

Analysis of Migration, Regional Characteristics, and Socioeconomic Outcomes in Developing Economies: Empirical Evidence from Nigeria

Anthony Orji¹ · Chukwuma Agu²

Published online: 2 March 2018

© Springer Science+Business Media B.V., part of Springer Nature 2018

Abstract Highly skilled migrants from Nigeria and other developing countries are becoming more attractive resources for industrial countries, as these countries experience demographic shifts characterized by skilled labor force shortages in certain sectors of their economies. Although there are a number of regional characteristics that may affect migration outcomes, in this paper, we also include individual-level factors in our analyses, such as education and age. Again, this paper also examines the issue of the North-South divide in poverty and other characteristics and how these affect migration. Furthermore, this paper also identifies which regional economic factors influence the individual's migration decision, taking into account personal characteristics. For empirical analysis, we used data from the Nigerian Migration Survey by the World Bank. The micro data allow us to identify household factors that influence migration decisions. In doing this, we control for different individual propensities to migrate and also assess the genuine impact of regional economic factors on migration. The results show that individual, regional, and country-specific factors make significant impact on migration decisions and dynamics. The paper concludes that socioeconomic variables and personal characteristics are crucial for explaining the pattern of regional migration flows in Nigeria. Thus, migration policies have to be adopted that will emphasize the mutual links between migration and development across the different regions.

Keywords Regional · Characteristics · Migration · Outcomes · Developing economy · Survey data · Nigeria

JEL Classification F22 · F24 · O15 · R23

✉ Anthony Orji
anthony.orji@unn.edu.ng

Chukwuma Agu
chukwuma.agu@unn.edu.ng

¹ Department of Economics, University of Nigeria, Nsukka, Nsukka, Nigeria

² Institute of Development Studies, University of Nigeria, Enugu Campus, Enugu, Nigeria

Introduction

International migration has development implications for origin and destination countries among developed and developing countries. Some 215 million people or 3% of the world's population are believed to live outside their countries of birth (United Nations 2015). Available statistics also show that in year 2013, the USA received the highest number of net migrants of 252,172, followed by the UK, 184,314. While the argument in the literature has been largely focused on South-North migration, the number of migrants between developing countries is estimated to be as large as the number of migrants moving from South to North (Ratha and Shaw 2007). Thus, the development implications of migration and the need to manage in-migration are as relevant to the South as they are to the North. Although violent conflict, political persecution, and trafficking are important causes for international mobility, more than 9 out of 10 international migrants move for economic reasons. By and large, migration has both positive and negative economic impacts on the migrant household, the sending country as well as the receiving country.

Though quantitative estimates of the direct gains from migration are difficult to obtain, economic simulations suggest that an increase in South-North migration would produce substantial income gains in the long run; these income gains could exceed those from comprehensive trade liberalization and the destination countries in the North would capture one fifth the overall benefits of increased immigration (World Bank 2006, Winters et al. 2003, Anderson and Winters 2008, van der Mensbrugge and Roland-Holst 2009).

However, in many of the developing countries, migrants are usually poor, unskilled, and uneducated people (or refugees) who are fleeing from hunger or danger in their home countries. Such migrants end up constituting nuisance in the receiving country; thus, they are often treated unfairly or deported in extreme cases. The Nigerian Government, for instance, expelled over 2 million immigrants mainly from Ghana in 1983 due to a domestic economic crisis, for which the aliens became scapegoats (Lassailly-Jacob et al. 2006). More recent examples of forced repatriation can be found both in the North and in the South: the USA deported more than 350,000 immigrants and South Africa 300,000 in 2008 alone (UNDP 2009). The case of Cote d'Ivoire, where stripping of immigrants of some of their rights sparked a chaos that led the country to the verge of an internal conflict, illustrates the growing intolerance to foreigners in the South (Adepoju 2003, UNDP 2015). The xenophobia attack in South Africa and most recent slavery in Libya, to mention but a few.

On the other hand, Nigeria has not been able to attract skilled migrants as its net migration has been all time low at -0.2 migrant(s)/1000 population according to Central Intelligence Agency (2017). This figure implies that the number of Nigerians living abroad is far greater than foreigners living in Nigeria. According to World Bank (2015), Nigeria has been revealed as the top remittance-receiving country in Africa and this invariably validates the fact that more Nigerians live abroad. Though the Central Bank of Nigeria is uncertain about the actual amount of money remitted to the country due to its lack of methods to measure informal ways through which remittances enter the country, it is noteworthy that Nigerians abroad

were recorded to have remitted US\$10/\$21 billion in 2010 and 2013 fiscal year, respectively, and this put the country ahead of other African countries as the most remittance-recipient country. Despite the high remittance inflow into Nigeria, poverty and inequality are still prevalent in Nigeria, and the country is yet to make efficient use of remittances like other developing countries, such as Mexico and the Philippines. The emigration of the highly skilled can be particularly important in the education and health sectors in small countries that face severe shortages of health workers (Docquier et al. 2010). Moreover, the departure of doctors may result in underemployment of nurses and other auxiliary staff (Commander et al. 2004). However, as argued by Dustmann et al. (2010), return migration can lead to mitigation of the brain drain, if not a net brain gain. When the migrants return, they have usually acquired skills that are needed in the sending community as manifested by a sizable wage-premium paid to the returned migrants (Wahba 2007).

Another important aspect of migration is the effect of remittances on education and investments in the migrants' origin countries (Mara et al. 2012). Remittances are associated with increased household investments in education, entrepreneurship, and health—all of which have a high social return in most circumstances. Studies based on household surveys in El Salvador and Sri Lanka find that children from remittance-receiving households have a lower school drop-out ratio and that these households spend more on private tuition for their children.

It has been established that Nigeria has capacity to attract and retain skilled migrants from all over the world. Although Nigeria is traditionally an important destination for migrants in African continent, there are more people emigrating from, than immigrating to, Nigeria. The net migration rate (per 1000 people) has increasingly become negative in recent years, decreasing from -0.1 in 2000 to -0.2 in 2017 (Central Intelligent Agency 2017). This negative trend was also predicted to continue with time.

Due to the fact that the number of emigrants from Nigeria is greater than immigrants into Nigeria, according to the World Bank (2015), Nigeria has been revealed as the top remittance-receiving country in Africa and this invariably validates the fact that more Nigerians live abroad. Though, the Central Bank of Nigeria is uncertain about the actual amount of money remitted to the country due to its lack of methods to measure informal ways through which remittances enter the country. However, these huge migrants' remittances to Nigeria are not efficiently utilized like in other climes. For instance, despite the high remittance inflow into Nigeria, poverty and inequality are still prevalent in Nigeria, and the country is yet to make efficient use of remittances like other developing countries, such as Mexico and the Philippines in terms of improved child education and real investment in origin countries. Furthermore, given that the rural sector contributes immensely to the national economy, the development of the sector should be the priority of the government and relevant stakeholders. Unfortunately, over the years, the development strategies and efforts in Nigeria have been more urban-based at the expense of the rural areas characterized by lack of infrastructure in the rural areas such as roads, electricity, water, and functional healthcare (Abah 2010).

Against this background, it is clear that highly skilled migrants from Nigeria and other developing countries are also becoming a more attractive resource for industrial countries as these countries experience demographic shifts characterized by skilled labor force shortages in certain sectors of their economies. Although there are a number of regional characteristics that may affect migration outcomes, in this paper,

we also include individual-level factors in our analyses, such as education, gender, and age. Generally, research in the area of the impact of regional characteristics and labor migration is generally inconclusive. In some countries of destination, Nigerian migrants are respected, while in others, they are generally regarded negatively. For example, some migrants have been blamed for or are feared to cause various problems such as spread of diseases, driving down wages of local workers, rise in crimes, and displacing or taking away jobs from local workers. Thus, given the economic objective of attracting and retaining skilled migrants in a globally competitive market and the social objective of ensuring a socially cohesive society, this research examines the whole issue about the North-South divide in poverty and other characteristics and how these affect migration. The impact of migration on child education, etc. on migration is also investigated.

Summarily, this research aims at studying the North-South divide (and across countries), how it affects migration, and the impacts of migration on child education and real investment. The work also intends to identify regional economic factors that influence migration decision-making.

The rest of the paper is organized as follows. The “[Literature Review](#)” section is on review of related literature, while the “[Methodology of the Survey](#)” section describes the methodology of the survey. The results and findings are presented and discussed in the “[Findings from the Survey](#)” section. The “[Policy Issues and Recommendations](#)” section gives some policy recommendations and the “[Conclusion](#)” section concludes the paper.

Literature Review

Theoretical Literature

Several attempts have been made through researchers to explain migration in terms of various theories but these seem to be fragmented. Moreover, there is not a generally accepted theory that can explain international migration. The theories of international migration can be divided into two groups and they are classical migration theories that explain the commencement and consequences of international migration as the other group of theories explains the perpetuation of international migration. Here, we briefly discuss some of the theories.

The Neo-classical Theory

According to the neo-classical theory of migration, migration of labor is due to the differences in the real wages between the countries and migration of labor brings equilibrium in the international labor market which wipes away the wage differences between the countries. The neo-classical theory explains both the macro and micro aspects of migration. The neo-classical macro theory of migration dates back to Hicks (1932).

The Dual Labor Market Theory

This theory posits that the labor markets of industrialized countries have a dualistic structure—skilled workers (primary segment) and unskilled workers (secondary segment).

The skilled workers are well paid, whereas the wages of unskilled workers in the secondary segment are low so that the local workers avoid secondary jobs. As a result of labor shortages at the bottom of the job hierarchy, employers are compelled to recruit the unskilled foreign workers, who do not plan to stay permanently, but accept the secondary job more easily since it pays them more income (Piore 1978 and Stalker 2000).

The World System Theory

The theory asserts that the root cause of migration is the existence of unequal development between the central developed countries and the peripheral agricultural countries. According to this theory, the central countries will develop by exploiting the peripheral countries. Besides, this theory realizes that migration is the natural consequence of globalization and market penetration across national boundaries (Wallerstein 1974).

Dual Economy Model of Development

According to this theory, migration between countries is mainly due to differences in wages and employment opportunities. Moreover, this considers migration as an individual decision for income maximization. Hence, the flow of migration over a long period of time is due to the prolonged disequilibrium that exists between the countries (Lewis 1953 and Todaro 2011).

Liberal Choice and Structural Theories

According to Ghosh, international movement of labor is caused by economic factors and he presents two models of migration theories. They are classical theories (liberal choice) and core-periphery conflict theories (structural). According to the classical theories, workers move from low-wage countries to high-wage countries and this results in the efficient use of labor and narrows down the inter-country wage gaps. However, according to the structural theories, migration widens wage and income disparities as a result of the differences in the economic and political situations of countries (Ghosh 1996).

Perpetuation Theories of Migration

The perpetuation theories of migration emphasize kin and friendship networks as important factors in migration. The interpersonal ties connect migrants, former migrants, and non-migrants in origin and destination that encourage circular migration and reduce migration risk (Tilly and Brown 1967). There are two most important theories that explain the continuation of migration and they are the Migration Networks Theory and the Theory of Cumulative Causation.

The Migration Networks Theory

This theory considers migration as a network process in which migrants help each other by communicating with the close friends and family members. They

exchange information, provide financial assistance, and even help to find a job for the migrant. It is asserted that such interaction facilitates migration by reducing the costs and risks. However, there are instances of migration through illegal means by friends and relatives that results in hardships and migrants become victims of violence and exploitation (IOM 2003).

The Cumulative Causation Theory of Migration

This theory of migration is propounded by Massey and this theory states that continuance of migration is due to the intermingling of migrants with other persons of the origin. The theory also asserts that migration sustains itself by creating more migration (Massey 1990). It is worthy to categorically state that this work will adopt the Dual Economy Model of Development as the theoretical underpin. Thus, migration between countries will be approached from the purview that it occurs mainly due to differences in wages and employment opportunities between origin and destination countries and as such considers migration as an individual decision for income maximization.

Empirical Literature

Researchers differ in their opinion about the impact of remittances on education which may be partly due to differences in the period of study, differences in the characteristic features of the region from where data were collected and method of analysis, etc. Lopez Cordova (2005) carried out a study about the poverty-reducing capacity of remittances in Mexico. He found that the incidence of poverty declines with the increase in remittances. The study also found that the relatives of migrants benefitted the most from remittances and the very poor families who cannot afford costs of migration did not benefit from remittances. The study also reported that the literacy rate among young adolescents and the per capita income of Mexico grew positively with increases in remittances.

Leod and Molina (2005) examined the impact of remittances on inequality and poverty in the Latin American countries and they observed that the remittances have actually reduced the incidence of poverty in these countries. The study also found certain changes in the social life of the people especially in the field of education as a result of remittances as remittances helped to increase investment in human capital by the emigrant's family.

Adams (2005) conducted a study about the impact of remittances on household expenditure and investment on the basis of data collected from Guatemalan households. He analyzed the expenditure pattern of the households and found that the remittance income compared to other sources of income is more likely to be spent on education. Yang (2006) evaluated the impact of exchange rate shocks on the remittances and household investment. More specifically, he analyzed how changes in the real remittance levels affected investment in human capital of remittance-receiving households in the Philippines. The study observed that the rise in real remittances has increased the number of children attending school and reduced the child labor in the country.

Malligan and Bohara (2010) analyzed the effects of remittance income on child welfare in Nepal in terms of its effect on child educational attainment and child labor.

For this, they used two Heckman full information maximum likelihood regressions. The study found both remittance and non-remittance income have positively and significantly contributed to the child welfare. However, the welfare effect of remittance income was significantly less than that of the effect of income from other sources. Mallick (2008) analyzed the impact of remittances on private consumption and investment and its implications on the economic growth during the period 1966–1967 to 2003–2004. By applying the time series models, he used general consumption model to examine the impact of remittances on the private consumption. He found that remittances have a positive influence on private consumption, on debt, on money supply, and on income. The study also found that remittances have some adverse effects on private investment although it has a neutral effect on the growth rate of output which may be an important factor in generating inflation in the country. Sabira (2006) assessed the impact of emigration on social mobility of the Muslim women and observed an upward mobility in the educational front by Muslim women in Malappuram. A higher educational mobility was found among the women of emigrant households more than the women of non-emigrant households which she attributes to emigration. In migrant households, women were significantly mobile between generations irrespective of their parents' educational status while in non-migrant households, parental education was an important factor in the educational mobility of daughters.

The above review indicates that there is a positive correlation between the flow of remittances and the educational attainments of emigrants. Among the studies reviewed, no researcher in Nigeria has studied the North-South divide within Nigeria, how it affects migration, economic factors that influence migration decision, and the impact of migration on child education and real investment in Nigeria. These are the intellectual gaps that this work aims to fill.

Methodology of the Survey

The study followed a structured methodology with the 2006 National Population Census providing the sampling frame. The NBS frame has 23,070 enumeration areas in the 776 local government areas of the country, politically consisting 36 states and Abuja Federal Capital Territory. For the purpose of the study, the states were stratified into high- and low-migration-incidence stratum of 18 states (with 16 in the South and 2 in the North) in the high-migration-incidence stratum while 19 states (with 18 in the North and 1 in the South) in the low-migration-incidence stratum. After random selection of states from each stratum, the states were regrouped into four regions—the North, South East, South, and South West (the three political regions in the North was grouped into one given that relatively fewer number of states were selected from the North generally on account of being predominantly a low-migration zone).

Following a random selection of 3188 enumeration areas with the help of the National Bureau of Statistics, a disproportionate sampling based on the available literature supplemented by expert judgment about migration and remittance from team members aimed at oversampling the high-migration states was adopted. This is because having a proportionate allocation across all selected states and using the population of each state in the 2006 Census to select the number of households to be included in the sample would not yield enough coverage of migrant households, particularly those with

international migrants. Hence, a disproportionate sampling approach with the aim of oversampling areas of the country with more migrants than the rest was adopted. According to Bilsborrow (2006), this approach becomes necessary because migrants fall into the category of rare populations for which a distinct disproportionate sampling procedure has to be adopted to ensure they are adequately captured.

Also, the aggregate population of the 18 states in the high-migration-incidence stratum was 67.04 million spread across 10,850 enumeration areas. Thus, the mean population of an EA in the high-migration stratum was 6179. In turn, aggregate population of the 19 states in the low-migration-incidence stratum was 72.95 million spread across 12,110 EAs yielding a mean EA population of 6024. These numbers were close enough to assume the mean population of EAs was essentially the same. To oversample states in the high stratum, a ratio of 2:1 in favor of the high-migration states produced 12 states from the high-migration stratum and 6 states from the low stratum.

Three LGAs were randomly selected from each high stratum state while the states in the low stratum had 2 LGs selected from 3 of the states each and 1 LG each from the other three to make a total of 45 LGs, i.e., $(3 \times 12) + (2 \times 3) + (1 \times 3)$. Thereafter, 2 EAs were selected per sample LGA to yield a total of 90 EAs. Households were considered according to three strata—those with an international migrant, those with an internal migrant, and those with no migrant.

Each sample EA was partitioned using a defined procedure into an average of 6 to 10 segments and one was randomly selected. The random list from the National Bureau of Statistics (NBS) was used to locate the lead household from where partitioning could take off. The target 2000 households for the study were near evenly allocated to all local government areas in the sample. Actual sampling of households was through a two-phase sampling that first lists all households in a randomly selected part of the EA with about 100 occupied households (in both urban and rural EAs). Adjustments in the sample results were made using household weights, calculated as the inverses of the probabilities of selection of each household, taking into account all the stages of selection. The final sample is shown in Table 1 below.

Findings from the Survey

Education, Migration, and the Nigerian Household

The literature on migration and development has long acknowledged education as a crucial factor in determining migration trends in literature. The infamous “brain-drain” description of migration of skilled workers from developing countries to developed ones is simply an acknowledgement of the potential losses incurred by countries when the best of their skills move to other countries. Docquier and Marfouk’s (2006) database and analysis of international migration by educational attainment literally force the issue and move it from the theoretical to the front burner in the empirical literature. Besides placing the household in a relatively more advantaged position to exploit opportunities that may be in foreign lands, education enhances individual skills and makes it more probable that the destination society will want him. Adjustment and possible assimilation is equally easier for the educated.

Table 1 Listed and sampled households in LGAs and EAs of the North and South

		North		South		Total
States in sample		6		12		18
LGAs		9		36		45
EAs		18		72		90
		No	%	No	%	
Listed	Int'l	4	0.49	813	99.51	817
	Internal	305	9.45	2922	90.55	3227
	Non-migrant	1441	35.75	2590	64.25	4031
Total		1750	21.67	6325	78.33	8075
Migration incidence		0.23		12.85		10.12
Interviewed	Int'l	3	0.53	560	99.47	563
	Internal	173	19.77	702	80.23	875
	Non-migrant	406	49.94	407	50.06	813
Total		582	25.86	1669	74.14	2251

Figure 2 (in Appendix) shows how household migrant characteristics affect child education while Table 2 shows the educational attainment of individuals in the sample by sex. The first six columns with figures indicate education attainment of household heads while the rest show the education attainment of the entire sample. It seems that while female household heads are generally less educated, the proportion of female household heads with no formal education of 30% is much higher than the 18% for their male counterparts. This is despite the fact that at just about 300 persons, the aggregate number of female household heads in the sample is relatively small compared to 1918 male household heads. This indicates that these women are not products of women liberation movement as much as they are of widowhood and sudden separation. The proportion with tertiary education appears not to be statistically different with about 17.9% of male household heads having and 16.1 female household heads. The share of men with secondary education is however higher at 23% compared to 19% for women. The same trends of more women without any formal education appear in the entire sample analysis (last four columns) where the proportion of females without any form of education is 23% compared to 15.5% for males. In contrast, 11.4% of all males have tertiary education compared to 8.6% of females. In between (for secondary, technical, and other education), the males equally show marginal gains over females.

On the whole, the country is not exactly highly educated though. While overall literacy levels have improved over the years, there is still much space for further improvement. For example, about 19% of the population still have no education at all and another 9% are merely alphabetized. About 53% of the entire population are either uneducated or have a maximum of primary school education while another 29% have a maximum of secondary or technical education. These numbers do not indicate how many actually finished each level of education; that can be deduced by a close

Table 2 Education attainment of individuals in sample

Highest level of schooling completed	All HH heads		Male		Female		All sample		Female		Male	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
No formal education	441	19.83	350	18.25	91	30.43	2352	18.95	1352	22.75	1000	15.46
Alphabetization	48	2.16	39	2.03	8	2.68	1063	8.56	504	8.48	559	8.64
Primary school	443	19.92	382	19.92	59	19.73	3151	25.39	1478	24.87	1673	25.86
Secondary school	492	22.12	435	22.68	56	18.73	3062	24.67	1411	23.74	1651	25.52
Secondary level technical	150	6.74	133	6.93	17	5.69	551	4.44	242	4.07	309	4.78
Tertiary/university	393	17.67	343	17.88	48	16.05	1245	10.03	508	8.55	737	11.39
Post-sec tech/voc	84	3.78	75	3.91	9	3.01	256	2.06	126	2.12	130	2.01
Graduate school	65	2.92	54	2.82	11	3.68	161	1.3	67	1.13	94	1.45
Other	105	4.72	104	5.42			553	4.46	247	4.16	306	4.73
Do not know	3	0.13	3	0.16			18	0.15	8	0.13	10	0.15
Total	2224	100	1918	100	299	100	12,412	100	5943	100	6469	100

look at the maximum number of years each individual spent in school—another indicator in the instrument—an exercise we intend to undertake in future analysis. Though the combination of formal tertiary, graduate school, and post-secondary technical education shows an appreciable 13.4% of the population, the share of graduate school education is paltry at 1.3%. Non-formal education is still relatively well patronized with nearly 5% of the population into it. The above education structure as outlined from the sample tells on the nature of jobs that the people can do and are doing. As we can also see, the job structure by each group partially reflects the education pattern embraced and the extent of formal training received by individuals. It seems that being born in an urban area is associated with greater access to education.

Those born in urban households seem to have greater access to education than those born in rural households. Table 3 shows the classification of the sample on the basis of the three areas of birth—rural Nigeria, urban Nigeria, and outside Nigeria in relation to the highest levels of education attained. The results indicate that 26% of persons born in rural areas have no formal education, compared to only 8% of persons born in urban areas that are disadvantaged. Beginning with the share of the sample with at least alphabetization, the proportions in urban areas become superior to those in rural areas. By secondary school, the relative shares completely turn in favor of those in urban areas and remain so for tertiary and graduate school education. The share of persons with “other” education is, however, higher in rural areas. Classification of the education by region shows that most of these with “other” education are in rural Northern Nigeria and the education referred to is primarily Islamic education. The proportion of the sample born outside Nigeria is relatively small and they managed to keep pace with education, mostly straddled between the two extremes of education between those born in rural and urban areas of Nigeria.

Finally, to the point that is of very great interest in the literature, by how much is education related to migration? We will not presume to provide an answer to this

Table 3 Level of education by place of birth

Highest schooling completed	Urban area within Nigeria		Rural area within Nigeria		Outside Nigeria	
	Freq	%	Freq	%	Freq	%
No formal education	418	8.26	1927	26.44	7	15.91
Alphabetization	606	11.98	445	6.11	5	11.36
Primary school	1347	26.62	1793	24.6	8	18.18
Secondary school	1540	30.43	1511	20.73	6	13.64
Secondary level technical/vocational sch	261	5.16	283	3.88	7	15.91
Tertiary/university	627	12.39	606	8.32	7	15.91
Post-secondary technical/vocational sch	125	2.47	130	1.78	1	2.27
Graduate school	119	2.35	40	0.55	2	4.55
Other	17	0.34	535	7.34	1	2.27
Do not know			18	0.25		
Total	5060	100	7288	100	44	100

question in this piece; clearly deeper correlation and regression analyses are necessary to be able to come to a firm conclusion with the present dataset. However, there seems to be a lot that could be gleaned from the plain presentation of the data as shown in Table 4. There seems to be remarkable differences among the household strata as found in the table. Panel A shows the education of the different household strata for all samples while panel B shows the education of adults above 15 years of age for each of the household stratum. For the entire sample, while nearly 63% of non-migrant households have only primary education at the most, only 39% of individuals in households with an international migrant are limited in education. In between, 52% of individuals with maximum of primary education are households with only internal migrants—closer to the non-migrant households but showing some difference all the same. In turn, 36.5% of individuals in households with international migrants have secondary school education compared to 21% in non-migrant households. Again, while 24% of individuals in households with international migrants have tertiary education, only 8% of individuals in non-migrant households have a degree. The non-migrant households make up with “other” education, which has been highlighted to consist mainly of Islamic education and which is predominant in the North. For all the levels of education, households with internal migrants straddle between the two performance extremes of non-migrant households and households with international migrants.

The gaps remain fairly the same as in the overall sample when only persons 15 years and above are taken into consideration as in panel B, amplifying the point that this difference in educational attainment has less to do with age than it has to do with other socioeconomic appurtenances that surround each household stratum. Here, while 49% of persons in non-migrant households are uneducated or have a maximum of primary education, the corresponding proportion in the international migrant household group is 26% retaining the above 23 percentage superiority of households with international migrants to non-migrant households. Internal migrant households remain somewhere at

Table 4 Education of migrants in the sample

	Non-migrant		Internal migrant		Int'l migrant	
Panel A: entire sample						
Education	Freq.	Percent	Freq.	Percent	Freq.	Percent
Uneducated or primary education	2890	62.61	2497	52.04	1179	39.33
Secondary education	949	20.56	1570	32.72	1094	36.49
Tertiary education	374	8.1	580	12.09	708	23.62
Other	403	8.73	151	3.15	17	0.57
Total	4616	100	4798	100	2998	100
Panel B: above 15 years						
Education	Freq.	Percent	Freq.	Percent	Freq.	Percent
Uneducated or primary education	1410	49.09	1264	37.92	601	25.94
Secondary education	809	28.17	1394	41.82	1004	43.33
Tertiary education	366	12.74	573	17.19	699	30.17
Other	287	9.99	102	3.06	13	0.56
Total	2872	100	3333	100	2317	100

the middle course between the two. Again, with 30% of members with tertiary education, the gap between international migrant households and their non-migrant counterparts rises to 17.4% as against 15.5% under the entire sample.

Clearly, the argument can be made that the higher education access drives mobility among international migrant households, but there is no question that the benefits of mobility feed back into maintaining the educational advantage of this household stratum over the rest. In the first place, if as is known in the literature, quite a significant proportion of remittances goes into consumption and social sector spending, assuming all other factors constant, then households at the same level of economic welfare with a non-migrant household but which have the advantage of having an international migrants and receive remittances are more able to pay for higher education than households without a migrant. In addition, the social network implies access to a wider range of education options than those without the same opportunities.

Policy Issues and Recommendations

The nature of labor migration in Nigeria is linked, on the one hand, to the pattern of (uneven) development accentuated by several dimensions of policy, and, on the other hand, to a pattern of capitalist growth, which has implied continued and growing informalization of the rural and urban economy. We have argued earlier in this paper that this pattern of development, apart from being inimical to the poor regions, is consistent with a “low road” to capitalist development, constraining the possibility of more rapid growth and technical change. In the light of this, we suggest that migration policy has to be concerned not only with supporting migrants, but also with the mutual links between migration and development across different regions. Some of the major policy recommendations in this context include the following:

1. Efforts should be made by the government to utilize resource flows from emigrants to strengthen national and regional development:

Policy frameworks regarding the effective utilization of financial inflows from emigrants to strengthen the development process at national and regional levels should be adopted. Similarly, the existing policies in Nigeria should address any concerns related to the migration of persons with professional or technical expertise, who are willing to make a contribution to the development process as returnees or in their non-resident status. These issues need to be considered at national and regional levels and effective policies need to be formulated which can integrate development concerns with the migration process. This is very germane in enhancing the role of migration on development across different regions in Nigeria.

2. Government should develop migration information systems:

In Nigeria, one of the areas that require immediate policy intervention is the creation of an appropriate information system on international migration. This would enable the authorities to monitor and manage emigration and immigration issues more closely. The status of out-migrant data can be improved by making the registration of entry by migrant workers mandatory at the Nigerian missions operating in labor-receiving countries. The nature of outflow data at

home can be strengthened by a fuller utilization of the data already available with government departments and recruitment agencies. A key requirement in this regard would be the strengthening of the statistical departments of the concerned government departments.

3. Efforts of government should be geared toward pro-poor development in backward regions.

Nigeria should adopt some policy initiatives to enhance a more vigorous pro-poor development strategy in backward areas of the countries. This could take the form of land, water, health, and education management through targeted approaches and increased public investment in those strategic areas. These strategies need to be accompanied by changes that improve the poor's access to land, to health facilities, to common property resources, to quality education, to social and physical infrastructure, and to governance institutions. The set of changes mentioned above will require strong organizational initiatives and intervention by the relevant authorities and on behalf of the poor. This will certainly enhance the welfare of the poor across the regions and reduce the negative impact of emigration in those regions.

4. Specific interventions should be targeted at some important sectors.

To ameliorate some of the negative features of labor migration, the authorities should target development at poor. Efforts should be made to strengthen the position of the poor who resort to survival migration. This can be achieved by helping the poor to overcome some major constraints that they face. These include food and credit. Access to food can be improved through a more effective public distribution of fertilizer and agro-allied credit schemes. Also, organizing the poor into self-help or savings groups, specifically tailored to the requirements of migrants, could help increase access to credit. These are ways to encourage the poor and ameliorate some of the negative features of labor migration.

Conclusions

This paper presents evidence on the importance for the migration decision in Nigeria of the person's situation, in particular: (a) family characteristics, such as being married to a working woman, having children, or living with relatives; (b) personal factors such as education or age; and (c) employment situation and other personal characteristics.

The paper also studies the influence of regional economic variables and shows that interactions between these and personal characteristics are crucial for explaining the current pattern of regional migration flows in Nigeria. Personal characteristics not only have an important direct effect on migrations but they also alter the effect of some regional economic variables on the migration decision and affect the interpretation of these regional effects. The findings about the effects of the regional variables enable us explain the present pattern of inter-regional migration in Nigeria. Thus, the important point is that the people that move in Nigeria are not always the same kind of people that used to do so. The reason is that the motivation behind migration decisions in Nigeria may have changed in line with regional variations or regional labor markets.

Acknowledgements We acknowledge the funding received from the World Bank Project on African Migration

Appendix

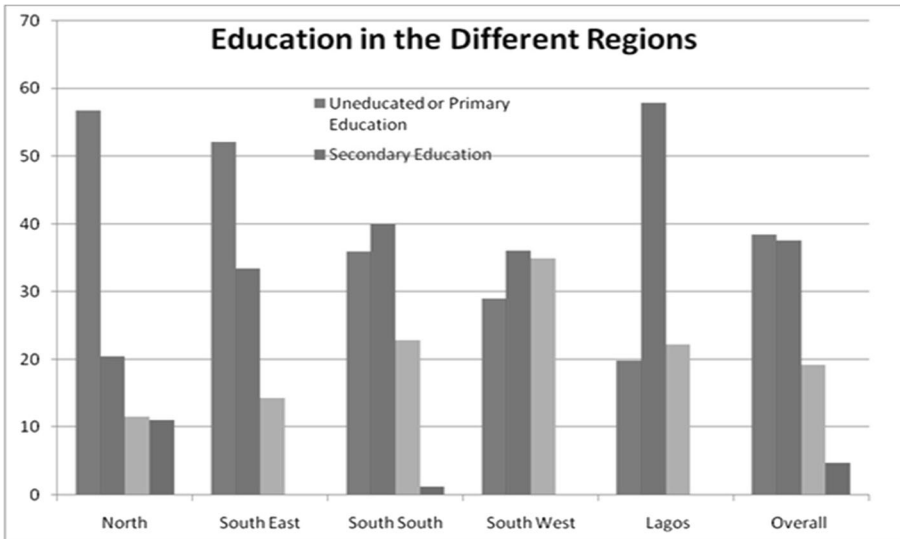


Fig. 1 Education in different regions

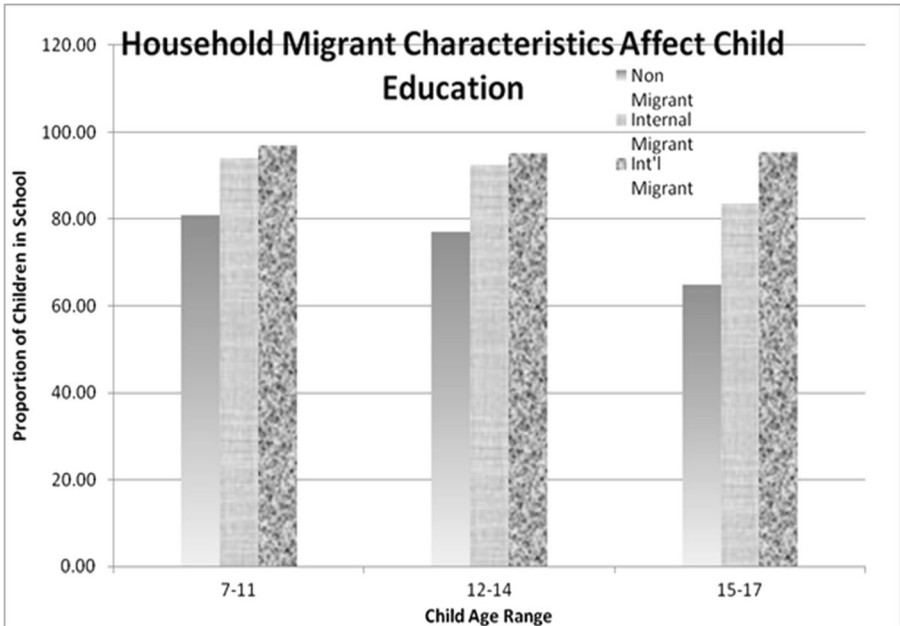


Fig. 2 Household migrant characteristics affect child education

References

- Abah, N. (2010). *Development Administration: A Multi – Dispensary Approach*. Enugu: John Jacob Classic Publishers.
- Adams, R. H. (2005). Remittances, household expenditure, and investment in Guatemala, World Bank Policy Research, Working Paper 3532, World Bank.
- Adepoju, A. (2003). Migration in West Africa. *Development*, 46(3), 37–41.
- Anderson, K., & Winters, L. A. (2008). The Challenge of Reducing International Trade and Migration Barriers. CEPR Discussion Paper 6760, March.
- Bilsborrow, R., Groenewold, G., Bruijn, B. (2006) Migration of the Health Belief Model (HBM): effects of psychology and migrant network characteristics on emigration intentions on five countries in West Africa and the Mediterranean region. Population association of America 2006 annual meeting, 2006.
- Central Intelligence Agency (2017). The world fact sheet 2017. Available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>.
- Commander, S., Kangasniemi, M., & Winters, L. A. (2004). The Brain Drain: Curse or Boon? A Survey of the Literature. In R. E. Baldwin & L. A. Winters (Eds.), *Challenges to Globalization: Analyzing the Economics* (pp. 235–278). National Bureau of Economic Research.
- Docquier, F., & Marfouk, A. (2006). International migration by education attainment, 1990–2000. In C. Ozden & M. Schiff (Eds.), *International migration, remittances and the brain drain* (pp. 151–199). Washington, D.C.: World Bank and Palgrave Macmillan.
- Docquier, F., Marchiori, L., & Shen, I.-L. (2010) Brain drain in globalization: A general equilibrium analysis from the sending countries' perspective. CEPR Discussion Paper, No. 7682.
- Dustmann, C., Frattini, T., & Halls, C. (2010). Assessing the fiscal costs and benefits of A8 migration to the UK. *Fiscal Studies*, 31(1), 1–41.
- Ghosh, B. (1996). Theories on Labour Migration. In J. Vanden Broeck (Ed.), *The Economics of Labour Migration* (pp. 77–113).
- Hicks, J. (1932). *The theory of wages*. London: Macmillan.
- International Organization for Migration (IOM). (2003). *Managing Migration Challenges and Responses for People on the Move* (Vol. 2, p. 14). Geneva.
- Lassailly-Jacob, V., Boyer, F., & Brachet, J.. (2006) South-South Migration, Example of Sub-Saharan Africa. Policy Department External Policies, European Parliament.
- Leod, Mc. D. and Molina, J., (2005): Remittances: Inequality and Poverty reduction-Some tests for Latin America. Papers prepared for LACEA meetings. AUP, Paris, France.
- Lewis, W. A. (1953) Economic Development with Unlimited Suppliers of Labour. In Agarwal, A. N and Singh S.P. (eds.), *The Economics of Underdevelopment*, Oxford University Press, New York, pp.400–491.
- Lopez Cordova, E. (2005). Globalization, Migration and Development: the Role of Mexican Migrant Remittances. *Economica*, 27, 236–259.
- Mallick, H. (2008). Do Remittances Impact the economy? Some Empirical Evidences from a Developing Economy, Working Paper Number. 407, Centre for Development Studies, Thiruvananthapuram, Kerala.
- Malligan, A. M., & Alok, B. K. (2011). The Effects of International Remittance Income on Child Education and Child Labour: Evidence from Nepal. *Indian Journal of Economics*, 519–538.
- Mara, I., Narazani, E., Saban, N., Stojilovska, A., Yusufi, I., & Zuber, I. (2012). *Analysis of Literature on the Effects of Remittances on Education and Health of Family Members Left Behind*. Western Balkans: Regional Research Promotion Programme.
- Massey, D. S. (1990). Social Structure, Household Strategies and the Cumulative Causation of Migration. *Population Index*, 56(1), 3–26.
- Piore, M. J. (1978). *Birds of Passage: Migrant Labour in Industrial Societies*. New York: Cambridge University Press.
- Ratha, D., & Shaw, W. (2007). South-South Migration and Remittances. World Bank Working Paper, No. 102, The World Bank.
- Sabira, N. (2006). Gulf migration and the educational Mobility of Muslim Women in Malappuram district, unpublished M.Phil. Thesis, Centre for Development Studies, Thiruvananthapuram.
- Stalker. (2000). *Workers without Frontiers. World Labour Report* (p. 132). Geneva: International Labour Organization.
- Tilly, C., & Brown, C. H. (1967). On Uprooting, Kinship and Urban Unemployment in Less developed Countries. *The American Economic Review*, LIX(1), 138–148.

- Todaro, M. P., & Smith, S. C. (2011). *Economic Development* (11th Edition). The Pearson Series in Economics.
- UNDP (United Nations Development Program). (2009). *Overcoming Barriers: Human Mobility and Development*. New York: United Nations Development Program.
- UNDP (United Nations Development Program) (2015). *Human Development Report 2015*. World Bank Development Report
- United Nations (2015) *State of World Population Publication*
- Van der Mensbrugge, D., & Roland-Holst, D. (2009). *Global Economic Prospects for Increasing Developing Country Migration into Developed Countries*. Human Development Research Paper, No. 50, United Nations Development Program (UNDP), New York.
- Wahba, J. (2007). In C. Ozden & M. Schiff (Eds.), *Returns to Overseas Work Experience: The Case of Egypt*. Washington, DC: International Migration, Economic Development and Policy, World Bank and Palgrave Macmillian.
- Wallerstein, I. (1974). *The modern world system: Capitalist agriculture and the origins of the european world economy in the sixteenth century*. New York: Academic Press.
- Winters, L. A., Walmsley, T., Wang, Z. K., & Grynberg, R. (2003). Liberalizing Temporary Movement of Natural Persons: An Agenda for the Development Round. *The World Economy*, 26(8), 1137–1161 August.
- World Bank (2015). Migration and development brief 25. Available at: <http://pubdocs.worldbank.org/en/102761445353157305/MigrationandDevelopmentBrief25.pdf>.
- World Bank. (2006). *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*. Washington DC: World Bank.
- Yang, D. (2006). International Migration, Remittances and Household Investment: Evidence from Philippine Migrants' Exchange rate shocks. NBER Working paper 12325. National Bureau of Economic Research.