The importance of family networks on the reunification processes in the migration systems: A Latin American case studies in the United States.

**Abstract:** Migration processes have different strategies that modify the likelihood of a new emigration. The existence of a support network, in many cases of relatives, seems to function as a mechanism to promote migration. Reunification events are common in the displacement of families, but, for some groups, the time between the most frequent meetings; That is, between spouses or between parents and children, presents differences. This document studies the reunification through the information of IPUMS-I and IPUMS-USA: the first, analyzes the composition of households and observes the role of gender by type of reunification proposed, the second, the details of the variables influence the time of reunification between the corresponding types of reunification. The results show the predominance of the types of households and the change of the trend over time, as well as the variables.

**Keywords:** Household typology, reunification, survival analysis.

### 1. Introduction

The migration process involves a series of development strategies and links between individual and collective processes. In these processes, families as analysts are subject to various pressures that lead to and change migration decision-making and the performance of migrant groups.

Studies of migration regimes include the observation of migration between two or more countries, not mainly in economic, social and cultural contexts, and how migration evolves (Kritz, Lim and Zlotnik, 1992; Giorgli, Garcia-Guerrero and MasFerrer, 2016). Some authors have been reviewing this development for a long time, understanding it as a response to migration movements or cumulative behaviour within a specific political framework. The aim is to make people aware of current realities and possible changes to governance regulations.

Current work has adopted another approach to understanding migration, which is unusual, but some migrants are recently recovering. Therefore, migration is studied from the perspective of migration systems; migration is defined as a cognitive entity that can be dealt with as other types of social and natural systems with the characteristics or simple characteristics that constitute these systems. In the migration system, rules and regulations governing migration are derived from the post facto classification of existing data and activities and their

constituent entities. Therefore, the basic mechanism of migration dynamics can be described: the generation, maintenance or possible termination of migration. This paper examines the specific circumstances of an activity that can be described as a population mechanism of such a system and generates new processes of mobility, such as family reunification (Wallerstein, 1976; Hedström and Bearman, 2009; Mabogunje, 1970; Kritz, Lim and Zlotnik, 1992; Bakewell, 2014; Leon-Medina, 2016).

Thus, it is envisaged that one of the mechanisms is proposed through the home network of the destination, which is the determinant of a country's attraction to certain groups. This seems to be reflected in the different rates of reunion of each family member. The concepts of mechanisms contained in system definitions and population analysis are analytical tools in themselves, and can be grammatically described as activities or mechanisms within the migration system proposed as mechanisms.

So far, in the United States, since 1965, when the United States Public Law (No. 89-236) first interpreted the issue of unification, the concept of the immigration chain has been the main focus of discussion, which has not only aroused wide academic interest (Frizzell, 1987). It is believed that this is another mechanism for consolidating and maintaining the immigration system, including a major factor: the role of feedback or feedback in migration (Mabogunje, 1970; Bakewell, O., Kubal, A., and Pertra, S., 2016).

Thus, it is envisaged that one of the mechanisms is proposed through the home network of the destination, which is the determinant of a country's attraction to certain groups. This seems to be reflected in the different rates of reunion of each family member. The concepts of mechanisms contained in system definitions and population analysis are analytical tools in themselves, and can be grammatically described as activities or mechanisms within the migration system proposed as mechanisms.

Other discussions, including family reunification, have taken place in the context of the integration of migrants into society. These discussions have generated a large number of indicators to enable people to understand the extent to which migrants have successfully entered and integrated into destination societies. These indicators are mainly generated through surveys. These include questions related to family reunification, which are more widely asked whether administrative procedures can be used to achieve family reunification quickly and safely, such as residence permits, work permits, unaccompanied minors and dependants. However, compared with census data, these data are incomplete.

However, the approach we have taken in studying family relations among Latin Americans from Colombia, Ecuador, Peru, Bolivia and Mexico has been taken in a number of theoretical areas, such as the development of migration networks and their work as a tool for integration and unification in destination countries. Migrant networks are understood as the interpersonal relationships that link family members, friends and community members in their places of origin and destination, and seem to affect the composition of families in their destinations (Poros, 2011, Arriaga, 2007; Canales, 2017).

Since the information only details the composition of families, we will focus on such networks to review the operation of migration within these networks. Family reunification is therefore regarded as one of the known forms of migration, because there is a clear dependence between one or more family members and the growing tendency of those who remain at home to migrate (Ryder, 1978, Massey, 1990).

Migration models attempt to explain migration through the importance of human capital and total population, but they do not take into account all aspects of migration, making the development of migration different from group to group (Massey and Aysa-Lastra, 2011). Therefore, family factors expressed through kinship include a way of looking at these differences. In this case, the concept of migration networks is closely related to the concept of human capital, thus combining personal characteristics such as kinship with explanatory factors of migration processes (Recaño, 2002; Cohen, 2012; Gurak and Kritz, M., 2016).

To achieve this goal, this work will adopt two strategies to study family reunification: the first strategy is to conduct a long-term review of family composition from 1980 to 2015 using census samples collected from IPUMS-International (MPC, 2018) for data collected in the United States. Learn about family arrangements for selected Latin American immigrants. Secondly, through a more in-depth cross-sectional analysis of Costa Rican Social Cooperation Association samples, the paper identifies the differences in forms and times of family reunification and explores the role of gender in head of household. This is because there is little research on the time variables to achieve uniformity, especially the benefits of not having to recalculate the denominator one year or five years ago for calculating ratios or tendencies (Ruggles et al., 2015, Vos S. 1987; Alcalde Campos, 2014; Cano Salazar, M. 2014).

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#### 2. Data sources

The data provided by IPUMS-International (Minessota Population Center, 2018) for 1980, 1990, 2000, 2005, 2010 and 2015, as well as the Community of America survey provided by IPUMS-USA repository (Ruggles et al., 2015). The former allows for an analysis of family forms, including classification by sex and relatives. It also enables people to identify time trends related to formation, and then use the second model to test survival time patterns, because it contains a variable indicating the year of marriage, and can distinguish which families are combined at birth and which families are more in line with the definition of reunificaton.

### 2.1. Limitations

On the one hand, in the first stage, a limiting factor is to cooperate with IPMS international samples, because they do not know whether couples have previously been combined in their country of origin, so they have decided to use IPMS-USA samples to arrange reunion time. Because of the restrictions on the number of years of marriage, it is possible to filter the number of years of marriage to the country of origin through a more cohesive sampling.

In addition, another limiting factor is that statements about family roles, especially as heads of household and husbands, may differ when family members first migrate. However, we cannot see this from this source, so we will study what we said in the survey.

Another limitation related to cross-sectoral information is that family composition is not guaranteed when conducting surveys, but we must take into account that, driven by new immigrants, family composition has demographic impetus. Generally speaking, this is the

origin of economic pressure. Therefore, there should be no change in the time interval between censuses. On the contrary, this may be a five-year trend since 2000.

Finally, although not only Governments but also returns research institutes and researchers have collected some figures, Observations of the processes of migrant groups that seem to be related to migration have always been partial, as other factors have also played a role, such as the increase in single migration, mortality, re-migration to other countries, and so on.

# 3. Methodology

The methodological position proposed in this article is within the framework of demographic analysis, with greater emphasis on the characteristics of activities that can be included in the above strategies; mechanisms within the migration system (Bakewell, 2014 and Leon-Medina, 2016). Therefore, this position is mainly descriptive.

To this end, Latin American homes are defined as having at least one Latin American immigrant family. To analyze relationships within families, individuals in the category try to remain calm on the basis of the main lifestyles collected in censuses and surveys (Laslett and Wall, 1972; Recaño, 1995; Echri Canovas, C.J. 1995; Ullman, Maldonado and Nieves, 2014, Sunday). A., and Bayona, J., 2010; Garcia, B., and Rojas, O., 2002.

In this way, there will be four types of families throughout the country: a family built by one person (the head of a family); a nuclear family: the core of a core marriage (the head of a family and the childless spouse, or the head of a family and the spouse with children, or the head of a family, or the head of a family, or the head of a family, or the head of a family; the head of a family or the head of a family; the head of a family members and the other is composed entirely of nuclear family members; one compound family: one nuclear family or an extended family, another non-relatives. Other types of families are defined as special accommodations (prisons, camps, seminars, etc.). These are not mentioned in the analysis, but they are taken into account in calculating the proportion of the remaining families in the total.

In addition, the forms of family reunification in Latin American countries in the United States will be reviewed, and the number and percentage will be calculated according to the type determined by the time of migration, and then the Kaplan-Meier estimator will be analyzed to analyze the time of family reunion in Latin American countries. Finally, the major groups in

Latin America will analyze the relevant variables in immigration literature to test the Cox model, indicating that the type of Cox has a significant impact on the time of reunion.

# 3.1. Kaplan-Meier

Survival analysis enables us to simultaneously review the progress of different monitoring cycles (Woodward, 2014); to analyze the number of events (consolidation), rather than just the facts of events. In our case, the time of reunion will start with the first migration of family members (possibly heads of household, husbands or children). In this analysis, it is neither considered as an event under review, nor as an event under review, nor as an event on the left (higher than zero in time), nor as an event on the right (no date or cut-off time).

Kaplan Meier (KM) method divides the monitoring period by the number of consecutive time intervals, and calculates the main indicators in the life table, such as the number of survivors ( $n_t$ : people without reuinied), the survival probability of the time interval starting in time t ( $p_t$ ), the number of events studied at the beginning of t ( $e_t$ ), the probability that events will not survive, the probability of recombination in our case, and the estimated survival probability ( $s_t$ ) from baseline to the end of the study time.

$$q_t = e_t / n_t$$
.  $p_t = 1 - q_t$ .  $s_t = p_0 p_1 p_2 \dots p_{t-1}$ .

Therefore, we can define the function of risk assessment ( $h_t$ ) as:

$$h_t = \frac{e_t}{n_t u_t}.$$

Where  $e_t$  is still the number of reunion events in the time frame t, and  $n_t$  the number of risks (survivors or non-reunions). We also assume that the next unification is  $u_t$  units more distant, so the risk is measured in the  $t + u_t$  interval. If there is no reunification time, it is always equal to 1.

### 3.2. Modelos de Cox

These statistical models are mainly used to simulate data collected from time to event monitoring studies, which are considered as a variable (Woodward, 2014). To carry out this analysis, we consider all positive periods in order to understand the general reunion of different types of partners. Parametric risk model ( $h_t$ ) requires theoretical probability

distribution of data specifications. Among them, the proportional risk model adopted by Cox (1972) is the most commonly used regression model in survival analysis. As we have already mentioned, its great advantage is that it does not need to have any special form of distribution in its lifetime. The model was adjusted using the "Software Survival Package" (R Core Team, 2017).

If it is necessary to compare two groups of people (e.g., those who are exposed to and not exposed to certain factors affecting the risk of reunion), it is generally assumed that the risk proportions faced by a particular group (e.g., those who are exposed and not exposed) are the same throughout the life cycle. This is called the proportional hazard hypothesis (PH) or Cox model.

# 4. Analysis and resuslts

# 4.1. Data description

As shown in table 1, when choosing countries, the population expansion factor and the case from the 1% sample of the Forest Partnership in 2015 were used, with the former 10 ranking as the benchmark. It also shows the proportion of these people in the total population and reports on Latin American/Hispanic populations. The same is true of the proportion of men and women (Male/Female).

Table 1.

Population classification and Latin American percentages, compared with the total population of the United States, and with any ethnic group declared Hispanic or Latino.

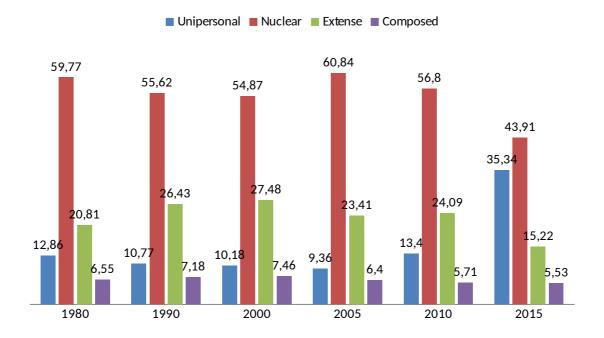
País	Population in EE.UU.	on EE.UU.	total % La/ Hi	N ACS Sample, 2015	% in ACS Smple	Sex ratio in ACS Sample (h/m)
México	11906325	3.7	23.59	93030	2.96	1.038
El Salvador	1382737	0.43	2.74	10096	0.32	1.007
Cuba	1225742	0.38	2.43	10517	0.33	0.924
Guatemala	957721	0.3	1.9	6980	0.22	1.240
Colombia	726766	0.23	1.44	5929	0.19	0.726
Haití	700683	0.22	1.39	5020	0.16	0.835
Honduras	610473	0.19	1.21	4097	0.13	1.010
Perú	469658	0.15	0.93	3826	0.12	0.913
Ecuador	455811	0.14	0.9	3355	0.11	0.832
Brasil	376453	0.12	0.75	3423	0.11	0.849
Total Hispanic	50477594			ACS 2015.	3147005	
Total USA	321418821					

Source: IPUMS-I, ACS 2015, own elaboration.

In the analysis of the sample of Latin Americans living in the United States of America and born in Latin America in 2015 by age and sex, it is noteworthy that Guatemala, El Salvador, Honduras and Mexico have relatively low sampling rates. Among other countries, more women's pyramids have been found in the Andean Community of Nations, ranking first in 10 countries, including Colombia, Ecuador and Peru.

# 4.2. Descripción de la composición de los hogares y el rol de sus integrantes

Let's first analyze the family structure with the type of reconstructed family. So, if we analyze Figure 1. By 2010, the most prominent of these two types of families will be the nuclear family and the large family. However, by 2015, the number of single families had increased by 11.2 percentage points since the 2010 census, and the number of nuclear families had declined dramatically. Similarly, from 1980 to 2000, the proportion of nuclear families declined slightly, while the proportion of extended families increased gradually.



*Figure 1.* According to the estimated percentage of four categories of households with at least one Latin American. Source: IPUMS-Internacional, Own Eaboration.

However, this trend has reversed since 2000. In the last decade of 2005-2015, single families increased from 9.4 per cent to 35.3 per cent, which can be interpreted as a strong impact of return due to the crisis, but other factors must also be taken into account, such as the displacement of single families themselves or third countries

Table 2 shows how the proportion of nuclear families in South America is higher than that in Central America. As can be seen from the table, by 2015, by classifying the top five countries, it can be explained in detail that in Uruguay, Chile, Venezuela, Brazil and Colombia, the proportion of single-parent families is the highest. The nuclear family is an order of some duplicated countries: Paraguay, Chile, Uruguay, Brazil and Costa Rica. If the classification is by the extended family, the order of classification is El Salvador, Guatemala, Nicaragua, Mexico and Honduras, and by the extended family: Honduras, Guatemala, El Salvador, Peru and Colombia.

Table 2.

Percentage of families with at least one Latin American by country of origin.

Туре	Unipersonal	Nuclear	Extenso	Compuestos
Paraguay	7.63	66.41	11.45	6.87
Chile	14.08	64.3	11.81	5.26
Bolivia	10.23	58.64	18.41	6.59
Brasil	13.51	61.87	9.36	6.69
Uruguay	16.44	62.67	12.67	5.14
Colombia	12.81	59.94	16.56	7.11
Ecuador	10.43	55.95	22.61	6.46
Perú	10.77	60.23	20.28	7.25
Venezuela	13.62	61.29	15.37	5.26
Costa Rica	12.21	61.4	15.8	6.03
Guatemala	6.59	52.4	25.85	9.91
El Salvador	6.37	52.32	27.45	7.96
Nicaragua	10.6	55.41	25.04	5.9
Honduras	8.81	50.97	23.11	10.09
México	7.62	58.94	23.27	5.11

Fuente: IPUMS-USA, ACS 2015, Own elaboration.

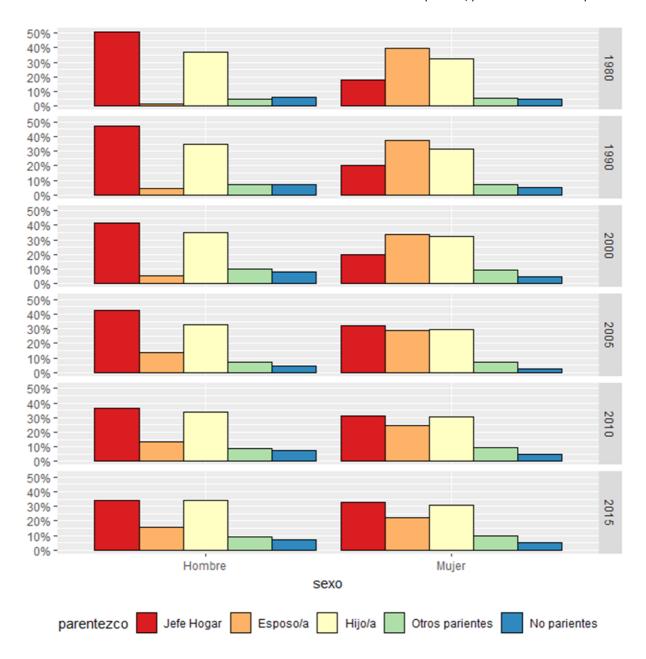
The main result is that in the United States, Latin American families are similar in composition. The most common form is the nuclear family, followed by the individual family. The latter varies widely across Latin American households, especially from 2010 to 2015. Nevertheless, there are still differences in the percentage of destinations among regions.

If we look at the number of returnees, we can see, for example, that the return rate of Mexican males is higher than that of females (64.4%), mainly in the 20-44 age group, which is more prominent because they consider themselves heads of the family (54.1%) (Giorguli and Bautista, 2018). Other authors have shown similar results in returning from the United States to Ecuador, Peru and Bolivia (Meja-Ochoa and Castro, 2012; Prieto, Pellegrino and

Koolhaas, 2015), which is consistent with the results of feminization of destination groups. However, we must emphasize that, as we have said, not all the increased proportion of single families belongs to returnees.

The weighted sample of family members provided in Figure 2. shows that the proportion of male heads of household decreases over time, and by 2015, the growth of female heads of household is close to that of male heads of household. Similarly, the proportion of men declaring husbands has also increased, while among women, the proportion has fallen to more than 20 per cent before 2015, lower than that of women declaring heads of households.

In addition, 35% of men declared their children, which is very close to the proportion of women declared their children. This trend has been maintained over time. Relatives and non-relatives earn less than 10%. The only obvious feature is that by 1980, the number of male non-relatives was higher than that of male relatives, and until 2000, the number of male relatives was lower than that of male relatives. For men and women, the percentage change was not significant. Finally, distribution seems to be equal, except that more people claim to be wives.



*Figure 2*. From 1980 to 2015, the ratio of population to head of household in IPUMS-Inernational samples was measured using the individual weighting method. Source: Own elaboration.

Similarly, the proportion of women as heads of household has increased, and the proportion of women as wives has decreased accordingly. Men also played a prominent role as husbands in marriages detected between 1980 and 2015. Similarly, since 2010, the number of single families has increased and the number of nuclear and large families has decreased, which is also the result of the return of Mexican immigrants. It demonstrates the decision to leave an anchored member, not only when it is possible to return, but also very definitely to make a living.

# 4.2. Understanding the Way and Time of reunification

In terms of form and time, we can see that by 2005, the Costa Rican Social Welfare Association had recorded a total of 78,097 Latin American households, compared with 10,6313 by 2015. The percentage of families with one person has increased, while that of families with two or more people seems to remain unchanged. The organization's first data is that 75% of immigrants from the country they represent are reunited with nationals below Mexico, which has the largest number of immigrants, accounting for about 95%. This shows that he is still a citizen of the United States. Mexicans emigrate considerably to their compatriots.

Please elaborate on how Latin American families are formed in terms of heads of household, husbands and places of birth. First, the sampling will focus on the analysis of couples, heads of households - husbands / wives, who come from the same country of birth. Table 3. It shows that by 2015, couples of the same nationality at the time of the census accounted for about 70 to 80 per cent of the countries of the Andean Community, compared with about 95 per cent in Mexico. It is noteworthy that a household headed by a husband from a higher country is a Peruvian family. First, the table shows that Latin American families are mainly composed of nationals.

Contry of hausehold head	Same nacionality spouse	Other nacionality spouse	Total cases
México	95.54	4.46	21203
Cuba	86.15	13.84	1893
Colombia	79.05	20.95	1031
Ecuador	75.51	24.49	637
Bolivia	75.41	24.59	122
El Salvador	71.83	28.16	1850
Perú	71.32	28.68	631

Source: ACS, 2015. IPUMS-USA. Own elaboration.

Table 4 shows two types of immigrant couples: the head of household and husband/wife (type 1) and the head of household and children (type 2). In this regard, Bolivia has shown a small number of cases, which will not be covered by our analysis due to the need for classification. Table 4 is the same as the sample of the Agreement on Cooperation in Agriculture and Animal Husbandry of 2015, but more details are given on the date of marriage and its role in determining the date of marriage. It shows that this is consistent with those who marry at birth. When the head of a family is a man, when he is a woman This includes the role of

gender in reunification to determine which countries are most prominent. As can be seen from the same table, the proportion of heads of household reunited with their husbands was higher if the husbands were men, such as in Ecuador, El Salvador and Mexico. At the same time, the proportion of couples who migrate is the highest.

In the case of children, the first is the migration of the head of household, and the second is the migration of children, which is similar. El Salvador and Mexico have a higher proportion, the former being female heads of household. In addition, four of the five selected countries are still dominated by women.

Tabla 4.

Percentage of unweighted sample countries by sex and type of reunification.

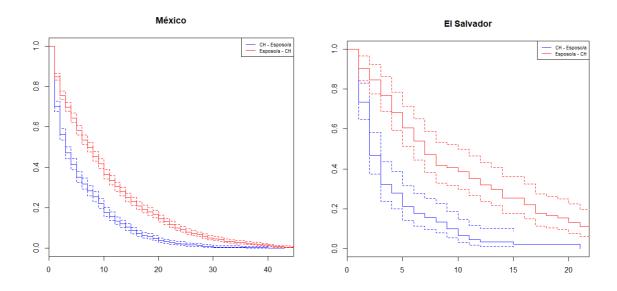
Couples with same nacionality	Sex of Household head	Household head - Spouse	Spouse -Household head	At the same time	Total couples type 1	Household head - Children	Children - Household head	At the same tame	Total couples type 2
Colombia	Hombre	20.9	13.3	65.9	211	25.5	7.0	67.5	157
	Mujer	4.9	34.4	60.7	61	23.1	11.5	65.4	104
Ecuador	Hombre	31.2	15.6	53.2	109	51.7	6.9	41.4	87
	Mujer	7.0	55.8	37.2	43	55.8	10.4	33.8	77
Perú	Hombre	29.7	10.8	59.5	158	38.7	8.7	52.7	150
	Mujer	8.3	33.3	58.3	48	30.0	3.8	66.3	80
Bolivia	Hombre	33.3	16.7	50.0	36	26.9	7.7	65.4	26
	Mujer	11.1	44.4	44.4	9	25.0	33.3	41.7	12
México	Hombre	37.0	26.6	36.4	2751	50.0	8.8	41.3	2891
	Mujer	13.1	8.9	78.1	1026	29.6	9.6	60.8	2570
El Salvador	Hombre	38.2	20.8	41.0	212	60.4	6.1	33.5	245
	Mujer	10.5	54.7	34.9	86	62.4	5.3	32.3	226
Cuba	Hombre	12.7	11.3	76.0	600	29.3	9.7	61.0	351
	Mujer	7.8	19.4	72.8	283.0	15.3	10.7	74.0	411

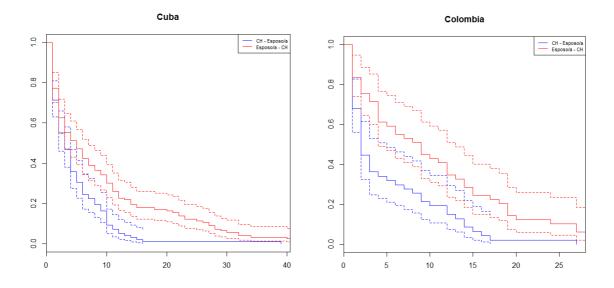
Fuente: ACS, 2015. IPUMS-USA. Elaboración propia.

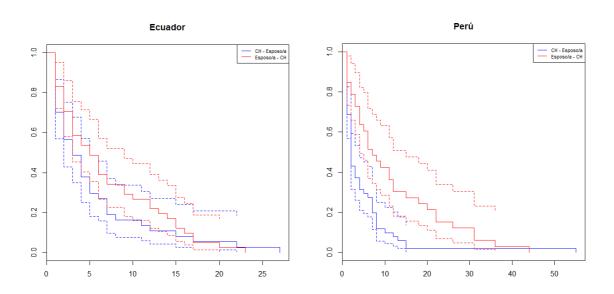
# 4.3. Research on Unified Time by Kaplan-Meier (KM) Calculator

From now on, the focus of the analysis will be to recognize that countries have different estimates of Kaplan-Meier (kilometres) for the time of arrival of a simple subtraction from the number of years each family member arrives. If we use this estimate, we examine the possibility of reunion in terms of time vectors (years) based on the difference between the year of arrival of the head of household (CH) and other family members as spouse (Esposo/a) and children (Hijo/a), and vice versa. As shown in figure 3, couples in the six most populous countries are reunited at this time.

It should be recognized that confidence intervals overlap, that is to say, they are not significantly different. However, in some countries, differences obviously depend on the size of the sample and therefore on the size of the interval. The case of Mexico and El Salvador best demonstrates that the samples have strong confidence intervals. However, as shown in Figure 3, there are significant differences in some well-performing countries during certain periods of reunification. Bolivia was excluded because of inconsistencies in the charts of its confidence intervals. From now on, the k axis is the estimated KM and the x axis is years.



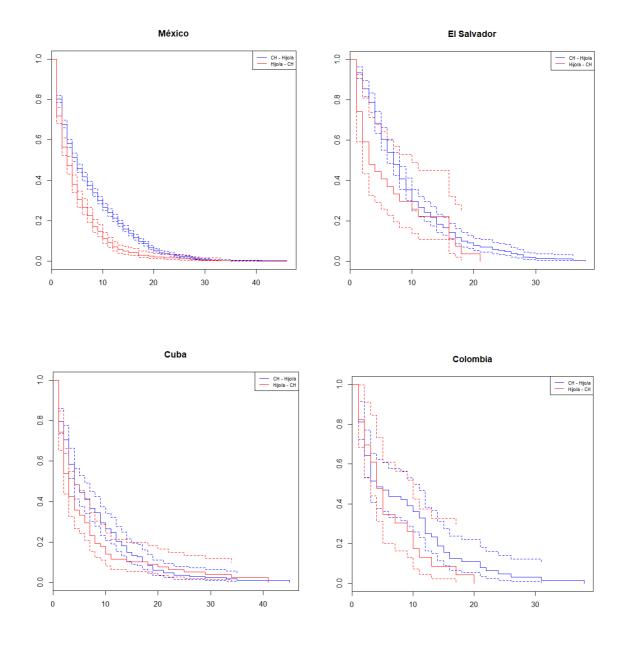


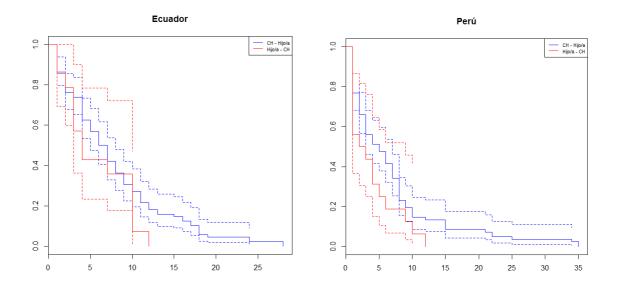


*Figure 3.* Kaplan-Meier estimates are used for family reunion time, and vice versa when the head of household (CHa) migrates before the spouse (Esposo/a). Source: ACS, 2015. Own elaboration.

For some countries, the first thing we can see is that when the husband/A first migrates, the time of family reunion is slightly longer than when the head of household first migrates. By contrast, Ecuador, El Salvador and Mexico have made faster progress than Cuba, Peru and Colombia.

On the contrary, family reunion occurs when family relations consist of the head of a family and their children. If we look at Figure 4, we will find that when children reunite them, people who are heads of the family migrate much earlier. Most of the cases selected occurred 10 years ago. For Mexico, at least more than 60 per cent do so. On the other hand, Figure 4 shows us that family reunion in Peru and Ecuador is relatively short, because first of all, the migration of heads of household, although we do not have enough evidence to better estimate the function of survival. The collective of Mexico and Colombia is likely to achieve reunification in a longer period of time.





*Figura 4.* Kaplan-Meier estimates that when the head of household (Ch) migrates before his children (Hijo/a), the time for family reunion, and vice versa. Source: Own elaboration.

# 4.4. Modeling time of reunification

In the next phase, the ipms-usa sample in the United States allows us to work together with the year of marriage, and we will forget who was the first to arrive, because we are more interested in the time spent on general reunion and the variables that affect it. The typical variables in the migration literature, in the context of family reunification, we can consider the importance of these variables to the head of household. They reflect part of the socioeconomic background provided by the country of origin. Because there are too many grades, especially for variable occupations, choose to list only those that are meaningful.

Therefore, the variables and categories considered are: age: the age from the last birthday of a person, or the date on the list, and the minor under one year of age as the reference category of the model. 1: Male (reference category), 2: Female. Year since immigration: the year after the immigration of a person born abroad to a country on the list; educational level: recording an individual's educational achievement according to the level of completion (grade or other milestone). Occupational categories: The main occupations of record-takers are compiled in accordance with the outline of the International Standard Classification of Occupations (ISOC) 2010.

The variables with 95% confidence in the Cox model are listed in Tables 5 and 6 below. The variables listed use the proposed classification in IPMS-USA. There were 458 occupational categories at first, and then 27. Therefore, this tool will be used as a diagnostic model, that is, beyond the numerical interpretation of the risks involved (i.e., the percentage of increased or non-increased risks in a category of independent variables). We will focus on the positive (+) and negative (-) effects of synthesis on reunification possibilities, i.e. they pose risks to reunion or prevent reunion.

Table 5 shows that for Colombians, children between the ages of 0 and 4 are a factor in delaying reunification, and for Ecuador, it can be said that reunion is more likely to take place over time. For example, low education or food preparation and service. Peru did not find any significant variables. In the case of Mexico, El Salvador and Cuba, the results showed that some variables delayed the process of family reunification, such as age, female identity and, unlike Ecuador, the longer migrants took, the less likely they were to be reunited, and the fewer migrants.

**Table 5**.

Significant variables in the Cox model for reunification of Household head - Spouse

COLOMBIA	ECUADOR	PERÚ	MEXICO	EL SALVADOR	CUBA
Having kids from kindergarden upt to 4th grade	Year of inmigration (+)		Age (-)	Age (-)	Age (-)
	Having education from year 5 to year 12 (-)		Sex: Women (-)	Yeat of immegration (-)	Year of immigration (-)
	Working in food services (-)		Year of immigration (-)	Office work administative support (-)	
			Having education up to 9th grade (+)		
			Having 4 years of univestiy (+)		
			Having 5 or more years of univestiy (+)		
			Woriking in activities of extraction of commodites (-)		
			Working in sales (-)		

Source: Own elaboration from IPUMS-USA data, 2015.

As shown in table 6, in the context of family reunification between heads of household (CH) and their children, it can be seen that for Colombia's CH, working in the construction sector has a role in reducing the risk of child reunification. This situation, as well as community and

social services activities in Mexico, is the only factor that promotes family reunification, while other factors have a positive impact on the possibility of reunification of heads of households with their children.

Table 6.

Significant variables in the Cox model for reunification of Household head - Children

COLOMBIA	ECUADOR	PERÚ	MÉXICO	EL SALVADOR	CUBA
Working in Construction (-)	Year of immigration (+)	Sex: Women (+)	Sexo: Mujer (+)	Year of immigration (+)	Age (-)
	Having up to 2 years of university(+)	Year of immigration (+)	Año de inmigración (+)	Having education up to grade 11(+)	Sex: Women (+)
		Working with art, design, entretainment, sports and media (+)	Having education from grade 5 up to 12 (+)Having 5+ of university (+)	Having 5+ of university (+)	Working in production sector (+)
		Working with comunitary and social services (+)	Having 4 years of university (+)	Working in Construction (-)	
		and social services (*)	Having 5+ of university (+)	Working with personal and care services (-)	
			Working in bodyguard services (+)	Unemployed (-)	
			Woriking with comunitary and social services (-)	Working with installing, manteinance and reparation services (-)	
				Working in cleaning and manteinance of buildings (-)	
				Working in office and administrative support (-)	
				Working in food preparation and services (-)	
				Working in production sector (+)	
				Working as health professionals and practicioners (-)	
				Working in the transporting and movement of materials (-)	
				Working with sales (-)	

Source: Own elaboration from IPUMS-USA data, 2015.

In the above analysis, the results vary in important variables, for example, highlighting the categories that indicate the positive impact of professional careers of Colombian and Peruvian groups. However, in the two cluster types studied, the effects of service industry occupations and low-skilled and low-paid occupations are obvious. Similarly, the positive impact of more education (years of university) and less education (below ninth grade) is

evident. Therefore, the results and the overall significance of the analysis are not too different, but complementary. Similarly, children's reunification shows more important variables, which indicates the extent of family reunification compared with other types of family reunion, but not quantified.

#### 5. Discusion and conclusions

In order to emphasize the importance of family networks in the migration system, a theoretical introduction of family networks was made in order to identify the important role of family networks in the development of migration, such as reunion. This is a clear result of the mature process of migrants'entry into destinations and reunification, which is a mechanism for maintaining contact and providing feedback or feedback in the process of migration in order to maintain continuity in new migrations. But also in the exchange of information, money, property and so on.

A cross-cutting issue is the feminization of household heads over time. It seems that this behaviour is more due to the imposition of economic and political systems, which mainly promote the return of men than to the prior plans of the country of origin, although such plans may exist. Feminization can be a mechanism/activity within the system for reasons that can be found in many other social or economic factors.

Similarly, the type of family structure retains the nuclear family as the main unit of all groups. According to classification, some families are more actively involved than others, so the number of single-parent families has increased. They remind people of some of the possible reasons. On the one hand, some return to their countries of origin, but there is no whole family unit to maintain some form of anchoring. On the other hand, these families could have sent a pioneer, the only one included in the census. Similarly, it should not be forgotten that the most common fact is that they work or study there.

The fact that the proportion of nuclear families in Central American countries varies so much shows that neighbouring regions have an impact because of the importance of such a centre as the United States to attract international migration. Migration traditions are also manifested in the proportion of nuclear families and more complex forms, such as the widespread existence of extended families, especially in Central American countries.

Most of the households sampled are couples belonging to the same ethnic group, which to some extent reflects the preference for the same group relationship (possibly endocrine), and may become a positive factor in the cohesion of migration networks.

A related aspect is the dynamic impact of the order of migration and the gender of the head of household on this process. On the one hand, we can see various types of migration, first the migration of household heads, then the migration of husbands. In this kind of migration, the male dominant phenomenon is obvious, first the migration of husbands, then the migration of household heads. The latter is mainly women, so it eventually became the vanguard of men. This may lead to some assumptions about gender choice in pioneering activities, which may vary in a system with different evaluations of gender equality issues.

One factor affecting family structure is return, which must be taken into account, particularly in the migration process. Although these figures indicate a large return of migrants, especially to Central America and other countries, this is not the only fact that some types of families are increasing if we continue to have separate inflows and others migrate to other countries, such as Canada or some countries in Europe. It is also necessary to examine the existence of death processes related to family arrangements and the impact of reunification on returns.

Through the analysis of reunion risk by Kaplan-Meier method, some problems related to the development of personal network are put forward. First, there is evidence that the reunion of the head of household with the husband/wife occurs more quickly in this order than in the opposite, while in a couple consisting of the head of household and the children, the opposite occurs. This difference indicates that there may be a pre-migration strategy, but also a large proportion of households migrate at the same time. Therefore, the strategy of sending children first may be due to the presence of other family members.

However, if countries differ in the time of reunification, how prepared is a collective to achieve reunification, given the development of collective employment and social integration. These differences make family reunification a mechanism through which family migration processes and collective solidarity are promoted and maintained.

Similarly, the analysis shows that there are important and positive variables in increasing the likelihood of spouse or child reunification, and these variables are different. In many cases, the positive impact is consistent with the persistence shown by groups who have increased years of migration, improved educational levels or engaged in certain occupations.

There are also some factors that have had a negative impact, namely, reducing the possibility of reunification. An obvious example is the volatile annual migration of El Salvador, Mexico and Cuba, which can be explained by the close neighbours as a result of the reunification of a couple. There are fewer and fewer rules for staying in the immigration office (for example, if you immigrate to Spain), so reunification can be achieved under more stable conditions, which takes longer. On the other hand, some occupations are usually hard or low-income, so, for example, in the case of reunion with children, these occupations can not afford to spend enough time in such occupations.

Previous analysis (excluding the conditions for marriage in the country of origin) showed that the number of male heads of household increased in all types of family reunion, and that if the head of household was the first, all the curves estimated by Kaplan-Meier would achieve reunification faster. However, the results are biased, because many people may lead by example, marry in the United States, and later reunite their own or another married child. Therefore, in order to study the more detailed process, the lack of information in the census must also be taken into account to some extent.

Regarding the impact of policies such as the integration framework of the Andean Community of States (Andean Community), the report highlighted the differences in the feminization of the collective and the low emphasis placed on the representative countries of Central America and the Caribbean. It has no effect on the time of reunion of established migration types. It seems to be of little help to incorporate this factor into the analysis as a distinguishing factor.

Similarly, the results of the study on increasing numbers of women in migration studies, which can be viewed horizontally and indispensably, confirm some authors'views on the increase of women's mobility and its relevance in destination countries. Because in some cases, their lifestyles have changed, including the impact of gender roles on women's access to family liberation and responsibility (OSO, 2008). However, despite the general trend towards feminization, in some cases, the process of family reunification still means that men dominate as heads of family reunion households.

Finally, the evidence presented in the light of the different decisions of families in Latin America shows that the establishment of family networks is itself a mechanism in established migration systems. Similarly, this mechanism may be more or less effective in attracting more migrants, depending on the preparation, occupation and integration of migrant groups and

their contacts at their destinations. The economic, social and political conditions of the destination must also be taken into account in the process of migration. Based on the selected cases, it can be inferred that the methodology adopted by the proposed system can be compared with other systems at the global level. Therefore, future work will include such comparisons in order to find general information on reunification.

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