Chapter 3
Migration in ELCA: who migrates, why, and what are the potential benefits?

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→ In December 2010, the rainy season caused a fault which destroyed Gramalote (Norte de Santander). Today, the only thing that remains standing among the ruins is the church's tower.

→ Colombia is truly a country in movement. Between 2010 and 2016, more than a fifth of households interviewed in the three rounds of the Colombian Longitudinal Survey by the Universidad de los Andes (ELCA) migrated at least once to another municipality or rural municipal settlement. The high rates of immigration from ELCA households are characteristic of Colombia. Lucas (2015) estimates that the percentage of migrants in the world and Latin America is 11.7% and 18%, respectively. In Colombia, this figure reaches 36.3%: one of the highest in the world.

Migration is an option and a strategy that households use to try to overcome poverty, mitigate the impact of negative shocks, seek better opportunities, and escape violence. The flow of migrants from rural to urban areas are also part of the country´s economic development process. The high wage gaps between the urban and rural areas, the better opportunities, and the better social services that cities offer attract migrants who contribute to making labor markets more dynamic, increasing the demand for goods, progressing to more advanced stages of economic development, and ultimately the growth of the country (Lucas 1997).

This chapter analyzes ELCA household migration in 2010, 2013, and 2016. It first examines the households' migration strategies and the characteristics of the migrants and then examines the potential returns of migration and how they are related with the migration strategy and the change in the occupational sector.

ELCA offers a unique opportunity to analyze and understand why there are high rates of migration, the characteristics of migration, and their potential consequences. A six-year follow up of the same households allows for the same families to be spatially monitored -as they move throughout Colombia- as well as identify what factors can explain the decision to migrate, and evaluate their conditions both before and after migrating. Until now, no Colombian survey has allowed for a detailed follow-up of migration, which has consequently limited understanding of the causes and its returns. Cross-sectional surveys, for example, do not allow it to be established if the higher income from a migrant household is because of the migration or if the migration happens because the household has a higher income, which works as a facilitating factor. As ELCA collects information both before and after the migration, this permits the causes and consequences of the migration to be untangled. This chapter undertakes a primary descriptive exploration into these topics.

→ Gladys Campo is 68 years-old and has been displaced due to violence. She came to Barrancabermeja with her eight children at the end of the 1980s. She appears in the photo with one of her granddaughters.

ELCA offers a unique opportunity to analyze and understand why there are high rates of migration, the characteristics of migration, and their potential consequences. A six-year follow up of the same households allows for the same families to be spatially monitored -as they move throughout Colombia- as well as identify what factors can explain the decision to migrate, and evaluate their conditions both before and after migrating.

3.1. Migration between 2010 and 2016: Rates, destinations, and possible reasons

This chapter concentrates on two types of migration: migration as investment and migration to mitigate shocks. Migration can be seen as an investment strategy motivated by the expectation of increasing wages in the destination. This decision involves migrating to regions with work opportunities, which are generally located in the country's urban areas, and,required investments to finance the cost of the move and the cost of living in the new location before finding work. As such, low-income houses that have restricted access to financial markets cannot resort to this strategy despite the high long-term returns and the added benefits to the country´s economy (Munshi & Rosenzweig 2016).

Furthermore, migration can be a strategy to mitigate the negative consequences brought about by shocks such as extreme climatic events, the loss of a harvest, or unemployment (Kleemans 2014). After having faced a reduction in their income due to an adverse shock, some -or even all members- of the household can migrate to compensate the decline in its income. As the homes are facing precarious situations, this type of migration is usually shorter in duration, to closer destinations, and there are generally less returns. Families resort to this type of migration due to a lack of more efficient risk-

→ Gladys Campo has been a victim of forced displacement twice in her life: the first because of her poverty in Cauca in the 1960s and the second due to paramilitary violence in the Magdalena Medio area in the 1980s.

management mechanisms such as access to financial markets or formal insurance. Thus, greater access to financial markets or insurance will reduce migration to mitigate shocks and promote investment migration.

ELCA's rural sample shows high rates of migration. One out of every three homes moved to another municipality or rural municipal settlement at least once in the period between 2010-2016 (see Table 3.1). By 2013, 20.2% of households had migrated since 2010: three quarters to another rural area -either another rural municipal settlement within the same municipality or in another municipality- and a third to urban areas. These percentages are similar in 2016: 21% of households migrated between 2013 and 2016, 65% of which migrated to rural areas and 35% to urban areas.

Migration was primarily between rural areas; this type of migration to similar and close rural areas is low cost, but probably produces low returns. It is probable that rural-rural migration is a response to negative shocks that the household had to confront while migration to urban areas is motivated by searching for better opportunities; this will be explored in the following paragraphs.

One group of households is highly mobile and migrated in both periods. 31.3% of rural ELCA households migrate, and from this number, 31.4% migrate in two periods. Between 2013 and 2016, a third of those who migrated in the two periods returned to the municipality they left in 2010. These figures suggest that, for a significant number of households, migration could be a relatively recurrent decision in the search for a better standard of living.

Urban households migrate substantially less frequently: close to 9% of urban households that were surveyed in the three rounds changed residence to another municipality[1] on at least one occasion. The majority of these moves (81% in 2013 and 77.4% in

1. Unlike the definition for the rural sample, the urban households that moved to another community within the same municipality are not considered to have migrated.

Table 3.1.
Rates of permanent migration

A. Rural Households	Number of Households	
Total	4.287	
Migrants 2013	864	20,15%
Rural	653	75,58%
Urban	211	24,42%
Migrants 2016	901	21,02%
Rural	586	65,04%
Urban	315	34,96%
New Migrants 2016	479	11,17%
Total Migrants 2010-2013-2016	1.343	31,33%
Migrants in 2013 who migrate once again	422	31,42%
Migrants in 2016 who return	128	14,21%
Return/ who migrate once again		30,33%
B. Urban Households	Number of Households	
Total	4.131	
Migrants 2013	212	5,13%
Rural	41	19,34%
Urban	171	80,66%
Migrants 2016	226	5,47%
Rural	51	22,57%
Urban	175	77,43%
New Migrants 2016	161	3,90%
Total Migrants 2010-2013-2016	373	9,03%
Migrants in 2013 who migrate once again	65	17,43%
Migrants in 2016 who return	28	12,39%
Return/ who migrate once again		43,08%

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

2016) were to other urban areas. Although they are less frequent than in the rural sample, they tend to move significantly larger distances. The high level of migration to other urban areas suggests that the principal objective of urban household migration is based on investment decisions rather than mitigating shocks. This could be the result of the urban population having less economic restrictions as they have higher income and more access to credit markets. However, it is curious that around 20% of urban migrants move to rural areas; the motive for these households' migration is unclear. It could be that they were originally rural households that temporarily migrate to urban areas to mitigate shocks, and they are returning to their municipality of origin. This chapter does not answer these questions; however, the following paragraphs do explore possible reasons for the migration strategies that all households take.

In addition to permanent migration, some people migrate temporarily and then return home. Temporary migration is defined in the survey as a move by any member of the household to another municipality for a period of more than six months. When one of the members of the household is sent to another place for a short period of time, the households reduce risk and ensure relatively stable levels of income as they diversify the opportunities and the probability of shocks happening (Stark & Bloom 1985). The rates of temporary migration for ELCA's urban and rural sample are shown in Table 3.2. This rates oscillate between 3.5% for urban households

in 2016 and 8.7% for rural households in 2013. On average, this type of temporary migration lasts for between 15 and 19 months. The two main reasons for temporary migration are, according to answers from both rural and urban household, the search for work opportunities, and the head of the household and their spouse separating.[2] Moreover, the search for better opportunities to study is the reason for temporary migration for around 14% of rural migrations and 5% of urban migrations. The armed conflict was a reason for temporary migration for about 7% and 5.4% of urban and rural homes, respectively.

Based on the georeferenced locations of the homes in each of the rounds, it is possible to estimate the linear distance that separates a household from its place of residence three years ago. The averages are presented in Graph 3.1. Rural households migrate shorter distances than urban households; for example, between 2013 and 2016, the average distance of rural households that migrated to urban areas was 70 km, but for urban households it was 89 km. As is mentioned in previous paragraphs, the households from the rural sample primarily migrate to rural areas, and these migrations are generally to places that are close by. For the period between 2010 and 2013, the average distance of rural migrations to other rural areas was 8.9 km, and between 2013 and 2016 it was 15.1 km.

The maps in Figure 3.1 illustrate the migration of these households and the changes in their spacial

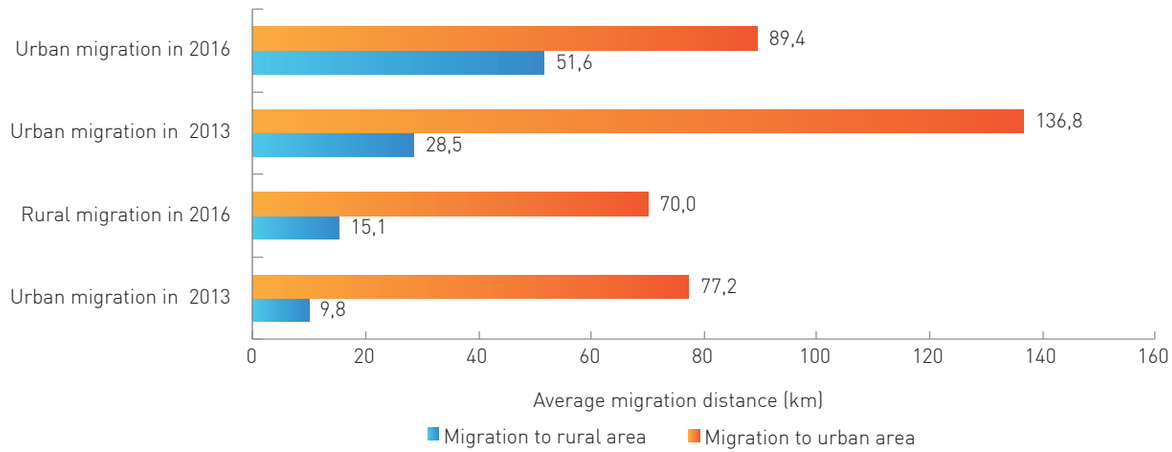
Table 3.2.
Rates of temporary migration

	Rural Households	Urban Households
Temporary household migration between 2010 and 2013	8,74%	5,39%
Average migration duration (Months)	18,88	18,95
	(9,75)	(10,30)
Temporary household migration between 2010 and 2013	6,62%	3,46%
Average migration duration (Months)	16,6	15,26
	(9,47)	(9,00)

Standard deviation in brackets

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

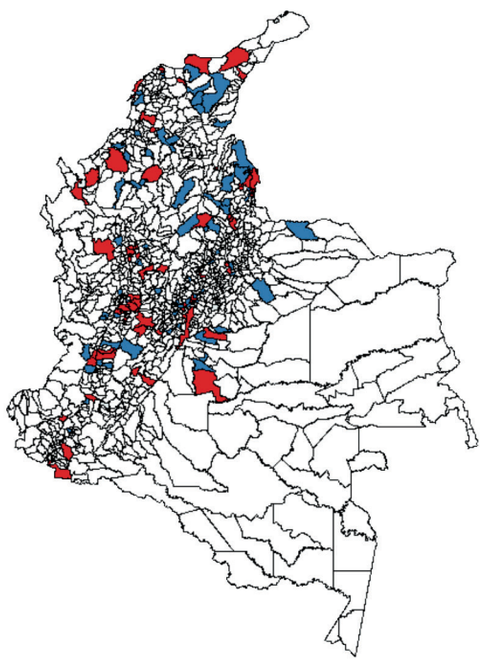
Graph 3.1.
Migration distances traveled



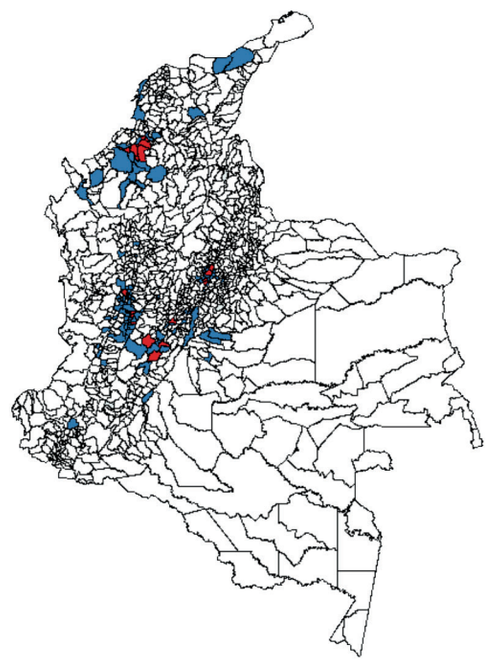
Source: ELCA 2010, 2013, and 2016. Authors' own calculations

2. To calculate these percentages, the option to move house was eliminated as this only happens when the head of the household migrates.

Figure 3.1.
ELCA Municipalities



Original CLS Municipalities: Urban Households
New Urban Municipalities



Original CLS Municipalities: Rural Households
New Rural Municipalities

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

distribution throughout the six years; we can arrive at four conclusions from these maps. First, this distribution corroborates that urban migration is less frequent and covers larger distances then rural migration. Households from the urban sample have scattered throughout the whole country; however, the municipalities of origin in 2010 are usually gravitational centers for migration. Second, the long-distance migrations are almost all to urban zones. Very few households incur the costs of moving so far from their original home to move to a rural area. Third, rural households seem to be more restrained in their migration. These households usually move to closer rural areas, and, when they migrate to urban areas, it is to close municipalities near the original rural municipal zone. Therefore, the map shows a dispersion that centers around the original municipalities in the 2010 sample.

3.2. Who migrates?

Migration strategies –their frequency, destination, and distance– suggest that households have different motives. Migration could be an effective strategy to increase the household´s income, to diversify risk, or to mitigate the impacts from negative shocks. The high risks associated with agricultural output, and the general lack of credit and insurance markets in rural regions can explain why there are high rates of rural to rural migration. Thus, this section seeks to characterize the migrants and evaluate if -in comparison with those

households that decide not to migrate- there are differences in their conditions previous to migrating that allow for the migration to be explained.

In order to identify migrants' profiles, we estimate the probability of migrating between 2010 and 2013 -controlled by household characteristics in 2010- and, also, the probability of migrating between 2013 and 2016 -controlled by household characteristics in 2013-. These estimations identify the correlations between household characteristics and the probability of migration. Tables 3.3 and 3.4 show the results from the estimations for the marginal effects that each variable has on the probability of migration.

Rural migrants are, more probably, households that have male heads, more young people, and lower education levels. Also, they are households with higher wealth indexes and with a lower frequency of problems related to accessing credit. Reporting problems accessing credit is associated with a 5.4% lower probability of migrating. This result suggests that financial restrictions could be an obstacle for rural households to migrate.

The profile of urban migrants is similar: households that have male heads and young members. The probability of migrating does not seem to be correlated with the work conditions of the head or their spouse. However, it is important to be cautious with the results as the urban sample of migrants is small, which reduces how precise the indicators are and the capacity to make statistical inferences.

→ Luis Eduardo Palacios is 72 and lives in Barrancabermeja. When his health allows, he works as a security guard or in other jobs such as a transportation assistant.

Table 3.3.
Probit: Marginal probability for rural households

	Migration between 2010 and 2013	Migration between 2013 and 2016
Number of people between 0 and 5	0.0318***	0.0286***
	(0.00870)	(0.0106)
Number of people between 6 and 17	-0.00118	0.0103*
	(0.00550)	(0.00583)
Number of people between 18 and 65	-0.0217***	-0.00420
	(0.00716)	(0.00840)
Number of people higher than 65	-0.0336**	-0.00766
	(0.0142)	(0.0142)
Female head of the household	-0.0454***	-0.00523
	(0.0167)	(0.0181)
Age head of the household	-0.000714	-0.00299***
	(0.000636)	(0.000659)
Highest household education (years)	0.000978	-0.00721***
	(0.00246)	(0.00262)
Total consumption (millons per year)	-0.000351	-0.000304
	(0.00142)	(0.00185)
Household suffered a shock between the two waves	-0.0140	0.0358**
	(0.0159)	(0.0158)
Suffered a natural disaster between the two waves	-0.0824***	0.0291
	(0.0155)	(0.0438)
Suffered a drought between the two waves	-	-0.121***
		(0.0158)

(Continue...)

The households that are members of organizations are 1.8% less likely to migrate; coming from a municipality with less than 20,000 inhabitants means that the household is 3.7% more likely to migrate.

The previous results also allow us to explore the relationship between the incidence of negative shocks and the decision to mitigate these shocks. These results are not causal, but they suggest potential causal relationships that could be explored in future research. Having suffered a natural disaster in the past three years is associated with a lower probability of migrating for both rural and urban homes (see tables 3.3 and 3.4). More specifically, rural households that have encountered extreme climatic events caused by La Niña (wetter than normal conditions) between 2010 and 2013, and by El Niño (droughts) between 2013 and 2016 show less probability of migrating. Having encountered wetter than normal conditions in 2010 and 2013 is associated with an 8.2% reduced probability of migrating than those who did not. In turn, rural homes that have suffered from problems relating to drought between 2013 and 2016 had a 12.1% less probability of migrating. The lower probability of rural households migrating due to extreme climatic shocks can be the result of a considerable drop in their income and some serious financial restrictions that impede them from migrating. Moreover, suffering from any other type of shock is correlated with a higher probability of migrating for both samples, which suggests migrating to mitigate shocks. However, as will be explained in the following sec-

Tabla 3.3.
Probit: Marginal probability for rural households *(...Continuation).*

	Migration between 2010 and 2013	Migration between 2013 and 2016
Covariated violence shocks betwen the two waves	0.0301*	0.00696
	(0.0168)	(0.0187)
Standardized size of land	-0.00117	0.00370
	(0.00418)	(0.00333)
Sale of land	-0.0686	0.0728
	(0.0469)	(0.0528)
Invested in land	-0.0141	-0.0205
	(0.0274)	(0.0229)
Member of an organization	-0.00209	-0.0149
	(0.0150)	(0.0153)
Wealth index	-7.29e-05	0.0145***
	(0.00305)	(0.00484)
Community wealth index	0.0138***	0.00239
	(0.00389)	(0.00408)
=1 if there is a problem gaining access to credit	-0.0538***	-0.00170
	(0.0145)	(0.0151)

Standard errors in brackets. * p↓0.10, ** p↓0.05, ***p↓0.01

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

Rural migrants are, more probably, households that have male heads, more young people, and lower education levels. Also, they are households with higher wealth indexes and with a lower frequency of problems related to accessing credit.

→ Rodrigo Octavio Ballesteros in 2017 with his two children Sara (12 years-old) and Cristián Ballesteros (8 years-old). They dream about skating and practice to make this a reality. Their dream is to compete in national competitions.

tions, there is an important heterogeneity in the relationship that exists between this probability and the occurrence of different types of shocks.

By disaggregating the different types of shocks from which households could suffer, important differences can be seen in the correlation with the probability of migrating in the following wave. Graph 3.2 shows the marginal effect that each type of shock has on the possibility of migrating. The results are only statistically significant for the rural sample, and, as such, we only include these results. Suffering a shock relating to production, defined as the

Table 3.4.
Probit: Marginal probability for urban households

	Migration between 2010 and 2013	Migration between 2013 and 2016
Number of people between 0 and 5	-2.29e-06	0.0156***
	(0.00431)	(0.00464)
Number of people between 6 and 17	0.00255	0.00129
	(0.00264)	(0.00354)
Number of people between 18 and 65	-0.00517*	-0.00392
	(0.00280)	(0.00321)
Number of people higher than 65	-0.0202**	-0.0129
	(0.00886)	(0.0101)
Female head of the household	-0.0133*	0.00315
	(0.00732)	(0.0115)
Age of head of the household	-0.000404	-0.000677
	(0.000324)	(0.000446)
Highest household education (years)	0.00102	-0.000802
	(0.00102)	(0.00156)
Head of the household employed	-0.00682	0.0117
	(0.0113)	(0.0113)
Head of the household unemployed	-0.00300	0.0189
	(0.0130)	(0.0278)
Spouce employed	-0.00543	0.00573
	(0.00739)	(0.0109)
Spouce unemployed	0.00308	0.0182
	(0.0134)	(0.0203)

(Continue...)

bankruptcy or closure of a family business and the loss of crops or animals is associated with a lower probability of between 11% and 15% of migrating for rural households. Additionally, having experienced a natural disaster or a drought –two types of shock that also result in the loss of assets– is associated with a lower probability of migration. It is possible that these shocks limit the ability for rural households to migrate as they directly reduce their amount of savings and restrict the liquidity that is available. This is constant with the average distances of migration for type of shock that is shown in Graph 3.3. The distance traveled by the migrants who suffer from these three types of shocks is substantially less than that of the migrants who do not suffer from any shock: the homes that suffer these shocks and migrate move to closer places, probably to temporarily mitigate the impact of the shock. Conversely, shocks such as the loss of a job, the death or illness of a member of the household, or a violent event in the community tend to be associated with a higher probability of migration and migrating a longer distance.

Investing in migration predicts that the highest earning households and the ones that have less financial restrictions are more likely to migrate. Graphs 3.4 and 3.5 present a first examination of this; they illustrate the rate of migration of rural and urban households, respectively, by quintile of consumption for both periods (between 2010 and 2013 and between 2013 and 2016). Rural migrants

Tabla 3.4.
Probit: Marginal probability for urban households *(...Continuation)*

	Migration between 2010 and 2013	Migration between 2013 and 2016
Total consumption (millons per year)	0.000311	0.000120
	(0.000192)	(0.000319)
Household suffered a shock between the two waves	0.0156**	0.0145*
	(0.00648)	(0.00760)
Suffered a natural disaster between the two waves	-0.0154**	-0.0324***
	(0.00718)	(0.00746)
Covariated violence shock betwen the two waves	0.00577	0.00339
	(0.00837)	(0.00796)
Member of an organization	-0.0185***	-0.00587
	(0.00688)	(0.00906)
Wealth index	-0.00162	0.00185
	(0.00147)	(0.00210)
Population of the municipality less than 20,000	0.0365*	0.0428*
	(0.0201)	(0.0241)
Population of the municipality between 20,000 & 100,000	0.00534	0.0445**
	(0.0142)	(0.0226)
Population of the municipality between 100,000 & 700,000	0.00468	0.0231
	(0.0128)	(0.0170)
Population of the municipality between 700,000 & 3,000,000	-0.00942	0.0128
	(0.0124)	(0.0164)
Population of the municipality greater than 3,000,000	-	-

Standard errors in brackets.* p↓0.10, ** p↓0.05, ***p↓0.01

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

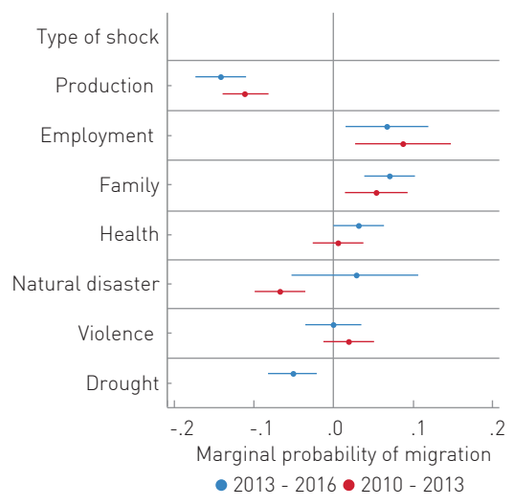
are frequently located in the three higher quintiles of consumption, a trend which becomes more marked in the second period (2013 and 2016). This is consistent with the idea that migration implies costs and that households with severe cash restrictions can see themselves as being restricted from migrating, even if it would be beneficial to do so. In turn, although there is less variation between quintiles, urban migration is, conversely, more frequent in the lower part of the consumption distribution, and it is less likely in the middle part of the distribution. This suggests that there could be less economic restrictions in urban areas than in rural areas. Similarly, in urban areas, it is mainly the households that face the most difficulties that decide to move.

3.3. Potential benefits of migration: changes in aggregate consumption

Migrating can generate economic returns. In order to explore the potential returns on migration, this section analyzes how ELCA's households' aggregate consumption has changed within the following periods 2010 to 2013 and 2013 to 2016 and then compares this evaluation between migrants and non-migrants. The panel nature of the data allows us to estimate the returns that, if they are not causal, control for non-observable household characteristics that could explain both the migration

Graph 3.2.

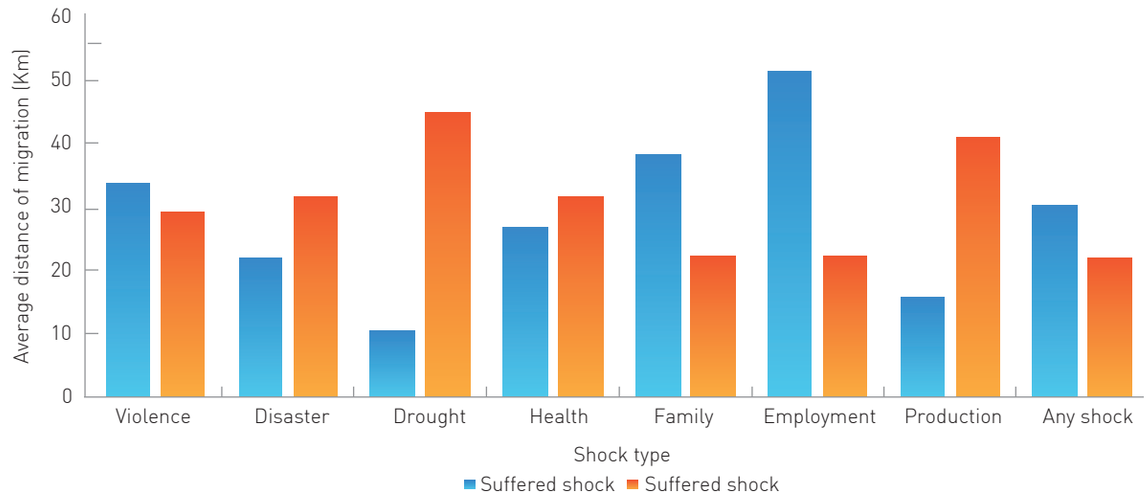
Marginal probability of migration according to type of shock: marginal effect



Source: ELCA 2010, 2013, and 2016. Authors' own calculations

Graph 3.3.

Types of shocks and distance migrated for rural households



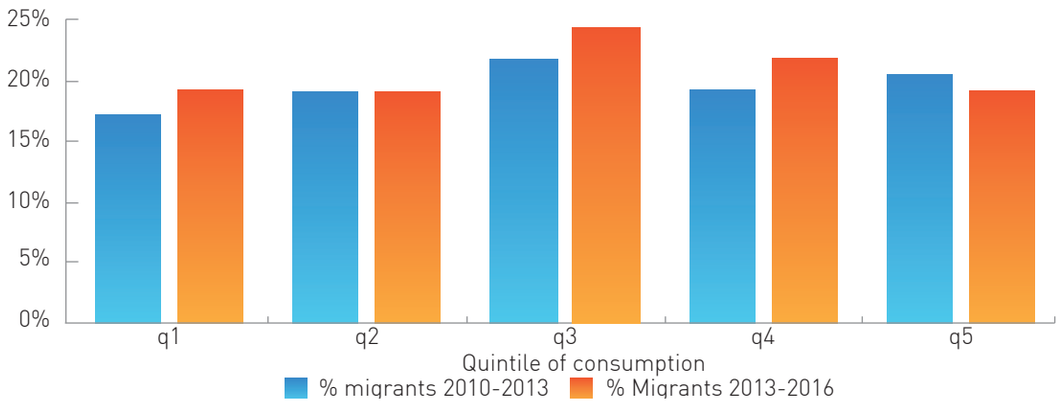
Source: ELCA 2010, 2013, and 2016. Authors' own calculations

and the increase in consumption. When the same household is compared over time, the possibility is reduced that the decision to migrate and the variations observed in consumption are simultaneously due to the household's particular features. For example, more entrepreneurial households may be more likely to migrate and to have bigger growth in consumption. This comparison allows us to control for the household characteristics that do not change over time and attribute the change in consumption to most likely be due to migration.

Graphs 3.6 and 3.7 present the coefficients obtained when estimating a series of regressions that associate the changes in consumption with migration. Regressions are estimated for: (i) household migration, (ii) rural migration to another municipality, (iii) rural migration to a rural municipal settlement within the same municipality (for the rural sample), and (iv) urban migration. These regressions control for fixed household effects: in other words, they eliminate all the non-observable household characteristics that explain changes in consumption and migration and observable household characteristics

Graph 3.4.

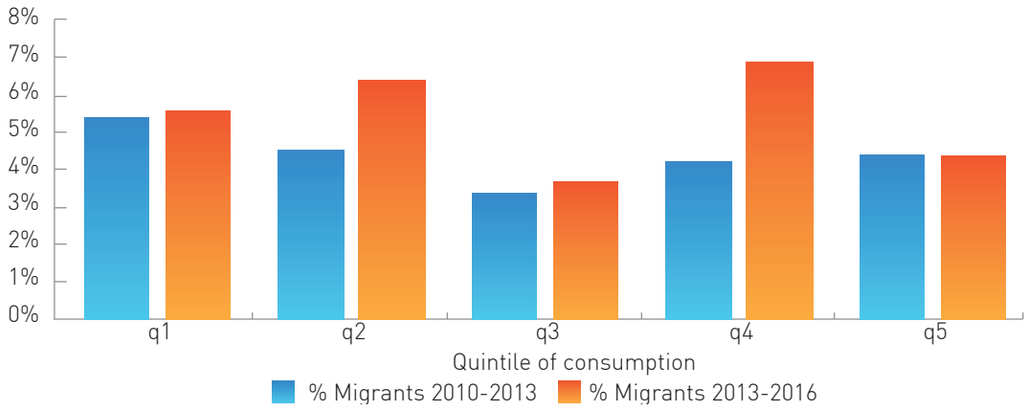
Migration rates by quintile of consumption: rural households



Source: ELCA 2010, 2013, and 2016. Authors' own calculations

Graph 3.5.

Migration rates by quintile of consumption: urban households



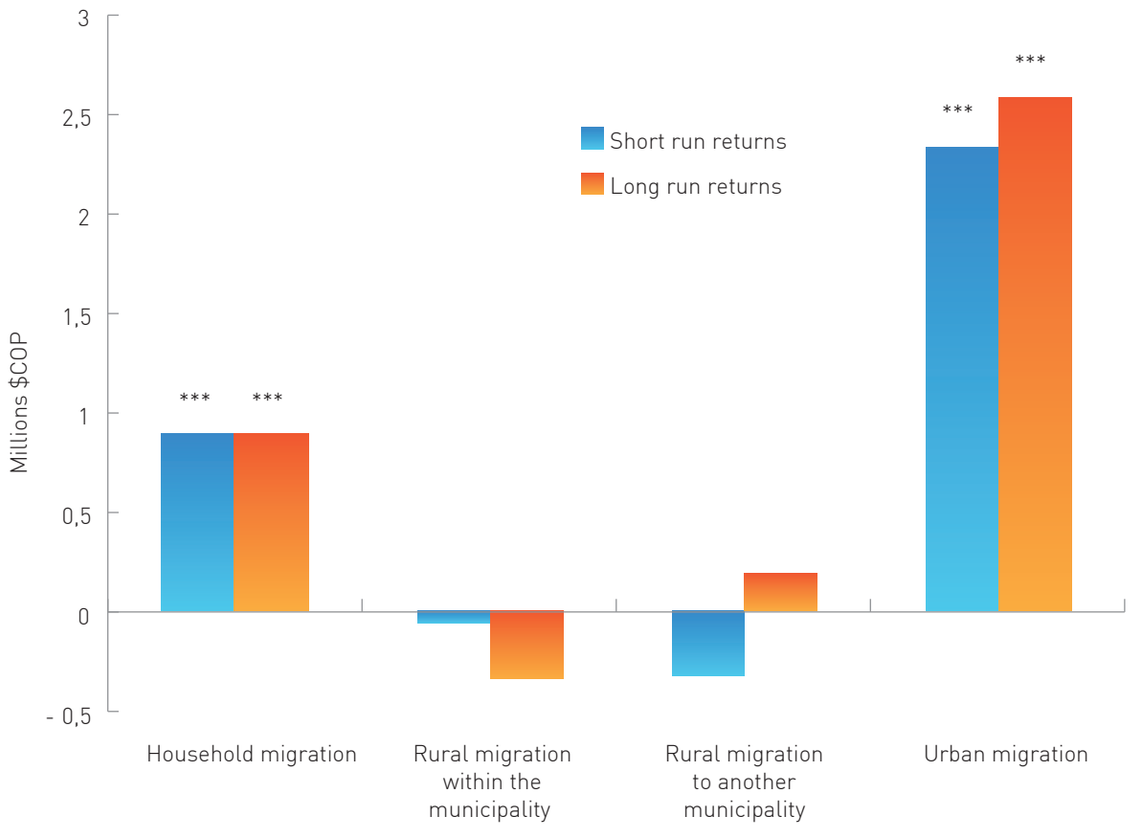
Source: ELCA 2010, 2013, and 2016. Authors' own calculations

that change between periods. The graphs report two estimations: (i) potential short-term returns (measured as changes in consumption between 2010 and 2013 and 2013 and 2016) and (ii) potential long-term returns (measured as the changes in consumption for 2016 for those who migrated between 2010 and 2013). These coefficients do not try to identify a causal relationship, but they do suggest the potential returns of migration.

The potential returns for rural households are presented in Graph 3.6. Migration is associated with an increase in short-term consumption that was a little less than COP $900.000 in 2016, or an increase in 10% compared to the aggregate consumption in 2010. The potential long-term returns are similar, which shows that the benefits of migration do not seem to have been strengthened over time. However, this average hides important differences in the potential returns of migrating in accordance with the migration strategy. The positive returns are marked by migration to urban areas. This migration is associated with increases in consumption that are not insignificant: the increase in average aggregate consumption between one round and the next for migrating households is 2.34 million pesos. This increase represents 26% of average annual income in rural areas in 2010.

This difference in consumption is not only sustained over time; however, it marginally increases when evaluated in 2016. In other words, the increase in consumption for migrating households continues in the long-term. Migrating to another rural area,

Graph 3.6.
Change in anual consumption: rural households



Standard errors in brackets.* p↓0.10, ** p↓0.05, ***p↓0.01

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

either in the same or to another municipality, does not generate significant increases in consumption compared to non-migrants. In fact, the coefficients for the potential short-term returns are negative, but not significant. Zero or negative returns could be the result of migration that was undertaken to mitigate the negative effects of shocks.

These differences in returns on migration are consistent with the two types of migration that are presented in this chapter. Those households that manage to save enough to invest in moving to urban areas manage to improve their income level while the homes that migrate to rural areas -generally close to their original home- presumably do this as the result of an adverse situation and with the purpose of stabilizing their income at the level it was prior to the shock.

The potential returns on migration for urban homes are not statistically significant. These returns are, on average, only positive in the long-term and when the destination is another urban area. This type of migration is associated with increases in consumption which were annually around $3 million pesos in 2016 (a 17% average level of consumption in 2010). Conversely, urban homes that migrate to a rural area have significant decreases in their annual aggregate consumption, which are maintained over time. These decreases are substantial: $3 million pesos in 2016. If there are a proportion of homes that migrate from urban to rural areas which con-

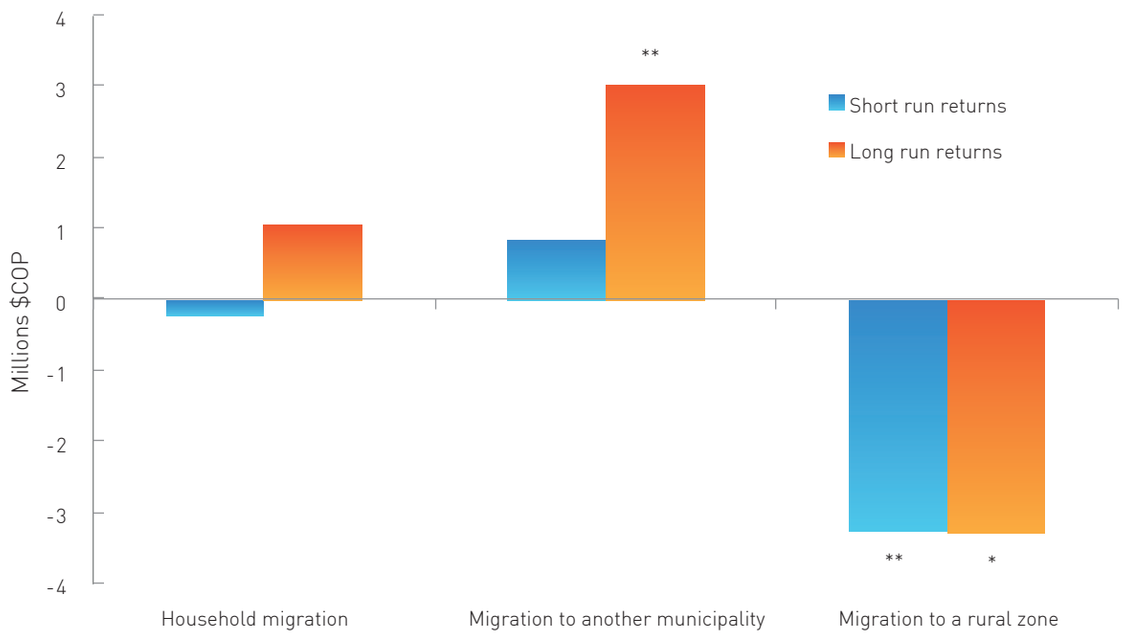
stitute around 1% of the total number of urban homes, it could be of interest to examine the possible causes of this particular type of migration as it does not conform to traditional explanatory models and there is no relation with clear benefits.

Graphs 3.8 and 3.9 illustrate how the different migration decisions generate divergen consumer tendencies for both homes in urban and rural zones. Two important conclusions can be derived from these figures. First, the households that migrate to urban areas increase their consumption more than non-migrants, and these differences deepen over time, which significantly increases the gap between non-migrants and those who decide to go to urban areas. Second, migrants to rural areas show a pattern of aggregate consumption that is very similar to non-migrants from rural homes or worse than non-migrants from urban homes.

Graph 3.8 and 3.9 suggest that there are two different groups of migrants. The first consists of the families who migrate to urban areas, larger distances, and that appear to get positive returns from migration. These returns are either maintained or are increased in the long-term: which means that

Graph 3.7.

Change in anual consumption: urban households



Standar Errors: * p<0,10, ** p<0,05, ***p<0,01

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

Those households that manage to save enough to invest in moving to urban areas manage to improve their income level while the homes that migrate to rural areas -generally close to their original home- presumably do this as the result of an adverse situation and with the purpose of stabilizing their income at the level it was prior to the shock.

there are even more differences with the group of non-migrants. The second is the group of families that migrate to rural areas, short distances, and that potentially gain no returns or, in some cases, negative returns from migration. It is likely that these families migrate to mitigate the impact of negative shocks.

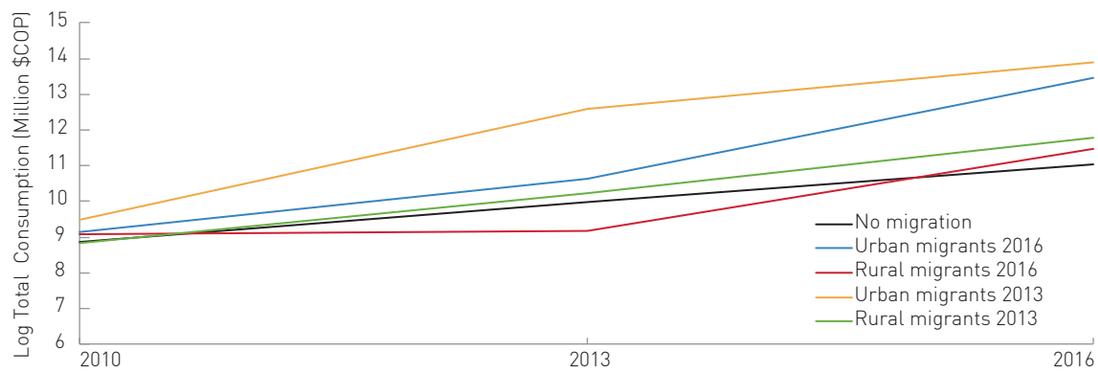
3.4. Potential returns from migration: changing occupation a possible reason

What could explain the positive changes in consumption from migration to urban areas? Is this the result of the urban-rural wage gap? Does this type of migration allow people to be employed in jobs with higher wages (Beegle, Weerdt & Dercon. 2011)? This section provides a primary analysis of these questions.

Migration often takes place together with the members of the household changing their occupational sector. Table 3.5 shows the change in the economic sector in which the migrant and non-migrant heads of the households are employed between 2013 and 2016. Migration seems to quicken the shift from the agricultural sector to other sectors. In the case of rural homes, 23.2% of the migrant heads of the households leave the farming sector for other occupations while the proportion of non-migrant homes that make this change

Graph 3.8.

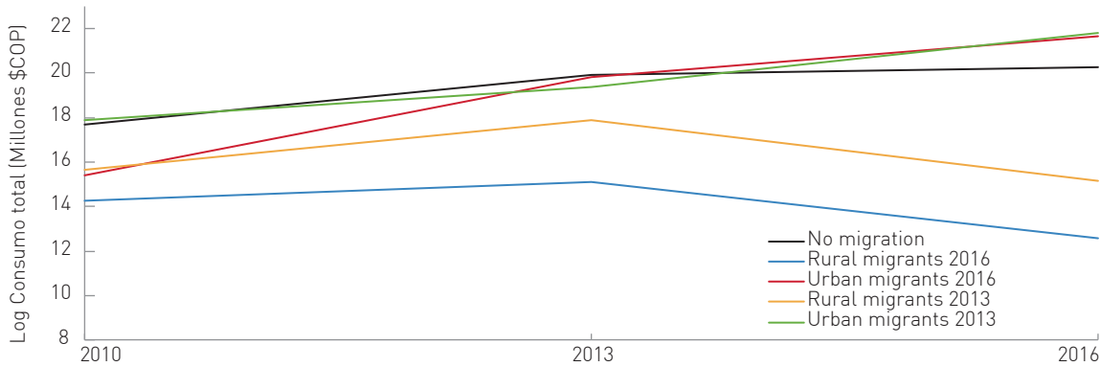
Evolution of anual aggregate consumption: rural households



Source: ELCA 2010, 2013, and 2016. Authors' own calculations

Graph 3.9.

Evolution of anual aggregate consumption: urban households



Source: ELCA 2010, 2013, and 2016. Authors' own calculations

is only 10.7%. In the urban zone, the proportion of migrant households whose head changes from the farming sector to mining, the manufacturing industry, or the service sector is significantly greater than for the non-migrant households. This could be explained by the notable difference that there between these two groups, even before migration, due to the proportion of households that are linked to the farming sector. In any case, comparing these percentages suggests that the transition towards higher paid sectors that fits together with migration could be one of the principal mechanisms through which household income is improved.

In this sense, graph 3.10 shows the coefficients obtained from estimating some similar regressions for the potential returns from migration. These regressions add an interaction between the condition of being a migrant and moving to the agriculture sector from a non-agriculture sector. The results suggest that an important percentage of potential returns from migration for rural households is due to the change of the sector in which members work. First, for the case of migration to other rural areas, the impact of changing occupational sector is so significant that it even compensates for the negative effect in consumption associated with this type of move. This suggests that leaving the agricultural sector, even if the household remains in a rural area, implies an increase in income. Second, the return for households that migrate to urban areas but remain in the agricultural sector continues to be significantly higher than those that do not migrate. This indicates that migration itself –moving from a rural to an urban area– implies a higher level on income, even when the household continues to work in the same sector. This could be explained by the urban-rural difference in salary or by the better economic opportunities in urban areas.

Table 3.5.
Percentage of employed heads of the household according to sector: 2013-2016.

Urban households		A. Migration			B. No migration		
		Occupational sector 2016			Occupational sector 2016		
		Agriculture or livestock	Manufacturing, industry, or services	Total	Agriculture or livestock	Manufacturing, industry, or services	Total
Occupational sector 2013	Agriculture or livestock	6.5%	10.1%	16.6%	4.7%	2.4%	7.1%
	Manufacturing, industry, or services	5.8%	77.7%	83.4%	1.2%	91.7%	92.9%
	Total	12.3%	87.7%	100%	5.9%	94.1%	100%
Rural households		**A. Migration**			**B. No migration**		
		Occupational sector 2016			Occupational sector 2016		
		Agriculture or livestock	Manufacturing. industry. or services	Total	Agriculture or livestock	Manufacturing. industry. or services	Total
Occupational sector 2013	Agriculture or livestock	51.7%	23.2%	75.0%	64.7%	10.7%	75.4%
	Manufacturing, industry, or services	6.8%	18.2%	25.0%	5.9%	18.7%	24.6%
	Total	58.6%	41.4%	100%	70.6%	29.4%	100%

Source: ELCA 2010, 2013, and 2016. Authors' own calculations

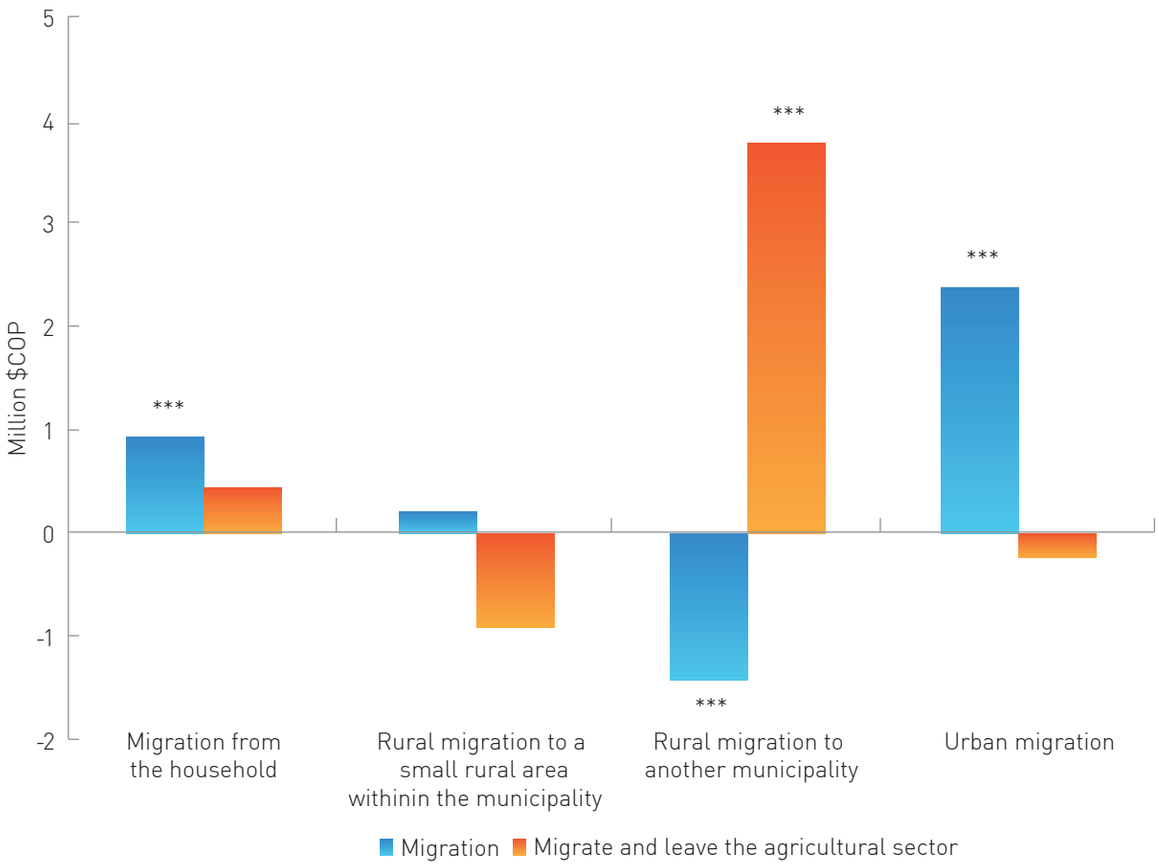
3.5. Conclusions

Colombia is a country in movement and transition. The high rates of migration for the rural sample illustrate the dynamism and the changes in rural areas. Households migrate to improve their standard

→ 35 people, including children, adults, and senior citizens live in the Palacios Campo family home in Barrancabermeja. Despite the small amount of space, the young find a way to spend time together. They are rehearsing a choreography for one of the girls' 15th birthdays.

Graph 3.10.

Returns from migration and from the change of occupational sector: rural households



Source: ELCA 2010, 2013, and 2016. Authors' own calculations

of living, to seek economic opportunities, to mitigate the impact of negative shocks and to escape violence. The chapter's analysis shows that migration seems to be an effective method to achieve this objective. The aggregated consumption of households that migrate to urban areas increases while the consumption of those who migrate to rural areas remains stable (denoting asuccessful consumption smoothing) or decreases a little.

However, it seems that the costs of migration and the limited access to financial markets are an obstacle for migration. In Colombia, particularly in rural areas, this restriction can be understood to mean that a majority of the short-distance migrations, as well as the ones to similar destinations, have low or non-existent observed returns.

→ Maria del Rosario Causil and her husband Antonio Franco have always made a living from working on farm in both agriculture and livestock. Today, they spend their time between the country and looking after their grandchildren as all their children work.

→ The Rincón family lives in the Villa Hermosa neighborhood (Medellín) in a house belonging to the grandmother and head of the family Blanca Rincón. Her dream was to build a house for her five children. Today she lives with three of them as well as three grandchildren and a great-granddaughter.

The absence of mechanisms that make it possible to insure against future risks imply, in turn, that migration is normally an ex-post strategy to mitigate negative shocks. This migration is not necessarily desirable and it can be avoided with improved policies to insure against negative shocks and better access to financial markets. Providing insurance in the agricultural sector, subject to particularly high risk levels, would allow households to be able to use migration as a longer-term investment tool, which would, therefore, bring the household better benefits.

Although migration can be a symptom of Colombian households' vulnerability, it can also reveal their adaptability to new opportunities and their versatility in confronting new challenges. In general, no household should see its mobility restricted -for either economic or cultural barriers- and it should not be forced to migrate due to foreseeable shocks. The information contained in ELCA makes it possible to diagnose migrant households' situations in detail in the country's and aides the creation of policies that allow the migration to continue in a way in which Colombian households can improve their quality of life.

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→ According to the Ministry of Finance and Public Credit's Adaptation Fund, the construction in Nuevo Gramalote has required investment totaling more than 400 billion pesos.

→ Carmen Santander Morales, her husband, and her children were victims of the disappearance of Gramalote. For seven years they have rented a property in El Zulia (Norte de Santander).