urban	−1.074**	−1.970***	−0.347	1.036
	(0.444)	(0.333)	(0.411)	(1.471)
YL Child's educational aspirations	0.103	0.0490	0.129	0.297***
	(0.0762)	(0.0569)	(0.202)	(0.0693)
Caregiver's educational aspirations	−0.0284	0.163***	0.137	0.273
	(0.0668)	(0.0457)	(0.0913)	(0.184)
Observations	905	951	612	882

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls.

(Continued).

	Moved for work			
	Ethiopia	India	Peru	Vietnam
	(5)	(6)	(7)	(8)
Male	−0.000619	0.0766	−2.201	1.890
	(0.914)	(1.034)	(2.322)	(1.442)
Highest grade completed by YL Child	0.0877	−0.0529	−0.263	0.252
	(0.169)	(0.0992)	(0.326)	(0.161)
Male*Grade	0.119	0.173	0.308	−0.212
	(0.174)	(0.128)	(0.337)	(0.165)
Age in R3 (months)	0.00108	0.0137	0.0254	0.0416
	(0.0276)	(0.0322)	(0.0339)	(0.0306)
First born	0.306	−0.411	0.130	−0.0546
	(0.325)	(0.288)	(0.352)	(0.195)
Caregiver's years of schooling	0.00866	−0.0308	−0.0391	−0.0114
	(0.0746)	(0.0562)	(0.0540)	(0.0376)
Household's wealth	0.309	−1.482*	−2.485*	−5.089***
	(1.404)	(0.840)	(1.382)	(1.118)
Own land (hectares)	−0.642**	−0.0558	−0.00649**	−0.0638
	(0.265)	(0.0990)	(0.00292)	(0.133)
Own livestock	0.898*	−0.514*	0.965*	0.680**
	(0.522)	(0.292)	(0.580)	(0.279)
Urban	−1.061	−1.801***	−0.222	0.599
	(0.677)	(0.541)	(0.414)	(1.021)
YL Child's educational aspirations	−0.0491	−0.0605	−0.183	−0.0250
	(0.0478)	(0.0479)	(0.134)	(0.0341)
Caregiver's educational aspirations	−0.0430	−0.128***	0.271*	0.0854
	(0.0521)	(0.0380)	(0.152)	(0.0590)
Observations	905	951	612	882

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls.

(Continued).

	Moved for family reasons			
	Ethiopia	India	Peru	Vietnam
	(9)	(10)	(11)	(12)
Male	−0.373	−4.896***	−1.562	−2.792
	(0.855)	(1.162)	(2.213)	(1.795)
Highest grade completed by child	0.0969	−0.102	−0.478	0.0541
	(0.130)	(0.0727)	(0.298)	(0.0817)
Male*Grade	0.0822	0.0226	0.237	0.148
	(0.160)	(0.0856)	(0.308)	(0.221)
Age in R3 (months)	0.0477	0.0356	0.0180	0.0431
	(0.0359)	(0.0299)	(0.0426)	(0.0383)
First born	0.268	0.121	0.461	0.255
	(0.247)	(0.216)	(0.357)	(0.277)
Caregiver's years of schooling	0.0636	−0.0574	0.0732	−0.00422

(*Continued*)

(Continued).

	(0.0439)	(0.0405)	(0.0584)	(0.0550)
Household's wealth	0.435	−0.358	−4.529***	−2.151*
	(0.857)	(0.862)	(1.347)	(1.258)
Own land (hectares)	−0.245	−0.0279	−0.0121	−0.0213
	(0.200)	(0.0262)	(0.0206)	(0.0174)
Own livestock	0.317	0.173	0.302	−0.412
	(0.305)	(0.233)	(0.636)	(0.256)
Urban	−0.732**	−1.007**	0.0480	−11.05***
	(0.370)	(0.430)	(0.553)	(0.993)
YL Child's educational aspirations	−0.0824*	−0.0314	−0.0521	−0.0125
	(0.0441)	(0.0424)	(0.120)	(0.0425)
Caregiver's educational aspirations	0.0554	−0.109***	−0.0337	0.0757
	(0.0760)	(0.0331)	(0.163)	(0.108)
Observations	905	951	612	882

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls.

(Continued).

	Moved for other reasons		
	Ethiopia	India	Peru
	(13)	(14)	(15)
Male	−1.413	−0.488	3.273**
	(1.153)	(3.070)	(1.521)
Highest grade completed by child	0.0710	0.355	0.183
	(0.150)	(0.256)	(0.197)
Male*Grade	0.142	0.0943	−0.508***
	(0.194)	(0.355)	(0.196)
Age in R3 (months)	0.0918**	−0.0587	0.0478
	(0.0422)	(0.0434)	(0.0355)
First born	−0.829	0.215	0.0849
	(0.523)	(0.320)	(0.318)
Caregiver's years of schooling	0.0833	0.0514	−0.0142
	(0.0653)	(0.0460)	(0.0485)
Household's wealth	−0.00545	−0.0220	−1.945
	(1.466)	(1.124)	(1.198)
Own land (hectares)	−0.243	−0.113	0.000585
	(0.335)	(0.136)	(0.00290)
Own livestock	−0.0494	−0.302	−0.334
	(0.446)	(0.396)	(0.374)
Urban	−1.088	−1.365**	−0.0418
	(0.890)	(0.533)	(0.598)
YL Child's educational aspirations	−0.0862***	−0.0253	0.111
	(0.0323)	(0.0727)	(0.0800)
Caregiver's educational aspirations	−0.102**	−0.0791*	−0.0246
	(0.0476)	(0.0435)	(0.0864)
Observations	905	951	612

Clustered standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls.

Table A3. Hausman-McFadden test of IIA assumption.

	Ethiopia		India		Peru		Vietnam	
Outcome	chi2	P> chi2	chi2	P> chi2	chi2	P> chi2	chi2	P> chi2
No move	4.417	0.975	−0.406	.	4.49	0.973	0.618	1.000
Study	−1.049	.	−11.614	.	−0.362	.	1.367	0.968
Work	0.04	1.000	−40.045	.	0.93	0.988	−4.307	.
Family	2.646	0.977	−5.769	.	2.869	0.897	-	-
Other	−0.021	.	1.543	1.000	1.246	1.000	1.806	1.000

Ho: Odds(Outcome-J vs Outcome-K) are independent of other alternatives.
A significant test is evidence against Ho.

Table A4. Marginal effects of multinomial probit model for the reasons for moving.

	Moved for studies			
	Ethiopia	India	Peru	Vietnam
	(1)	(2)	(3)	(4)
Male	−0.045*	0.086***	−0.005	−0.034
	(0.022)	(0.025)	(0.026)	(0.026)
Highest grade completed by child	0.052***	0.026***	0.040**	0.112***
	(0.009)	(0.008)	(0.015)	(0.025)
Age in R3 (months)	0.002	−0.004	−0.002	−0.000
	(0.002)	(0.003)	(0.002)	(0.005)
First born	−0.048	0.035	−0.089***	−0.021
	(0.028)	(0.030)	(0.027)	(0.020)
Caregiver's years of schooling	−0.001	0.014***	0.000	0.013*
	(0.004)	(0.003)	(0.004)	(0.006)
Household's wealth	0.051	0.187	−0.021	0.095
	(0.085)	(0.110)	(0.091)	(0.121)
Own land (hectares)	0.020	0.004	−0.000	0.011**
	(0.019)	(0.003)	(0.001)	(0.003)
Own livestock	−0.020	0.061*	0.084**	0.083
	(0.023)	(0.027)	(0.030)	(0.048)
Urban	−0.072*	−0.209***	−0.025	−0.318***
	(0.036)	(0.046)	(0.036)	(0.064)
YL Child's educational aspirations	0.011	0.009	0.014	0.044***
	(0.007)	(0.007)	(0.015)	(0.009)
Caregiver's educational aspirations	−0.003	0.026***	0.009	0.037
	(0.006)	(0.006)	(0.008)	(0.025)
Number of movers	115	213	75	236
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education.

(Continued).

	Moved for work			
	Ethiopia	India	Peru	Vietnam
	(5)	(6)	(7)	(8)
Male	0.040*	0.127***	0.006	0.051*
	(0.020)	(0.021)	(0.021)	(0.021)
Highest grade completed by YL Child	0.005	−0.001	−0.008	−0.016
	(0.004)	(0.005)	(0.008)	(0.012)
Age in R3 (months)	−0.001	0.001	0.001	0.003
	(0.002)	(0.002)	(0.002)	(0.003)
First born	0.023	−0.046*	0.012	−0.017
	(0.017)	(0.021)	(0.023)	(0.017)
Caregiver's years of schooling	−0.002	−0.004	−0.003	−0.006
	(0.004)	(0.003)	(0.003)	(0.003)
Household's wealth	−0.021	−0.080	−0.149	−0.350***
	(0.068)	(0.063)	(0.077)	(0.093)
Own land (hectares)	−0.034*	−0.005	−0.000	−0.006
	(0.016)	(0.008)	(0.000)	(0.010)
Own livestock	0.048	−0.040	0.052*	0.062**
	(0.028)	(0.020)	(0.026)	(0.023)
Urban	−0.047	−0.102**	−0.018	−0.076
	(0.029)	(0.035)	(0.026)	(0.040)
YL Child's educational aspirations	−0.002	−0.004	−0.013	−0.014***
	(0.003)	(0.004)	(0.009)	(0.004)
Caregiver's educational aspirations	−0.004	−0.012***	0.016	0.006
	(0.003)	(0.003)	(0.010)	(0.006)
Number of movers	60	94	50	119
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education.

(Continued).

	Moved for family reasons			
	Ethiopia	India	Peru	Vietnam
	(9)	(10)	(11)	(12)
Male	0.011	−0.310***	0.009	−0.109***
	(0.024)	(0.048)	(0.013)	(0.025)
Highest grade completed by child	0.000	−0.012*	−0.013*	−0.012
	(0.007)	(0.005)	(0.006)	(0.006)
Age in R3 (months)	0.000	0.002	0.000	0.003
	(0.003)	(0.002)	(0.002)	(0.002)
First born	0.026	0.008	0.021	0.024
	(0.019)	(0.018)	(0.013)	(0.021)
Caregiver's years of schooling	0.001	−0.004	0.003	−0.001
	(0.004)	(0.003)	(0.002)	(0.003)
Household's wealth	−0.073	−0.040	−0.155**	−0.105
	(0.082)	(0.064)	(0.052)	(0.075)
Own land (hectares)	−0.034*	−0.002	−0.000	−0.002
	(0.015)	(0.003)	(0.000)	(0.002)
Own livestock	0.007	0.017	0.007	−0.039*
	(0.027)	(0.019)	(0.022)	(0.019)
Urban	−0.042	−0.040	0.008	0.076*
	(0.034)	(0.032)	(0.020)	(0.030)
YL Child's educational aspirations	−0.003	−0.003	−0.004	−0.004
	(0.004)	(0.004)	(0.004)	(0.003)
Caregiver's educational aspirations	0.006	−0.011***	−0.003	0.001
	(0.006)	(0.002)	(0.005)	(0.009)
Number of movers	83	123	28	77
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education. Moving for family reasons include moving to follow family (Ethiopia and Peru) and moving for family formation (India and Vietnam).

(Continued).

	Moved for other reasons		
	Ethiopia	India	Peru
	(13)	(14)	(15)
Male	−0.024	0.018	−0.039
	(0.019)	(0.012)	(0.020)
Highest grade completed by child	0.004	0.012	−0.013
	(0.004)	(0.006)	(0.007)
Age in R3 (months)	0.004*	−0.002	0.003
	(0.002)	(0.002)	(0.002)
First born	−0.032	0.010	0.008
	(0.021)	(0.014)	(0.019)
Caregiver's years of schooling	0.003	0.002	−0.001
	(0.003)	(0.002)	(0.003)
Household's wealth	−0.003	−0.016	−0.110
	(0.057)	(0.043)	(0.075)
Own land (hectares)	−0.011	−0.003	0.000
	(0.011)	(0.005)	(0.000)
Own livestock	−0.006	−0.016	−0.041
	(0.016)	(0.015)	(0.026)
Urban	−0.038	−0.020	0.005
	(0.031)	(0.021)	(0.040)
YL Child's educational aspirations	−0.005**	−0.001	0.006
	(0.001)	(0.003)	(0.005)
Caregiver's educational aspirations	−0.005	−0.004*	−0.002
	(0.003)	(0.002)	(0.006)
Number of movers	44	42	47
Observations	905	951	612

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The base category of the dependent variable is No Migration.

All specifications include ethnicity and region as controls, as well as an interaction of gender and education. Vietnam does not have the outcome alternative 'Moved for other reasons' because only a few observations reported this option. Therefore, these were grouped under 'Moved for family reasons.'

Table A5. Marginal effects of multinomial logit model for the reasons for moving with alternative definition of migration.

	Moved for studies			
	Ethiopia	India	Peru	Vietnam
	(1)	(2)	(3)	(4)
Male	−0.039	0.079***	−0.013	−0.044
	(0.023)	(0.023)	(0.025)	(0.024)
Highest grade completed by child	0.046***	0.021*	0.037*	0.156***
	(0.010)	(0.008)	(0.015)	(0.027)
Age in R3 (months)	0.003	−0.006	−0.002	0.005
	(0.002)	(0.003)	(0.002)	(0.004)
First born	−0.039	0.025	−0.086***	−0.031
	(0.021)	(0.027)	(0.023)	(0.020)
Caregiver's years of schooling	0.002	0.011***	−0.001	0.014*
	(0.003)	(0.003)	(0.004)	(0.006)
Household's wealth	0.030	0.156	0.001	0.047
	(0.075)	(0.099)	(0.093)	(0.111)
Own land (hectares)	0.024	0.004	−0.000	0.011
	(0.019)	(0.003)	(0.000)	(0.008)
Own livestock	0.012	0.060*	0.081**	0.039
	(0.028)	(0.027)	(0.028)	(0.045)
Urban	−0.075*	−0.175***	−0.027	0.273
	(0.037)	(0.029)	(0.038)	(0.184)
YL Child's educational aspirations	0.017**	0.006	0.013	0.040***
	(0.006)	(0.007)	(0.019)	(0.008)
Caregiver's educational aspirations	−0.003	0.025***	0.012	0.003
	(0.005)	(0.006)	(0.009)	(0.019)
Number of movers	108	183	74	208
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education.

(Continued).

	Moved for work			
	Ethiopia	India	Peru	Vietnam
	(5)	(6)	(7)	(8)
Male	0.037	0.107***	0.008	0.028
	(0.019)	(0.023)	(0.019)	(0.021)
Highest grade completed by YL Child	0.002	0.001	−0.008	−0.010
	(0.004)	(0.005)	(0.010)	(0.009)
Age in R3 (months)	−0.001	0.003	0.001	0.002
	(0.002)	(0.002)	(0.002)	(0.002)
First born	0.017	−0.027	0.016	0.014
	(0.015)	(0.018)	(0.025)	(0.015)
Caregiver's years of schooling	0.002	−0.001	−0.003	−0.006*
	(0.004)	(0.004)	(0.003)	(0.003)
Household's wealth	−0.034	−0.087	−0.122	−0.361***
	(0.065)	(0.049)	(0.094)	(0.101)
Own land (hectares)	−0.032	−0.001	−0.000	−0.007
	(0.017)	(0.006)	(0.000)	(0.010)
Own livestock	0.037	−0.029	0.050*	0.049**
	(0.021)	(0.020)	(0.023)	(0.018)
Urban	−0.033	−0.073***	−0.011	0.011
	(0.026)	(0.019)	(0.026)	(0.083)
YL Child's educational aspirations	−0.002	−0.003	−0.014	−0.012***
	(0.003)	(0.003)	(0.009)	(0.003)
Caregiver's educational aspirations	−0.003	−0.010***	0.017	0.009
	(0.003)	(0.003)	(0.009)	(0.005)
Number of movers	51	78	50	96
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education.

(Continued).

	Moved for family reasons			
	Ethiopia	India	Peru	Vietnam
	(9)	(10)	(11)	(12)
Male	0.002	−0.186***	0.005	−0.091***
	(0.023)	−0.016	(0.015)	(0.019)
Highest grade completed by child	0.004	−0.008	−0.014*	−0.017*
	(0.006)	−0.005	(0.007)	(0.008)
Age in R3 (months)	0.002	0.003	0.000	0.003
	(0.003)	−0.002	(0.002)	(0.003)
First born	0.028	−0.004	0.022	0.023
	(0.020)	−0.018	(0.016)	(0.022)
Caregiver's years of schooling	0.004	−0.005	0.003	−0.001
	(0.003)	−0.003	(0.002)	(0.003)
Household's wealth	0.027	−0.089	−0.156**	−0.139
	(0.068)	−0.061	(0.054)	(0.089)
Own land (hectares)	−0.021	0.000	−0.000	−0.001
	(0.017)	−0.002	(0.001)	(0.002)
Own livestock	0.019	−0.005	0.006	−0.032
	(0.020)	−0.019	(0.023)	(0.021)
Urban	−0.049*	−0.022	0.005	−0.230***
	(0.024)	−0.031	(0.020)	(0.009)
YL Child's educational aspirations	−0.008*	−0.003	−0.002	−0.003
	(0.003)	−0.003	(0.005)	(0.003)
Caregiver's educational aspirations	0.005	−0.010***	−0.003	0.001
	(0.005)	−0.002	(0.006)	(0.009)
Number of movers	82	103	28	73
Observations	905	951	612	882

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
The base category of the dependent variable is No Migration.
All specifications include ethnicity and region as controls, as well as an interaction of gender and education. Moving for family reasons include moving to follow family (Ethiopia and Peru) and moving for family formation (India and Vietnam).

(Continued).

	Moved for other reasons		
	Ethiopia	India	Peru
	(13)	(14)	(15)
Male	−0.025	0.011	−0.037
	(0.019)	(0.010)	(0.021)
Highest grade completed by child	0.000	0.011	−0.003
	(0.004)	(0.007)	(0.009)
Age in R3 (months)	0.003	−0.001	0.003
	(0.002)	(0.001)	(0.002)
First born	−0.027	0.003	0.011
	(0.015)	(0.011)	(0.022)
Caregiver's years of schooling	0.003	0.002	−0.001
	(0.003)	(0.001)	(0.003)
Household's wealth	−0.014	−0.008	−0.092
	(0.058)	(0.032)	(0.080)
Own land (hectares)	−0.008	−0.013	0.000
	(0.015)	(0.009)	(0.000)
Own livestock	−0.009	−0.001	−0.042
	(0.021)	(0.012)	(0.030)
Urban	−0.028	−0.008	0.002
	(0.033)	(0.014)	(0.038)
YL Child's educational aspirations	−0.004**	−0.002	0.008
	(0.001)	(0.002)	(0.006)
Caregiver's educational aspirations	−0.004	−0.002	−0.005
	(0.002)	(0.001)	(0.006)
Number of movers	43	24	47
Observations	905	951	612

Clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The base category of the dependent variable is No Migration.

All specifications include ethnicity and region as controls, as well as an interaction of gender and education. Vietnam does not have the outcome alternative 'Moved for other reasons' because only a few observations reported this option. Therefore, these were grouped under 'Moved for family reasons.'