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# Half A Century Of Migration And Family Formation In Latin America And The Caribbean

# Abstract

Migration and family formation dynamics were fundamental factors in the societal transformation of Latin American and Caribbean (LAC) countries during the second half of the twentieth century. A holistic understanding of how these two demographic phenomena relate to one another and how this association is embedded in gender and class systems is needed to understand modern societies. The first chapter of this dissertation lays out the theoretical premises of a gender- and class-based analysis of these dynamics. The following chapters use quantitative information to examine family formation trajectories among migrants from three different perspectives: immigration, transnational, and internal. Family formation paths for individuals of age 39 and above are reconstructed using the National Survey of Family Growth in chapter 2 (immigration), the Mexican and Latin American Migration projects in chapter 3 (transnational), and the LAC Demographic and Health Surveys in chapter 4 (internal). Together, these sources cover 12 LAC countries and the three main destinations of LAC international migrants: United States, Canada and Spain. A typology of family formation trajectories is built for each of these three data sources and the distribution of men and women in each typology is computed by age at migration and socioeconomic status. I termed these distributions family profiles. The heterogeneity in family profiles across the three perspectives is examined considering the major societal and economic changes that occurred during this time period in the region. This joint examination shows that social class and gender differences are the primary basis of distinction in family profiles and that migration constitute a secondary source of disruption. Put formally, the processes by which family formation trajectories unfold among migrants are segmented. This does not mean migration is powerless in terms of triggering social change. Migration is associated with change in family formation dynamics in the origin and reception societies; yet, its potential is modest, and it will hardly take the shape of a revolutionary leap.

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# HALF A CENTURY OF MIGRATION AND FAMILY FORMATION IN LATIN AMERICA AND THE

#### CARIBBEAN

## Andrés Felipe Castro Torres

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in

## Demography and Sociology

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#### ABSTRACT

# HALF A CENTURY OF MIGRATION AND FAMILY FORMATION IN LATIN AMERICA AND THE CARIBBEAN

#### Andrés Felipe Castro Torres

#### Herbert L. Smith

Migration and family formation dynamics were fundamental factors in the societal transformation of Latin American and Caribbean (LAC) countries during the second half of the twentieth century. A holistic understanding of how these two demographic phenomena relate to one another and how this association is embedded in gender and class systems is needed to understand modern societies. The first chapter of this dissertation lays out the theoretical premises of a gender- and class-based analysis of these dynamics. The following chapters use quantitative information to examine family formation trajectories among migrants from three different perspectives: immigration, transnational, and internal. Family formation paths for individuals of age 39 and above are reconstructed using the National Survey of Family Growth in chapter 2 (immigration), the Mexican and Latin American Migration projects in chapter 3 (transnational), and the LAC Demographic and Health Surveys in chapter 4 (internal). Together, these sources cover 12 LAC countries and the three main destinations of LAC international migrants: United States, Canada and Spain. A typology of family formation trajectories is built for each of these three data sources and the distribution of men and women in each typology is computed by age at migration and socioeconomic status. I termed these distributions family profiles. The heterogeneity in family profiles across the three perspectives is examined considering the major societal and economic changes that occurred during this time period in the region. This joint examination shows that social class and gender differences are the primary basis of distinction in *family profiles* and that migration constitute a secondary source of disruption. Put formally, the processes by which family formation trajectories unfold among migrants are segmented. This does not mean migration is powerless in terms of triggering social change. Migration is associated with change in family formation dynamics in the origin and reception societies; yet, its potential is modest, and it will hardly take the shape of a revolutionary leap.

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# Chapter 1. A Multi-Site and Relational Study on Family and Migration

For most Latin American and Caribbean (LAC) countries, the second half of the 20<sup>th</sup> century constituted a period of important demographic change with far-reaching and long-lasting consequences (Guzmán et al. 2006; Livi Bacci 1992). During this period, the Demographic Transition was completed in a unique way in conjunction with substantial transformations in the realm of the family. Fertility declined substantially, cohabitation increased, and marital dissolution boomed. In addition, internal and international migration transformed the region into an urban and negative-net-migration area, with more than 70% of its population living in urban areas and one of the largest international diaspora worldwide, by the turn of the century (White 2016). The three empirical studies of this dissertation describe the heterogeneity in the relationship between the migration experience (international and internal) and family formation dynamics during this time period. I use data from the 1932-1977 birth cohorts from 12 LAC sending countries and three receiving countries that are included in each empirical study with color codes for origin and destination countries and the type of data.

The three empirical studies are complementary. Together, they provide a holistic understanding of the heterogeneous ways in which migration and family formation relate to each other. Each study has a different emphasis across two dimensions: migration type (international vs. domestic), and observation perspective (origin vs. destination). The first study concentrates on international migrants in the United States (destination perspective), the second one studies internal and international migration using data collected in LAC countries (origin perspective), and the third one focuses on internal migration and origin perspectives.

Theoretically, this work puts forward a material interpretation of the relationship between migration and individual family formation trajectories in terms of differences across opportunity structure of different social groups. This general framework has two advantages: (1) it allows us to reconcile previously proposed explanations on how these two demographic phenomena are connected, which in turn helps us better understand the social and demographic transformation of the 20th century, (2) it highlights the explanatory power of a long-standing sociological concept typically absent in demographic accounts, namely, *social class*.



Figure 1.1: Countries of study by perspective and type of data

Note: four data sources are used to study these three destinations and twelve origin countries. The National Survey of Family Growth, the Mexican Migration Project, the Latin American Migration Project, and the Latin American and Caribbean Demographic and Health Surveys. Not all countries are represented in each source.

This introductory chapter presents the theoretical and methodological foundations common to the three empirical studies, along with an overview of their specificities. Here, I argue that theory and methodology cannot be separated, i.e. that the theoretical and methodological choices of a research process are of the same kind: neither entirely theoretical, nor purely methodological. Further, I discuss the implications of this argument for the study of family dynamics.

The three empirical studies are also interrelated because they focus on the same time period and overlapping contexts. However, each piece is written as a self-contained text

and can be read independently. This causes some repetition because shared contextual elements and key theoretical points are included in all chapters. The specificity of each chapter counterbalances this repetition by providing unique dimensions to the understanding of migration and family formation. The last chapter compiles the main results from the three empirical analysis and discusses their theoretical implications. This theoretical assessment highlights the benefits of a life-course-relational approach to understand demographic processes and potential venues to improve demographic theories when the focus switches from mean levels of demographic outcomes to the heterogeneity of life courses (Elder 1994; Emirbayer 1997).

# **Theoretical background**

Migrant-non-migrant differentials in fertility and partnership outcomes have been mainly explained in terms of *socialization, assimilation/adaptation, selection* and *disruption*. These four explanations vary in the degree of importance they concede to conditions prior to migration (*socialization* and *selection*), during migration (*disruption*), and after migration (*assimilation* and *adaptation*). (More detailed discussion of these explanations is presented to different degrees in the empirical studies). In quantitative analysis, this differential degree of importance is used to test these hypotheses against each other following deductive models backed up with statistical inference. This approach was first formulated for studies on internal migration in developed countries, and later used in developing nations and contexts of international migration (Goldberg 1959; Kulu 2005a; Macisco and Myers 1975).

From an empirical standpoint, the deductive approach has been fruitful. Since the appearance of these hypotheses and especially after the 1950s, the literature on migration and family formation has grown substantially (see Zárate and Unger de Zárate (1975) for domestic migration and Kulu (2005a) for international migration). Overarching reviews of this literature conclude that, because some explanations are valid in certain contexts and for certain subgroups, they should be regarded as complementary and not competing.

From a theoretical standpoint, this conclusion is rather unsurprising. The complementary nature of these hypotheses needs to be further explored in order to understand the conditions that make one explanation more valid than others.

Migrants are not a random sample of the population, for there is always selection. Trying to "remove" selection to measure the 'true/actual/intrinsic' importance of other mechanisms seems unrealistic. As posited by Furstenberg, "In any event, social live is created by multiple and interacting influences that generally come in packages rather than operating as particular or singular influences, as they are commonly studied in experimental designs" (2010:287). Likewise, even if the evidence favors one hypothesis, say *adaptation*, it would be naïve to expect all migrants to adapt their family behaviors to those of the host society. Stating that the average migrant assimilates (or does not) to the host society, reveals as much as it conceals. This approach neglects the great heterogeneity that characterizes migrant populations by imposing the narrative of the "average-migrant" to use De Hass' (2014) expression.

Several scholars in sociology have called the attention to the limitations of a deductive approach that focuses on testing hypotheses (often also referred to as variable-based research (Emirbayer 1997)). In one of the earliest and most stringent critiques, Bourdieu and Darbel (1966) show how these approaches cannot account for the U-shaped pattern of fertility across occupational categories in France during the 1960s. This critique was bitterly expressed against Rational Action Theory—a fertile ground for deductive approaches—in a later book where the deductive approach is presented as an illusion:

"[...] 'rational action theory' [is] the paradigmatic form of the scholastic illusion, which leads the scholar to project his thinking into the minds of the active agents and to see as underlying their practice (that is, as informing their 'awareness') his own spontaneous or elaborated representations or, worse, the models he has had to construct to account for their practices" (Bourdieu 2005:7).

To be clear, this critique is more about the deductive nature of research inspired by the Rational Action Theory than about its focus on economic motivations. Indeed, there are

alternatives that keep the focus on economic conditions while exchanging deduction for induction (Lebaron 2003).

Scholarly works on family formation have also called for more comprehensive explanatory models that include both exogenous and endogenous factors, and that move beyond testing hypotheses (Johnson-Hanks et al. 2011). These concerns continue to populate scholarly literature, including studies on migration, as reflected in the work of Garip (2012) and De Hass (2014). These two authors argue in favor of inductive approaches to data analysis. I do not expect to solve all these theoretical limitations but to contribute to theory improvement taking an alternative point of departure.

This alternate starting point assumes that the influence of *selection, socialization, adaptation, assimilation* and *disruption* mechanisms differ across contexts and subgroups. This approach takes the exploration of these differences as a goal of inquiry. Three theoretical premises support this change. These premises provide an overarching framework to understand family formation trajectories and migration paths as strategies within concrete opportunity structures. The unequal distribution of these opportunities across individuals is the main explanatory factor. This approach has consequences for the production, visualization, and interpretation of results, and clearly shows the intertwined nature of theory, methodology and methods.

# First: results on migration studies depend on the point of view of the observer

In particle physics, a moving object for one observer could be steady for another. In migration studies, the implications of this remark are twofold. First, results depend on the observer's position because the nature of samples varies across places. For example, a sample of migrants collected at destination does not include, by construction, return migrants and, it is less likely to include migrants with illegal status (assuming that not having permission to stay in the country make people less willing to participate in government-sponsored data collections). Second, results depend on the observer because

questions and explanations are also context-dependent, i.e. derived from the disciplinary schemes researchers acquire through scientific training and the problematics that are deemed as pertinent to the general public. Whereas issues of unbalanced sex-ratios among young adults may be of interest for social scientists in sending areas (in female-dominated flows, for example), sociologists at destination may be more interested in studying intermarriage patterns among first- and second-generation migrants. To continue the metaphor with physics, because the second observer does not see movement, he/she is simply not able to raise questions about it. An additional aspect emerges when internal and international migration are jointly considered, because the prevalence of these two phenomena is substantially different. Studying international migrants implies looking at a small portion of the population (less than 3% worldwide), whereas looking at internal migrants may, in many contexts, imply the study of the majority. It is estimated that one sixth of the world population are internal migrants (United Nations 2013).

These three aspects of research on migration (data, questions, and migration type) have not been jointly considered in migration studies. In recent decades, studies on immigrants in destination areas are more common than transnational studies, studies on emigration, and studies on internal migration. The predominance of destination/immigration studies is accompanied with a focus on the nation-state as the unit of analysis. This further reinforces the bias towards receiving-perspective policy relevant questions (Beauchemin 2014; Glick Schiller 2010). As a result, we know more about immigration in developed countries than about emigration and internal migration in sending areas. While important, results from immigration studies are incomplete and potentially biased as they are more likely to reflect the experience of those who, voluntarily or not, stayed in destination areas (settlement-bias). In addition, focusing on one nation at a time has prevented the field from having an overarching understanding of migration as a general societal process. For example, by focusing on issues of *assimilation* and *adaptation*, conditions at origin and the causes of immobility (reasons to stay) are left with little consideration (Carling 2002; Sayad 2014).

This state of art is changing rapidly, but it is still partially valid for the subfield of studies on migration and fertility, and on migration and partnership dynamics. For example, studies on family and fertility outcomes among rural migrants have been mostly conducted from an urban perspective, leaving aside other migration flows, e.g. rural-torural. Likewise, the increasing importance of international migration gave rise to many country-specific studies on migrant's family outcomes, most of which rely on data collected at destination. (These studies are discussed with more detail in Chapter 2. Perhaps the most remarkable exception to this rule is the case of Mexico). On the other hand, increasing availability since the 1980s of transnational data (data collected at origin and destination) has allowed family and migration scholars to counterbalance this bias by analyzing family formation dynamics using multisite data (Beauchemin 2012; Riosmena 2016). Two limitations remain. First, studies on internal migration and family formation dynamics have stagnated, especially those on rural-to-rural migration. Second, there is a dearth of comprehensive efforts that bring together results from different perspectives a put them into a common theoretical framework.

The main lesson one can derive is that a comprehensive understanding of the connection between migration and family formation trajectories requires the use of data collected in different places, and across different migration flows (internal and international). If one is interested in the overarching role of mobility on family formation dynamics, then a multisite-comparative approach is the way to go.

Let's start by considering international migration. When migrants' family formation trajectories are studied using a national representative survey or a census in the host country, studies suffer from the so-called *'settlement-bias'*. Results neglect the experience of return migrants. When data come from official sources, migrants from disadvantaged minorities, such as those without legal authorization to stay in the country of reception, are underrepresented. However, one major strength of this kind of data is that it includes households that migrated entirely, something that samples collected at origin cannot do. To cover this perspective, the first empirical analysis of this dissertation (Chapter 2) uses data from the National Survey of Family Growth (NSFG). The NSFG is

one of the few US-based surveys that collects marital and birth histories with a sufficiently large sample of immigrant individuals.

Studies on migrant family dynamics that rely on data collected at origin and transnationally complement studies conducted at destination in two ways. First, these data include information on return migrants, meaning that these samples have a greater degree of heterogeneity in terms of the migration experiences of individuals. Second, these data sources allow researchers to compare family formation trajectories among migrants and non-migrants at origin. This comparison group is not inherently better than native-born individuals at destination; it is simply complementary in the sense that is allows one to account for potential changes in family formation dynamics at origin. Hence, transnational data sources are very attractive to study heterogeneity in family dynamics. Yet they are not free from limitations and biases.

When information about migrant's family formation trajectories is collected at origin migrants with strong family/kinship ties are more likely to be in the sample than migrants with weak links to their families. To partially overcome this limitation, the origin data is complemented with samples collected at destination. The main limitation of these additional cases is that they are not randomly selected due to the lack of sample frames for migrants (Beauchemin and González-Ferrer 2011).

This is the case of the two data sources I use to cover the transnational/origin perspective: the Mexican Migration Project (MMP) and the Latin American Migration Project (LAMP). These two projects use two strategies to collect information about migrants in countries of origin: (1) they collect information during holidays so that migrants are more likely to be visiting their family members left behind, and (2) when the migrant is absent, they collect information through the family members. Consequently, samples in these two projects do not include households that migrated entirely (since there is no one who can report them), nor migrants who broke their links with their families after migration. Hence, migrants included in the sample are likely to have stronger family ties than the

average migrant, because they are those who either visit or are reported by the family members left behind (Massey and Zenteno 2000).

These limitations do not make these data sets useless. On the contrary, multisite datasets have proved to be useful to perform comparative migration studies in the Americas and Europe (Beauchemin 2014). In the case of the MMP and the LAMP, the richness of the retrospective information on migration (domestic and international), family formation and socioeconomic status, along with the broad geographical coverage (12 countries in Latin America) make them a unique data source to study the relationship between the migration experience and individual family formation paths in the region (Riosmena 2016). A clear understanding of the characteristics of the sample, the sampling frame, and the collection strategies is key to appropriately use these samples.

Finally, a third possible perspective to the study of migration and family formation is the one centered on internal migration. Given the key role of internal migration in LAC countries, studying the relationship between internal moves and family dynamics help us understand the current demographic profile of the region. Besides, the contribution of a study on internal migration and family formation dynamics among Latin American countries is twofold. First, it will provide a solid description of trends in fertility and partnership at origin, which will serve to contrast with reference groups in the other two perspectives. Second, it will shed light on the specifics consequences of crossing different types of borders (international, national, rural, urban, etc.).

Demographic and Health Surveys (DHS) can be used to explore these issues. DHS data allow me to distinguish women who change residence from childhood to present, and from one type of residence to another (rural vs. urban). The timing of migration for the last move can be also identified. These variables can be used to separate women in different migration status groups and compare family and fertility outcomes across them. The DHS does not collect full marital histories; family formation trajectories must be inferred indirectly. Neither do DHS data allow me to study these issues among men. To summarize, in the absence of a unique and perfect data set to study migration and family, the adoption of a multisite-perspective approach seems promising. In other words, the study of migrants ought to be conducted from all possible perspectives in order to clearly understand the relationship between migration and family formation.

Individuals age 39 to 49 were selected as the analytical sample in each data source, for a total of 126,012 life courses, i.e. approximately 5.7 million person-years. Figure 1.2 presents a lexis diagram with the birth cohorts of each analytical sample. Since data collection varies across sources, birth cohorts differ, yet the significant overlap among them suggests that results pertain to the period between 1950 and 2000.

Figure 1.2: Lexis diagram for reproductive life spans and analytical samples by data source



# Data sources National Survey of Family Growth, 1995 – 2015 Mexican and Latin American Migration Projects, 1982 – 2016 Demographic and Health Surveys, 1986 – 2012

(n= 11,754 men and women) (n= 16,213 men and women) (n= 98,045 women)

# Second: social theory should aim to explain patterned heterogeneity

Migrant populations are typically more heterogeneous than non-migrant. And, as migration flows become more and more diversified over time, the potential of a unique

social theory for migration studies is doubtful. Yet increasing heterogeneity at the two ends, origin and destination, may not necessarily imply the end of theorization; neither does the emergence of a single explanation per context. According to De Hass (2014:13):

"Social theory formation is precisely about striking a delicate balance between the desire to acknowledge the intricate complexities and richness of social life on the one hand and the scientific need to discern underlying regularities, patterns and trend on the other".

Researchers are 'free' to choose their standpoint along the continuum between complexity and reductionism. Exploring heterogeneity across empirically constructed sociodemographic entities implies a double move towards the first end of this continuum (complexity). First, this approach implies to move from studying mean levels of a single-outcome dependent variables to study heterogeneity in demographic life courses, i.e. multiple events that unfold over individual's lives. Second, it requires the construction of data-driven sociodemographic entities. These entities are empirically identified by the configuration of relevant sociodemographic variables such as birth cohort, sex, age at migration, and educational attainment.

Building a dependent variable that captures heterogeneity in fertility and partnership life courses can be done in several ways, one of which is using typologies. A typology is systematic classification of units according to a given set of criteria. The multiplicity of criteria is what allows typologies to directly study heterogeneity. Contrary to single outcomes, such as being single, married, cohabiting, separated or divorced, or having 0, 1, 2, etc. children, a typology can group individuals with similarities across these two categories and their changes over time. Under this approach, the dependent variable becomes a categorical variable that organizes individuals into groups (clusters) of similar trajectories in terms of the timing, ordering, type and quantity of fertility and partnership events. Built this way, the typology is an instrument that reflects heterogeneity. Several algorithms allow me to build data-driven typologies that minimize the within-cluster variance across the selected criteria. The proportion of explained variance associated with the grouping should be carefully assessed and different clustering techniques should be tested to assure the robustness of the typology.

Sociodemographic entities are groups of individuals identified by a configuration of key variables. I identify these entities using sex, age at migration, and educational attainment. The last two variables are categorized in four groups. The age at migration groups reflect crucial moments in the transition to adulthood. The first group comprises individuals who migrated before age 18, i.e. individuals who migrated before the legal age of majority (most likely, but not necessarily, as dependents). The second age at migration group includes those who migrated between ages 19 and 24, an age group that comprises a substantial proportion of family formation events: first births and first marriages and unions. This is a crucial group because the act of migrating and forming a family coincide. The remaining two groups correspond to ages 25 to 30, and after age 30.

The four educational attainment groups are: 0 to 4 years, 5 to 8 years 9 to 12 years and, 13 or more. Despite cross-national differences in educational systems, people in the first group lack formal certificates and educational degrees. The second and third groups roughly correspond to the acquisition of primary and secondary education credentials, respectively. The last group corresponds to higher education. These categories are defined differently in the first empirical analysis as it relies on US data. For that analysis I categorized educational attainment as: Less than high school, High School degree, College incomplete and College completed.

Theoretically speaking individuals' educational attainment measures the accumulation of cultural capital in its institutionalized manifestations, i.e. formal credentials/degrees (Bourdieu 1986). In the context of 20<sup>th</sup> century LAC, this variable also captures differences in economic and social resources. As seen in Figure 1.3, educational expansion started among the 1940 birth cohorts mostly driven by increases in primary schooling (around 5 years of schooling). This was a time period where the service economy grew, making returns to education rise (Bethell 1998). From the 1940 birth cohorts onwards, secondary and college education became a resource that allowed individuals to have better economic prospects while reflecting the socioeconomic position of their families. In order to have high educational attainment, individuals from the 1930-1970 birth cohorts must have had substantial financial resources and family

support. At the other end of the educational ladder, individuals with very little educational attainment represent the most vulnerable group in terms of family support and poverty.



**Figure 1.3:** Time trends in years of schooling for women ages 40 to 45 and income inequality in Latin America and the Caribbean (LAC) and destination countries

Note: data on years of schooling comes from Barro and Lee (2013), Gini index series for Latin American and Caribbean countries come from the United Nations Economic Commission for Latin America and the Caribbean, Gini index series for destination countries (Canada, Spain and United States) come from the World Bank. Country codes are: BOL (Bolivia), BRA (Brazil), CAN (Canada), COL (Colombia), DOM 9Dominican Republic), ECU (Ecuador), ESP (Spain), GTM (Guatemala), HTI (Haiti), MEX (Mexico), NIC (Nicaragua), PER (Peru), SLV (El Salvador), USA (United States of America)

An additional support for this interpretation on the role of education on LAC social stratification systems is its weak association with inequality trends. As seen in the right panel of Figure 1.3, income inequality has remained high in sending countries despite educational expansion. This descriptive association has been studied in depth by scholars who have confirmed the low capacity of LAC educational systems to promote upward social mobility (Hoffman and Centeno 2003; Torche 2014).

Hence, educational attainment among individuals aged 39 and above is a good proxy for social class because it measures resource-availability during adolescence and young adulthood along with economic prospects during adulthood. In addition, age at migration

relates to individuals' stage over the life-course. Combined with sex, these two variables serve to identify groups of individuals that differ in their degree of vulnerability, i.e. in the extent to which the act of migration can disrupt their family trajectories because of their temporal coincidence, and the degree of preparedness of individuals to assume the cost of both migrating and starting a family.

At one extreme, low-educated individuals who migrated as teenagers are likely to come from poor families who were not able to provide educational opportunities to them at destination (if they were not absent). At the other end, migration after age 30 of highly educated individuals is very likely to be a constraints-free migration of an independent individual, probably moving due to better economic prospects. In between these two groups, those migrating between ages 19 to 24 are the most exposed to experience disruptions in their family formation trajectories due to the temporal coincidence between moving and forming a family. That family trajectories are similar within each of these groups is an empirical question, yet its theoretical basis comes from the sociological fact summarized by Johnson-Hanks et al. (Johnson-Hanks et al. 2011) in the following terms:

"People similar to each other in social and economic position will tend to be similar in the nature and type of materials available to them [...]. This similarity comes both from the fact that they are likely to perceive and categorize materials in similar ways, as well as from common relations of power and inequality".

The distribution across the categories of the family typology—termed *family profile*—is estimated using multinomial logistic models. These models are useful as they allow me to *family profiles* while controlling for potential confounding factors in each chapter. Hence, the set of *family profiles* across age at migration and educational attainment groups reflect all the potential ways in which socioeconomic status, migration, and family formation relate to one another.

Presenting and comparing several *family profiles* in an intelligible way poses challenges because analyses are conducted separately for men and women in chapters 2 and 3, for domestic and international migrants in chapter 3, and according to destination and origin

in chapter 4. There are 48, 80 and 120 *family profiles*, respectively. Using standard tables with regression coefficients and their statistical significance will be cumbersome and will bring us back to the comparison of means. Instead, I use factorial analysis techniques to show the main patterns across *family profiles* in two-dimensional scatter plots that jointly display the family typology, age at migration, and educational attainment. These figures constitute the main output of a theoretical approach centered on the analysis of patterned heterogeneity.

# Third: a material interpretation of inductively produced results

Van Hear (2014) has noted the need to bring the concept of social class to international migration studies. According to him, the causes and consequence of migration can be better understood from a class perspective. In his approach, based on Bourdieu's theoretical apparatus, social class depends on the volume and composition of individuals' capital (economic, cultural and social). Individuals with high levels of these three types of capital—e.g. highly educated professionals who migrate sponsored by the multinational companies they work for-have a different migration experience compared to individuals with low level-e.g. uneducated seasonal workers who migrate helped by smugglers. The formers are less likely to suffer from exploitation, discrimination and xenophobia at destination than the latter. Their motivations to migrate ought to be distinct. Likewise, the family formation trajectories of these two groups are likely to differ. In order to achieve higher education, highly skilled migrants may have postponed family formation. On the contrary, low-class migrants are more likely to migrate once their families are already formed. And in some cases, as suggested by qualitative evidence, it is the mere existence of the family that allows (or pushes) individuals to migrate due to the financial support and access to migrant networks that extended families provide (Hondagneu-Sotelo 1994).

It is the multidimensionality of this definition what makes social class a powerful explanatory concept. This multidimensionality also makes it hard to measure using

quantitative demographic sources (Furstenberg 2010). Few demographic surveys (or censuses) in LAC include information on economic, cultural and social resources along with retrospective information on fertility and partnership. In addition, differences in the age at migration make social class measurement even more complicated. For example, what determines the social class of people who migrate as teenagers is the volume and composition of their parent's capital. Instead, for those who migrate after age 30, it is their own capital that matters the most. In the absence of a perfect measure for class belonging across demographic sources at all ages of migration, a measure of educational attainment is an adequate second best. In the context of migration, reaching high educational attainment at destination can be understood as a double advantage. First, migrants must have enough resources to migrate. Second, migrants must have an extra amount of resources to pursue higher education after arrival.

Differences in family formation trajectories by educational attainment would be interpreted as driven by the different material conditions of individuals in each educational category, i.e. as social class differences. Given the strong correlation between social class and family formation dynamics in the Americas, migration-related disruptions in family trajectories are expected to have two characteristics. First, these disruptions are expected to be secondary, i.e. weaker than the correlations associated with social class. Second these disruptions are expected to reproduce, if not augment, social class differences in family formation trajectories.

Together, these three theoretical premises shaped the choice of the data sources, the selection of analytical sample within each of them, and the statistical procedures for recodification and data analysis. As highlighted in each subsection of this introduction, these decisions were simultaneously motivated by theoretical and methodological reasons which proves the intertwined nature of these two aspects of research.

# Chapter 2. Fertility and partnership trajectories in the United States, differences by race/ethnicity and migration status

# Introduction

Migration, fertility, and partnership formation have been treated as separate, independent events and rarely considered jointly. As the significance of international migration to the US continues to grow, it is increasingly pressing to understand the interrelationship of these three processes. This chapter examines the interrelations among them by comparing fertility and partnership trajectories of migrant and non-migrant individuals in the US. I provide an in-depth description of these trajectories and their associations with individuals' race/ethnicity, socioeconomic status, and age at migration. These analyses demonstrate the heterogeneous ways in which migration relates to individual family formation trajectories and the need to group previous explanations, often presented as competing, into a common framework centered on social class differences in the unfolding of these three demographic processes over individuals' life courses.

Using marital and birth histories collected by the National Survey of Family Growth (NSFG) I reconstruct individual's full sequences of births, unions, marriages, separations and divorces from age 15 to age 39. I refer to these sequences as family formation and dissolution trajectories, or family formation trajectories for short. I use cluster analysis to classify individuals into a family typology based on the similarity of their family trajectories. Men and women are analyzed separately. Using multinomial logistic models, I predict the distribution of individuals in this typology by race/ethnicity, age at migration and educational attainment, controlling for other socioeconomic variables. These conditional distributions reflect the socioeconomic disparities and migration-related disruptions in the likelihood of following each family formation trajectory. In the final section, I use Linear Probability Models (LPM) to compare the propensities to have a partner who is part of the population majority (NH white) and a partner who belongs to the same racial/ethnic group (endogamy). I use these results to speculate on the

mechanisms behind the association between migration and family formation trajectories in the US, and to identify research opportunities for future work.

# **Theoretical background**

Studies looking at migrant-non-migrant differences in fertility and partnership schedules include almost all high-income countries, which have been the primary destination areas since 1950 (Adserà and Ferrer 2015; Kulu and González-Ferrer 2014). These studies rely on four key hypotheses to explain differences between migrant and non-migrant on fertility and marriage/union formation outcomes. These hypotheses are known as *selection, socialization, disruption* and *adaptation/assimilation*.

The first two explanations focus on conditions prior to migration, such as family norms and values learned during childhood (*socialization*) and the less family-oriented attitudes of migrants (*selection*). For example, higher fertility among African migrants in Spain (Castro-Martin and Rosero-Bixby 2011) and Canada (Adserà and Ferrer 2014), and Turkish migrants in Germany (Milewski 2010) has been associated with the fact that migrants experience primary socialization in contexts of larger families. Likewise, to the extent that international migration requires planning, migrants-to-be are thought to adjust their family behavior in accordance with their migrant's fertility in the United States (Parrado 2011), Canada (Adserà and Ferrer 2014), and Sweden (Andersson 2004) have documented lower fertility rates in the years prior to migration, followed by a peak in birth risk within the first five years after arrival.

The last two explanations emphasize how changing circumstances caused by migration could lead to a *disruption* in migrants' family formation trajectories, or how these circumstances lead them to *assimilate* to the prevailing behaviors in the host society. Low fertility rates among Mexican men after migration to the US are associated with spousal

absence, and high fertility rates after with family reunification (Lindstrom and Giorguli Saucedo 2002). Similarly, fertility among migrants to France and Italy peaks during the years following migration (Mussino and Strozza 2012; Toulemon 2004), distorting period fertility measures (Toulemon and Mazuy 2004). This connection has been also confirmed for marital dynamics of African and Latin American migrants in Europe (Beauchemin et al. 2015; Cortina Trilla, Esteve Palós, and Cabré Pla 2009) and, Latin American migrants in the US (Parrado 2004). This later study shows how marriage market conditions in the US are associated with delayed marriage and circular migration, as male migrants must go back to their countries of origin to find partners. Migrant women, instead, are more likely than men to marry a US-born and this probability is negatively associated with the age at arrival (Choi and Tienda 2017).

Over time, these differences in the timing of family events between native and foreignborn do not translate into lower complete fertility or lower prevalence of marriage. Context-specific conditions lead migrants to have a similar number of children compared to the native-born. This is the case of Hispanic migrants in the US (Parrado 2011) and migrants in the United Kingdom (Dubuc 2012). The higher cost of education for children at destination, the exposure to positive ideas about smaller families, as well as the decline in average family size in countries of origin, are among the potential explanations for the convergence of fertility levels between native- and foreign-born over time (Bean, Berg, and Van Hook 1996; Frank and Heuveline 2005). In addition, migrant-non-migrant differences in fertility diminish progressively across migrant generations (Kulu and González-Ferrer 2014; Pailhé 2015; Parrado and Morgan 2008).

Because these studies mostly focus on "mean levels" of the quantum and timing of family events (e.g. first births, ages at marriages), it is hard to grasp, at a first glance, the complementary nature of the *socialization*, *selection*, *assimilation* and *disruption* hypotheses. Indeed, some studies suggest they are competing hypotheses rather than complementary explanations (Kulu 2005b). The narratives built upon the "competition" of these four explanations describe the experience of an "average-migrant", which neglects potential heterogeneity in the relationship between family formation and migration. Even if the evidence favors one hypothesis, say *assimilation*, it would be hard to assert that all migrants adopt the prevailing family behavior of the host society. Moreover, since families are not homogeneous in destination countries, there may be multiple ways of assimilating beyond the incorporation of the family behaviors of the majority (e.g. Non-Hispanic white in the US). Exploring heterogeneity among migrant groups will allow us to assess the conditions that that give greater validity to each explanation. Further, previously neglected patterns, hidden behind mean levels, are also likely to appear when heterogeneity is explicitly explored.

Concentrating on migrants in the US, this paper extends the existing literature on migration and family formation in three directions. First, it explores the heterogeneity of family trajectories, i.e. all the family-related events that occur to an individual over the life course. Using family trajectories as an outcome variable, rather than separate family events, directly highlights the connection between fertility, marriage/union, and migration within individuals' life courses (Billari 2001). Second, it provides quantitative evidence on the gendered nature of family formation and migration life paths. This evidence backs up an extensive body of literature coming from qualitative studies (Bledsoe 2004; K. Donato 2010; Hondagneu-Sotelo 1994). Third, it explores heterogeneity across migrant groups based on their age of arrival and educational attainment. These two variables combined allow me to capture multiple migration experiences and their deviations from the "average-migrant" experience. This the first study to examine heterogeneity in family trajectories in the US across all these dimensions using quantitative nationally representative information.

# Migration flows and family dynamics at origin and destination

The second half of the twentieth century witnessed important changes in the origin of migrants to the US with respect to migration flows during the first half of the century. The number of people coming from European countries declined and the number of people of Asian and Latin American origin increased substantially (Castles, De Haas, and

Miller 2014:6). In 1930 the percent of individuals of European, Asian and Latin American and Caribbean (LAC) origin living in the US was 83, 1.9 and 5.6%, respectively. By 1990 these figures changed to 23, 26 and 44%; and by 2000 people from LAC countries became the majority representing 52% of the foreign-born population (Gibson and Jung 2006).

Factors triggering migration from LAC to the US during this period were predominantly economic (Clark, Hatton, and Williamson 2003; Donato et al. 2010). Most of the people who moved to the US did so in search of better opportunities. These moves often occurred in response to targeted labor recruitment efforts, such as state directed policies to hire male workers. The most salient example of these policies is the Bracero program, which brought approximately 4.6 million Mexican men to work in the US between 1942 and 1964 (Garip 2012). In addition to labor-migration, people from LAC also move to the US to augment their professional skills via specialized training and higher education, but these proportions are rather small (Rendall and Parker 2014). For women, migration occurred predominantly for family reunification reasons as work policies did not target them, which means their migration trajectories were much more attached to their family paths than men (K. M. Donato 2010; Kanaiaupuni 2000).

Before we can explain the various ways in which migration experiences spur different family trajectories, we must first understand family contexts at origin and destination. Three aspects differentiate family dynamics in the US from other high-income nations. First, despite strong delays in the transitions to first birth and first marriage, fertility in the US has not reached lowest-low or low levels (Monte and Ellis 2014). Second, increasing marital instability and single motherhood among groups with low socioeconomic status coexist with positive views and expectations about the importance of marriage for individual's fulfillment and for the society (Coontz 2014; Thornton and Young-DeMarco 2001). Third, substantial differences among socioeconomic groups in the timing of fertility have produced bimodal distributions in the ages at first birth (Sullivan 2005). This context of stratified family formation trajectories suggests that

assimilation could take different forms beyond the mere apprehension of the majority's behavior.

In LAC, the configuration of changes in family formation dynamics has been distinct. By the 1950s fertility was still high in the region, except among countries in the Southern cone, Argentina and Uruguay. The following two decades witnessed fast declines in fertility triggered by processes of urbanization, increasing educational attainment and the growing capacity of couples to practice effective birth control (Guzmán et al. 2006). Ages at first birth did not increase despite declines in fertility. The mean age at first birth has remained stable in many countries with large socioeconomic gradients (Esteve and Florez-Paredes 2018). Among low-SES women, these mean ages have indeed declined, whereas among high SES women the postponement of childbearing has been a longstanding practice. As for the institution of marriage, increasing marital instability has emerged in a context where informal unions and formal marriages have endured as socially equivalent alternatives to family formation (Castro-Martín 2002). All these changes occurred along with moderate socioeconomic development and sustained high inequality (Torche 2014). Two commonalities between families in the US and LAC countries are worth noting. First, the increasing role of educational attainment across cohorts in determining family outcomes (Castro Martin and Juarez 1995; Furstenberg 2014). Second, the trend towards a polarization in family formation trajectories that separates the life-courses of low-status and high-status individuals (García and de Oliveira 2011; Landale and Oropesa 2007).

Family change in origin countries implies that motivations and means to migrate may differ according to the socioeconomic background of migrants. Among high SES individuals, delayed transitions to childbearing and marriage, financial resources and smaller families provide both the individual aspirations and material means for relatively constraint-free migration. By postponing childbearing, individuals, especially women, have more time to gather information and set goals associated with international moves. Individuals without children may be more likely to plan for higher education or specialized training at destination. Information about how to achieve these goals is more likely to be transmitted through institutions of formal education, to which high-SES individuals have privileged access at origin. Hence, family trajectories among high-SES migrants are expected to be at the front line of family change in origin countries. In other words, migration is likely to boost family change towards later transitions to union formation, marriage and childbearing along with lower fertility among high-SES individuals, some of the features described as being part of a global trend, the Second Demographic Transition (Lesthaeghe 2010).

Among low-SES individuals, the motivations and means to migrate are different. Because family formation tends to occur before migration, the latter typically takes the form of a household strategy where one member, often the household head (male), migrates as a targeted earner. The family may or may not follow this first migration depending on the socioeconomic conditions achieved by the first migrant (Hondagneu-Sotelo 1994). Hence, for low-SES individuals, migration is not likely to imply strong delays in family formation. On the contrary, to the extent that family support is a precondition for the targeted earner to migrate, migration could be associated with stronger family ties. Also, in the context of family reunification, a formal marriage could be an important resource for partners' migration.

# The National Survey of Family Growth (NSFG)

I use five waves, covering the period from 1995 to 2015, of the NSFG. The NSFG is a nationally representative survey of men and women 15 to 45 years old. Most recent NSFG waves oversampled Black and Hispanic individuals, which provides an adequate sample size for the study of migrant populations. Because the focus of the paper is on the socioeconomic differences in the migration experience and family formation trajectories, I include in the analysis all migrants. This strategy allows me not only to have larger samples but also to incorporate all the heterogeneity in family formation and migration trajectories of migrants from different origins.

I use retrospective information on individuals 39-year-old and above to reconstruct their marital and birth histories starting at age 15. Individuals' family status at each age is coded in 16 categories that result from the combination of four marital status categories: never married, cohabiting, married, separate/divorced/widowed, and four parity levels: zero, one, two and three+. Hence, a family formation and dissolution trajectory is a sequence of 16 differential states over 25 years.

For foreign-born individuals, I use the reported year of entry to the US to calculate their age at migration; I group ages at migration into four categories: before age 18, 19 to 24, 25 to 30 and after age 30. These age groups capture two important aspects of individuals' life courses. First, whether the socialization to family values and norms took place at origin or at destination including primary socialization within the family and at school. Individuals in the first two groups were less exposed to family norms at the origin than individuals in the last two. Second, the typical age schedule of family formation. Age patterns of fertility and union formation display clear peaks during young adulthood (19 to 24) for less educated individuals and slightly later ages (25 to 29) for more educated ones.

Because the focus of the paper is on migration and not on race/ethnicity, the US-born population is divided into two groups. The first group corresponds to Non-Hispanic White individuals (NH white herein) and the second one comprises all other race and ethnicity groups, I use the labels 'Other' and 'non-white' to refer to this group. This binary distinction, although insufficient to capture racial/ethnic disparities among native-born individuals, provides a conservative reference point to understand the significance of the difference between native- and foreign-born in their family formation trajectories. Hence, the main explanatory variable of this work is a six-category variable that combines the two racial groups for the US-born population, and the four age-at-migration groups for the foreign-born. The six categories are: NH white, Other (or non-white), Before age 18, 19 to 24, 25 to 30 and >30. Further disaggregation is not possible due to small sample size of men. Table 2.1 displays the number of individuals in each of these six categories by sex.

The sample of women is larger than men because information for the latter was only collected after 2002. Because the analytical sample includes individual age 39 to 45, women in this sample were born between 1950 and 1976, whereas men belong to the 1958 to 1976 birth cohorts. Hence, the family lifetime of these birth cohorts span years from 1965 to 2016. Even though births, marriages, separations, and divorces can be observed outside of this age range, more than 95% of these events occurred within it, which offers a good tradeoff between sample size and the completeness of family formation histories.

	Race/ethnicity and place of birth						
Sex	Native-	Native-born		Foreign-born by age at mig			Total
	NH white	Other	<18	19 to 24	25 to 30	>30	
Women	4,264	2,093	390	284	278	323	7,632
Men	2,214	1,137	272	160	156	183	4,122
Total	6,478	3,230	662	444	434	506	11,754

Table 2.1: Analytical sample by sex, race/ethnicity, and age at migration

Note: the analytical sample includes individuals age 39 to 45 from five waves of the National Survey of Family Growth (1995, 2002, 2006-10, 2011-13 and 2013-15). Men and women samples are independent.

# Sequence and cluster analysis

To compare sequences of categorical states (e.g. single no children, single one child, married no children, etc.) it is necessary to measure the dissimilarity among them. The dissimilarity between a given pair of sequences depends on five aspects: (1) experienced states, including features to account for the relative similarity between states, (2) distribution of the states, (3) timing of events, (4) duration of states and (5) sequencing (Studer et al. 2011). Given the correlations across these five aspects, there is no dissimilarity measure that can account for all of them simultaneously (Studer and Ritschard 2016). Researchers need to select one approach based on the research question of interest.

I measure dissimilarity among family formation trajectories calculating the minimum number of changes one should do in a sequence to transform it into another. For example, two changes are required to transform the sequence "Single-Married" into the sequence "Single-Married-Divorced". This minimum number of changes is termed transformation cost. The higher the transformation cost the higher the dissimilarity between a given pair of sequences. The count of changes is double-weighted to better account for the dissimilarity among states and age patterns of family formation events (Studer and Ritschard 2014). For example, a change between the states 'single' and 'married' should weigh more than a change between 'married' and 'divorced, because these last two states are both ever married (i.e. more similar). Likewise, this former change (married-separated) should weight more if it occurs at younger ages, because the implications of marital dissolution are larger for younger than for older individuals. These two sets of weights are the between-state Gower's dissimilarity index, and the age-specific transition rates across states (Gower 1971; Lesnard 2010).

Using this approach, I compute a pair-wise matrix for the individual sequences. The generic term of this matrix  $d_{ij}$ , measures the dissimilarity between the family formation trajectories of individuals *i* and *j*. The higher this number the more dissimilar are their family paths. Further, I rely on this matrix to group individuals with similar family trajectories. Once these groups are identified, I provide an in-depth description of them followed by an exploration of their correlation with socioeconomic variables via nominal logistic regression models (Dobson and Barnett 2008). I present figures for the predicted probabilities in the main text and full tables with coefficients, standard errors and significance levels are available upon request.

# Family trajectories across racial, ethnic and age at migration groups

Figure 2.1 displays the state distribution plot by age at migration for family formation trajectories of women (top) and men (bottom) in the analytical sample. These plots depict the aggregate prevalence and timing of births, and changes in marital status over
individuals' life courses (see Cornwell 2015 for an overview of these plots). Four different colors distinguish marital statuses and their shade is proportional to the number of children ever born.



Figure 2.1: State distribution of family statuses across age for women (top) and men (bottom) by race/ethnicity and age at migration

Note: figures account for sample weights. Axes are drawn horizontally at 0.5 and vertically at age 27.

Two overall patterns can be observed in Figure 2.1. First, the prevalence of marriage in these birth cohorts is remarkably high for both sexes, regardless of their race/ethnicity and age at migration. By age 39, a large majority of individuals were married at least once. The only exceptions are non-white US-born individuals, among whom the prevalence of singlehood, single-parenthood, and cohabitation combined is the largest. By age 39, around 30% of these women and 15% of these men have never been married. This same group also displays the largest prevalence of marital dissolution, which contrasts with the low levels observed among the foreign-born groups (small red areas).

Second, the main differences across race/ethnicity, age at migration groups, and between sexes are related to the timing of family formation events. Transitions to marriage and first birth occur later, and birth intervals are longer among foreign-born individuals than among US-born (except among those who arrive before age 18). These patterns are especially marked for men, among whom transitions to family formation occur later compared to women. Differences across these six groups not only pertain to the realm of family formation. Educational attainment and religious affiliation also vary among men and women in these groups. According to Table 2.2, the proportion of women and men with a college degree is higher among NH white than among non-white individuals. This relationship holds when comparing NH whites with individuals who migrated before age 18. For those who migrated after age 18, educational composition is polarized, i.e. the larger proportions are at the highest and lowest categories of educational attainment.

	Women							Men					
	US-born		Foreign	-born by	age at m	igration	US-	born	Foreign	-born by	age at mi	igration	
	NH white	Other	<18	19-24	25-30	>30	NH white	Other	<18	19-24	25-30	>30	
Education	al attainn	nent											
Lowest	10.6	20.7	29.0	43.0	29.8	28.9	12.9	23.1	39.8	49.8	27.0	29.0	
	(0.6)	(13)	(3.1)	(4.5)	(3.6)	(3.4)	(11)	(2.1)	(4.7)	(5.4)	(5.0)	(5.1)	
Low	27.1	31.3	21.5	20.1	21.1	17.6	26.3	33.4	21.1	12.3	14.2	17.5	
	(1.0)	(14)	(2.5)	(3.3)	(3.8)	(2.7)	(14)	(2.2)	(3.5)	(3.5)	(2.9)	(4.0)	
Med.	27.6	27.7	23.6	14.1	16.8	16.5	27.3	25.8	14.2	16.0	15.0	17.2	
	(0.9)	(13)	(2.6)	(2.7)	(2.5)	(2.8)	(14)	(2.0)	(2.5)	(3.9)	(4.0)	(4.4)	
High	34.6	20.3	25.9	22.8	32.3	37.1	33.6	17.8	24.9	21.8	43.8	36.3	
	(1.1)	(1.3)	(3.2)	(3.6)	(3.7)	(4.1)	(17)	(18)	(3.9)	(4.8)	(5.4)	(5.2)	
<b>Religious</b>	affiliation	1											
No religion	14.8	9.7	14.6	13.5	16.3	11.9	22.0	13.8	21.3	19.1	20.7	14.7	
	(0.7)	(10)	(2.7)	(2.8)	(3.0)	(2.8)	(13)	(14)	(3.3)	(5.0)	(4.3)	(3.4)	
Catholic	25.9	21.1	46.3	47.8	45.2	47.0	23.7	23.1	43.8	42.3	36.5	32.6	
	(1.1)	(16)	(3.7)	(4.2)	(4.2)	(3.7)	(15)	(2.3)	(4.9)	(5.7)	(5.5)	(6.0)	
Protestant	54.5	66.0	32.4	25.3	15.5	27.5	47.4	56.2	19.6	22.8	18.7	24.7	
	(1.1)	(18)	(3.3)	(3.3)	(2.5)	(3.4)	(17)	(2.6)	(3.3)	(4.7)	(4.0)	(4.2)	
Other	4.7	3.3	6.6	13.4	22.9	13.6	7.0	6.9	15.3	15.8	24.2	28.0	
	(0.5)	(0.8)	(1.5)	(3.0)	(4.3)	(2.6)	(0.9)	(14)	(3.8)	(3.7)	(4.9)	(6.2)	
Percent	65.3	19.6	4.8	3.5	3.4	3.4	64.0	18.9	5.8	3.4	3.5	4.3	

**Table 2.2**: Educational attainment and religious affiliation by sex, race/ethnicity, and age at migration

Note: educational attainment is coded as: No-high school degree (Lowest), High school degree (Low), Some college education (Med.) and College education and more (High). Standard errors, in parenthesis, are clustered within each survey wave. There are 710 clusters for women and 452 for men.

In terms of religious affiliation, men are more likely to declare that they are not religious compared to women. In addition, most of the US-born population are Protestant (55% among women and 45% among men) and most of the foreign-born are Catholic. These differential compositions may be related to family formation outcomes to the extent that higher educational attainment is associated with delayed transition and lower fertility, and religious affiliation with marital stability (Furstenberg 2010). Hence, when using multinomial models, I control for these two variables plus the birth cohort to account for these differential compositions. Model without controls yield virtually the same results.

#### A family typology for men and women in the US

The family typology for men and women comprises six family categories (i.e. six typical family paths). Among all of them, men's transitions to family formation occur slightly later than women's, and completed fertility is higher for the latter. These categories are sorted by average complete fertility and labeled based on their most salient characteristic as: "Never married", "Delayed", "Normative", "Unstable", "Single parent" and "*Early*". Figure 2.2 displays all individual sequences along with the six-category typology. This typology separates family trajectories according to two criteria: (1) intensity of family events, i.e. the number and type of family events that occurred between ages 15 and 39, and (2) their degree of proximity with the normative trajectory. The bottom area in Figure 2.2 contains trajectories of low intensity, i.e. delayed or no transition to family formation and low complete fertility. The upper area includes highintensity trajectories, meaning that men and women in these groups display early transitions to family formation and high complete fertility. The categories of stable marriages (Normative, Early and Delayed) constitute normative trajectories, whereas the Never married, Unstable and Single parent are non-normative ones. This classification explains 51% and 55% of the total variance across women's and men's family trajectories, respectively.

The *Normative* category comprises the largest share of both sexes (29% for women and 27% for men). Women and men following this family path have, on average, 2.0 and 1.9 children, respectively. Marriages in this category are stable, with only 12% of them being dissolved by age 39 and they occur at about the same age for both sexes. The timing, order, and intensity of family events of this category correlates with positive socioeconomic outcomes for families and children (Hogan 1978; Multiple Authors 2015).



Figure 2.2: Individual family trajectories and family typology by sex

Note: individual trajectories are sorted by complete fertility within each family category. Even though figures account for probability sample weights, interpretations should be cautious due to over plotting.

The large percent of individuals in this category reflects the importance of marriage as a social marker in US society. Two other categories can be considered as normative due to the large proportion of individuals they comprise and the high prevalence of unique/stable marriages: *Early* and *Delayed*. Combined, these categories comprise 44% of women and 38% of men. The remaining three categories occur far less frequently reinforcing the idea that they correspond to non-normative family paths.

The percent distribution of men and women in this family typology corresponds to the overall *family profile*. Deviations from this profile across racial/ethnic and age at migration groups reflect the stratified nature of family formation trajectories (race/ethnicity) and the implications of the migration experience for these trajectories (age at migration). *Family profiles* across these two dimensions are estimated via multinomial logistic models, where the dependent variable is the family typology and the main explanatory variables are race/ethnicity and age at migration. To better capture the stratified nature of family trajectories, I control for potential confounding factors including birth cohort, religious affiliation and educational attainment. Further, I interact educational attainment with race/ethnicity and age at migration to explore differences in *family profiles* according to the socioeconomic background of migrants, and its insertion in the US family system.

## Under and over-representation in family trajectories by migration status

The baseline model uses only birth cohort as predictor. This model yields an AIC of 25,222 for women and 14,041 for men. Specifications with all control variables produce a decline in the AIC with respect to the baseline model (better goodness of fit) of 10.0% for women and 6.1% for men. Likewise, the AIC for the specification that includes the interaction between race/ethnicity, age at migration and educational attainment reduces the AIC by 10.1% for women and 5.9% for men. Sex differences in the AIC reduction

suggests that socioeconomic characteristics have more explanatory power of this family typology among women than men.

Table 2.3 presents *family profiles* by race/ethnicity and age at migration. These profiles are estimated including all control variables. The lower panel in Table 2.3 displays the ratio between each group's *family profile* and that of the NH white population of each sex. I subtracted one to facilitate interpretation of these numbers. Those above 0.3 (strong positive association) are bolded and those below -0.3 (strong negative association) are written in red.

		Women							Men						
Groups	Never married	Delayed	Norm	Unstable	Single parent	Early	Never married	Delayed	Norm	Unstable	Single parent	Early			
US-born															
NH-white	8.2	17.7	29.3	11.4	4.5	28.8	17.7	15.3	30.5	8.7	7.1	20.6			
Other	12.3	11.2	26.6	19.5	8.1	22.4	22.3	19.0	19.9	14.8	4.6	19.4			
Foreign-bo	orn by ag	e at migi	ation												
<18	13.2	13.0	28.0	9.7	3.1	32.9	11.4	31.8	29.1	11.6	2.2	13.8			
19 to 24	4.5	13.4	54.7	5.0	1.1	21.3	18.1	24.0	37.0	6.7	2.9	11.2			
25 to 30	5.8	27.2	42.5	5.8	2.9	15.7	10.5	29.4	39.5	7.2	2.4	11.1			
>30	9.6	22.9	35.1	5.9	3.4	23.1	13.8	30.3	29.9	10.0	2.4	13.6			
Ratio of fa	mily prof	<i>iles</i> minu	is one (	ref: NH-v	white)										
Other	0.49	-0.37	-0.09	0.70	0.79	-0.22	0.26	0.24	-0.35	0.70	-0.35	-0.06			
Foreign-bo	orn by ag	e at migi	ation												
<18	0.61	-0.27	-0.04	-0.15	-0.31	0.14	-0.35	1.08	-0.05	0.33	-0.70	-0.33			
19 to 24	-0.46	-0.24	0.86	-0.56	-0.75	-0.26	0.02	0.57	0.21	-0.23	-0.59	-0.45			
25 to 30	-0.29	0.54	0.45	-0.49	-0.36	-0.45	-0.41	0.92	0.29	-0.18	-0.67	-0.46			
>30	0.16	0.29	0.20	-0.48	-0.25	-0.20	-0.22	0.98	-0.02	0.14	-0.67	-0.34			

**Table 2.3:** Family profiles and deviations from NH-whites' family profile by sex, race/ethnicity, and age at migration

Note: control variables include birth cohort, religious affiliation and educational attainment. Results without control variables are equivalent. Ratios above 0.3 are bolded and ratios below -0.3 are written in red.

Among US-born individuals, differences across *family profiles* reflect both the stratified dimension of family trajectories in the US and their gendered nature. For example, compared to NH white women, non-white women are more likely to be in non-normative trajectories, especially in the *Single parent* and *Unstable* categories, both related with

worse socioeconomic outcomes for children. Among men, these associations are generally weaker with the only exception of the *Unstable* category.

There are three overarching patterns in the deviations of *family profiles* by age at migration. First, migration is negatively associated with high intensity, disrupted, and non-traditional family trajectories. Almost all ratios for the *Unstable*, *Single parent* and *Early* categories (i.e. the non-normative paths) are negative for migrants. Second, this association is weaker, or sometimes even reversed, for the first and last age at migration groups. For example, men who migrated before age 18 are 33% more likely to be in the *Unstable* category compared to NH white men. Third, associations between migration and low-order family categories vary substantially by age at migration and sex. For example, women who migrated before age 18 are more prone to be in *Never married* category, whereas their male counterparts are 35% less likely to follow this trajectory. Likewise, the positive association between migration and the delayed transition to family formation (*Delayed* category) is present among women who migrated after age 25 whereas it is true for all men, regardless of their age at migration.

### The gendered interaction between socioeconomic status and migration

To further explore heterogeneity across educational attainment, predicted probabilities were obtained for the interaction term among race/ethnicity, age at migration, and educational attainment. This interaction yields 24 *family profiles* by sex. Figure 2.3 displays the main patterns across these *family profiles*, the left panel corresponds to women and the right one to men. The center of each plot corresponds to the mean *family profile*.

Two features can be interpreted in Figure 2.3. First, proximity between categories of the family typology means that predicted probabilities are simultaneously high. For example, the two closest categories are *Single parent* and *Unstable*, meaning that across the 48 *family profiles*, the proportion of individuals in these two categories are positively

correlated. The opposite is true for categories that are separated (e.g. *Early* vs. *Never married*). Second, for the educational attainment and age at migration groups, proximity to the center implies that the *family profile* resembles the mean *family profile*. Deviations from the center are interpreted in terms of the categories that are in the same direction of the deviation. For example, the most distinct *family profile* among women with respect to the mean is that of highly educated women who migrated before age 18. The *family profile* of this group is positively associated with the *Never married* and *Delayed* categories, indeed, the proportion of women in these two trajectories are 30 and 28%. These figures are considerably higher than the mean: 9.1 and 17.5%, respectively. Among this same group, highly educated women who migrated before age 18, the proportion of them in the *Early* category—the most distant categories to highlight patterns of educational differences.

Figure 2.3 captures three phenomena. First, racial/ethnic and educational disparities in *family profiles* among the US-born population. Second, the role of migration in compressing/lowering educational disparities due to the strong negative association between migration and the *Unstable* and *Single parent* categories. Third, the gendered nature of these two results due to the lower explanatory power of educational attainment and age at migration for men's *family profiles* compared to women. This difference between sexes means that the two experiences (going to school, as a marker for social position, and migrating) influence more women's trajectories than men.

*Racial/ethnic and educational disparities:* educational disparities in *family profiles* among US-born NH white women are large. Among this group, those with college education are more likely to be in low-intensity family categories (right side of the plot), whereas low educated women are more likely to follow high-intensity categories (left side of the plot). Non-white women display smaller educational disparities (i.e. shorter distance across educational attainment groups), and their *family profiles* are associated with less traditional family categories: *Single parent, Unstable* and *Never married*. This latter association is strong, which is consistent with racial/ethnic differences in family

trajectories largely documented by the literature on the US family context (Chen and Morgan 1991; Frank and Heuveline 2005; Parrado and Flippen 2012).



Figure 2.3: Disruption in *family profiles* by sex, race/ethnicity, age at migration, and educational attainment

Notes: the mean profiles are (Women-Men): *Never married* (9.1-14.0), *Delayed* (17.5-22.9), *Normative* (28.6-29.6), *Unstable* (9.2-9.9), *Single parent* (8.1-5.8), *Early* (27.6-17.8).

*The role of migration:* among foreign-born women patterns are more heterogeneous because *family profiles* are spread along the vertical dimension and because educational disparities are disturbed, meaning that educational attainment matter less for *family profiles* of migrants than for *family profiles* of US-born women. Moreover, contrary to what happens among US-born women, low educational attainment is not associated with single-motherhood and, to a lesser extent, with family instability. Take women who migrated before age 18 as an example. Among these women, educational disparities are the largest, meaning that the *family profiles* of the low- and high-educated are very different. Whereas 62% of the low-educated women are in the *Early* category, this

percent is only 4 among those with College education. These two figures among nativeborn are 50 and 8% for NH white, and 27 and 13% for non-white women (i.e. lower educational differences).

Among the other age at migration groups, lines connecting educational categories are shorter and the largest differences appear in the vertical dimension (less traditional vs. more traditional family categories). Migration at early-adult ages (19 to 24) is strongly associated with the *Normative* and *Early* categories, meaning that the confluence of the decision to migrate and the formation of a family favors family stability, and reduces differences across educational attainment groups. The last two age at migration groups also display less marked educational disparities compared to those observed among NH white women. Contrary to what occurs among US-born women, *family profiles* of women with some college and with college education do not differ substantially. These two groups of women are both more likely to follow less intense and less traditional family trajectories; yet, not to the same extent as native-born NH white, which may be related to the differential value that educational credentials have among migrants compared to native-born.

As for family instability, the percent of women in the *Unstable* and *Single parent* categories is lower among foreign-born women than US-born NH white, the only exception are women who migrated before age 18, i.e. those with the longest time of exposure to the US family context. The percent of women in these two categories (*Unstable* and *Single parent*) among those who arrived in the US before age 18 lies between that of NH white and non-white women, signaling a confluence of assimilation and socialization.

*Sex differences:* patterns among men are much less apparent than they are for women. Educational differences for US-born men are like those of US-born women in that the most distinct educational group are college-educated men. Men in this group tend to follow less intense family formation trajectories. The other three educational levels are in the opposite side of the plot, i.e. associated with more intense family trajectories. Likewise, migrants' *family profiles* are closer to stable trajectories than *family profiles* of US-born men (top vs. bottom locations).

In terms of sex differences among migrants, migrant women display more similarity to their US-born counterparts than migrant men do with respect to US-born men. In other words, evidence for women is more indicative of assimilation to the US family system than evidence for men. For example, educational differences in *family profiles* among US-born men spread along the horizontal axis, whereas among migrant men they follow a diagonal distribution. This is because the negative association between migration and the *Unstable* and *Single parent* categories is more pronounced among migrant men than migrant women. None of the points pertaining to migrant men appear close to any of these two-family categories, meaning that the migration experience for men rarely implies staying in the US as divorced, separated, or single parents. Among women, these situations are also rare but not as much as among men.

A potential explanation for sex differences are inter-marriage propensities, i.e. probabilities of marrying someone from a different racial/ethnic group. Controlling for the same socioeconomic variables as before, Table 2.4 presents the summary of Linear Probability Models (LPM) predicting two interrelated outcomes: the proportion married to NH white (the majority population) and the proportion married to an individual of the same racial ethnic group (endogamy).

Racial/ethnic endogamy among NH white individuals is strong, and it is weaker among women than men. Among NH white women the proportion married to a NH white is positively associated with education. The reversed relation is observed among men, i.e. the higher the educational attainment the lower the proportion of men married to NH white women. Compared to non-white US-born women, foreign-born women have a higher probability of being married to a NH white man at all educational levels, meaning that US-born white men are more open to foreign-born women than to native-born women of other racial/ethnic group.

This probability is negatively associated with the age at migration and positively associated with educational attainment. Early arrival is associated with a higher integration to the US family systems for women. This integration has two dimensions. First, migrant women are more likely to marry a NH white man if they arrive as young adults. Second, early migration implies the strengthen of the educational differences in the probability of marrying a NH white man.

			Wom	en			Men						
	US-born		Foreig	1-bonr by a	ge at migra	tion	US-bo	om	Foreign	-bonr by a	age at migra	tion	
	NH white	Other	<18	19-24	25-30	>30	NH white	Other	<18	19-24	25-30	>30	
Percer	nt whose pa	rtner is NH	white										
Const.	85 ***	18 **	71 ***	36 **	11	18	100 ***	42 **	15	13	-26	27 +	
	(3.2)	(5.8)	(12.2)	(13.1)	(12.7)	(13.4)	(4.6)	(13.7)	(12.0)	(11.2)	(16.7)	(15.1)	
Educat	tional attai	nment (Ref.	Lowest)										
Low	6 **	4	22 *	30 **	19 +	3	-8 **	-6	17 +	-5	1	-14	
	(2.4)	(2.9)	(9.7)	(9.4)	(11.0)	(7.3)	(2.7)	(8.4)	(9.8)	(6.3)	(4.4)	(9.6)	
Med.	7 **	8 *	25 *	39 ***	20 *	17 *	-8 *	1	17 +	-4	32 +	-13	
	(2.4)	(3.3)	(9.5)	(9.9)	(9.1)	(7.7)	(3.2)	(8.4)	(10.0)	(6.1)	(16.4)	(12.9)	
High	8 ***	18 ***	31 ***	32 **	35 ***	24 *	-6 **	-2	29 **	22 +	24 *	-3	
U	(2.4)	(4.7)	(8.3)	(9.5)	(9.4)	(9.9)	(2.0)	(8.8)	(9.6)	(12.7)	(9.7)	(13.5)	
Percer	nt whose pa	rtner belong	s to the sa	me racial/e	thnic group	)							
Const.	85 +	83 ***	70 ***	89 ***	98 ***	78 ***	100 ***	57 +	59 ***	95	110 ***	89 *	
	(3.2)	(6.1)	(10.5)	(8.4)	(9.3)	(12.0)	(4.6)	(13.9)	(18.7)	(6.0)	(13.3)	(7.8)	
Educat	tional attai	nment (Ref.	Lowest)										
Low	6 **	-8 *	-10	-12 +	-20 *	-3	-8 **	6	-14	11 +	-4	3	
	(2.4)	(3.9)	(6.9)	(6.1)	(8.6)	(5.9)	(2.7)	(8.5)	(13.0)	(6.2)	(4.3)	(2.4)	
Med.	7 **	-11 **	-18 *	-23 *	-3	-7	-8 *	1	-7	3	-22	-2	
	(2.4)	(3.7)	(7.6)	(9.6)	(4.5)	(6.8)	(3.2)	(8.2)	(9.3)	(6.1)	(16.3)	(2.6)	
High	8 ***	-20 ***	-28 ***	-4	-15 +	-10	-6 **	3	1	-12	-14	-5	
0	(2.4)	(4.8)	(7.3)	(7.4)	(8.1)	(6.2)	(2.0)	(9.1)	(7.1)	(7.5)	(8.1)	(3.5)	

**Table 2.4:** Sex differences in the percent married with a NH-white (top) and the percent married to a member of the same racial/ethnic group (bottom)

Significance levels are presented as: +0.1, \*0.05, \*\*0.01 and \*\*\*0.001

Note: control variables include birth cohort, religious affiliation and educational attainment. Standard errors, in parenthesis, are clustered by survey wave. There are 710 clusters for women and 452 for men.

Migration for men is not associated with a higher probability of marrying a NH white woman. Compared to US-born non-white men, foreign-born men are less likely to marry a NH white woman at almost all educational levels. A slight exception are men who migrated before age 18 and went to college. Among this group, the proportion married to a NH white woman is estimated at 44%, slightly above the proportion among non-white men with college education (42%). Results for men should be taken carefully as estimates display large standard errors due to small sample size.

Results for the proportion married to someone of the same racial/ethnic group mirror those obtained for the proportion married to a NH white. Women are less likely to marry someone from their same racial/ethnic group than men. Among foreign-born individuals, the relationship between educational attainment and the probability of marrying someone of the same racial/ethnic group is negative for women, and it is null for men. This relationship is strongest and the weakest among women who migrated before age 18 and after age 30, respectively.

## **Conclusions and discussion**

This paper identifies six typical family trajectories among men and women born between 1950 and 1980. Accounting for by more than 50% of the total variance in family formation trajectories, this typology describes the large heterogeneity and strong connection among family-related events across individuals' life courses. These family trajectories are strongly associated with individuals' educational attainment, especially among women. This association is disrupted among migrants in ways that depend on their sex and age at migration. Therefore, a variegated pattern is observed in the *family profiles* of migrants. Interpreting these patterns and their correlates add nuances to our understanding of migrants' family trajectories in terms of *selection, disruption, assimilation* and *socialization* influences.

For US-born individuals, the increasing importance of schooling for positive socioeconomic outcomes and the differential access to formal education, strengthen the association between educational attainment and family trajectories (Furstenberg 2014). Individuals with four or more years of higher education are more likely to follow

trajectories characterized by delayed transition to marriage, marital stability, and low fertility than individuals with fewer years of education. At the other end of the educational scale, people without a high school diploma are more likely to experience single-parenthood and marital instability, two trajectories with negative implications for the socioeconomic conditions of both adults and their children (Multiple Authors 2015). This association also varies by race/ethnicity. The association between higher education and marital stability is weaker for non-white women. Conversely, the association between lower education and marital instability is weaker for NH white women. This interaction creates a more polarized family context in the United States along racial and ethnic lines (Esping-Andersen 2009).

Migrants enter the US stratified family context in ways that depend more on their sex and age at migration than on their educational attainment. Still, the role of educational attainment in family formation trajectories is an important one. Educational attainment operates differently among migrant groups, by age at migration, adding nuance to the *assimilation, socialization* and *disruption* hypotheses. Migrating as an adolescent, for example, is associated with the largest differences across educational attainment levels, meaning that there are differential assimilation paths according to the socioeconomic background of migrants. Early-adult migration, on the other hand, is associated with normative family paths regardless of educational attainment of migrants. Finally, migration at later ages is associated with delayed and less intense family formation trajectories.

These patterns are clearer for migrant women than migrant men and are driven by three factors. First, early migration to the US strengthens educational differences in *family profiles* because of the longer exposure to the US stratification system and the very distinct socioeconomic background of adolescent migrants: those who migrated as dependents vs. those who migrated as married adolescents (Landale and Oropesa 2007). This pattern contrasts with that of young-adult migrants. Second, because marriage itself may help individuals to cope with the challenges of migration, migrants are likely to follow more normative/stable trajectories, especially when migrating as young adults.

Therefore, there is a strong negative association between migration and both singleparenthood and marital instability. The extent to which this is driven by return migration remains unanswered. Third, among individuals who migrated after age 18, the *family profiles* of those with some college and college education are similar, and the lack of access to college education is not associated with early transition to family formation and high fertility. Anticipatory behavior and higher racial/ethnic exogamy among women than men are likely to play an important role on this difference between sexes. Lower rates of transition to family formation before migration are likely to explain why, despite their relatively low educational attainment, migrants do not follow trajectories of early transition to family formation and high fertility.

The fact that these descriptions apply less to men than women implies that men's family trajectories are less affected by the socioeconomic characteristics studied in this paper. To the extent that these characteristics (race and ethnicity, age at migration, educational attainment, religious affiliation, and birth cohort), reflect the opportunity structure that individuals meet to develop their family lives; it follows that men face fewer social constraints than women during the family formation process in the US. To be sure, migrant men enjoyed higher mobility during this time period, meaning that they could travel back and forth, or eventually return to their origin countries, in the process of finding a partner or sustaining a family (Massey 1987b; Raley, Durden, and Wildsmith 2004).

At the same time, men are substantially less likely than women to be partnered with someone from a different racial and ethnic group, especially with a NH white partner of the opposite sex. This means that men's experiences are better accounted for by the hypotheses of *socialization* and *disruption*. First because they tend to marry someone from the same racial/ethnic group (potentially from the same origin country). Second, because this type of marriages often implies to travel back and forth between the two countries (Parrado 2004). Periods of temporary couple separation have been found to disrupt fertility schedules and marital schedules (Lindstrom and Giorguli Saucedo 2002; Parrado 2004). On the contrary, women's family experiences are better explained by the

assimilation hypothesis, i.e. migrant women's *family profiles* replicate the main racial/ethnic and educational differences observed among their US-born counterparts. Yet, assimilation does not simply mean replicating normative patterns, as for women who migrated between 19 and 25. Assimilation into the US family system implies strengthening socially determined differences in *family profiles* in the case of women who arrive before age 18, and weakling these patterns among those arriving after age 25.

Finally, some caveats on the data and the potential venues for future research on family trajectories, migration and educational attainment are worth noting. Results based solely on information collected at destination are likely to suffer from the so-called immigration-bias (Beauchemin 2014). Analysis on migrants who stayed in the US until age 39 may over-represent the experience of 'successful migrants', i.e. those who were able to stay in the US perhaps by remaining married. This bias in the sample could explain why features such as single-parenthood, sustained cohabitation, and unstable marriages are not prevalent among migrants, even though these three phenomena were increasing in origin countries during the period of analysis. In the same vein, the experience and family formation trajectories of migrants without legal status in the US is likely to be underrepresented in this work. Hence, future research using transnational samples and samples that better capture the experience of migrants with varying legal statuses have much to add to the findings presented in this chapter.

# Chapter 3. A transnational perspective on family formation and dissolution in Latin America and the Caribbean

# Introduction

Migration has a strong potential for disrupting the family formation trajectories of individuals, i.e. the type, timing, ordering, and sequence of unions, marriages and childbirths. Together, internal and international migrants comprise one seventh of the world's population, that is, more than one billion people (United Nations 2013, 2017b). This population is unequally distributed across countries, and within them across subpopulation groups. The need to understand the association between migration and family formation dynamics is indisputable, especially for contexts where migration has been part of larger processes of socioeconomic change, that is the case of Latin America and the Caribbean (LAC).

The years between 1950 and 2000 in LAC offer an interesting context to study the relationship between migration and family formation dynamics. During this time period, internal and international migration transformed LAC countries from rural to urban nations, and from receiving to sending countries of international migrants (Durand 2009; White 2016). The main destinations for LAC international migrants are the United States and Spain, the former mainly driven by Mexican and Central American migration, and the latter by migration from the Andean countries (Colombia, Ecuador, and Peru). As for internal migration, rural-to-urban migration brought a significant number of agricultural workers to cities contributing significantly to urbanization (Portes 1989; Rodríguez Vignoli 2004). In both cases economic factors such as wage differentials and better economic prospects at destination were the main drivers of these flows (Clark et al. 2003; Durand and Massey 1992).

Compared to other regions of the world, indicators of family formation in LAC have been more stable, however, families in LAC countries experienced some changes, including fertility decline, booming of cohabitation, and increasing marital instability, during the last five decades of the 20<sup>th</sup> century (Arriagada 2007; García and de Oliveira 2011). These changes occurred in tandem with the increasing feminization of the US-LAC migration and significant presence of LAC women in migration flows to Europe (Castro Torres and Canal Laiton 2018; Van Mol and de Valk 2016). Evolving migration flows and family change have brought about complex gender relations that permeate both the migration experience and the unfolding of individual family formation trajectories (Herrera 2008; Hondagneu-Sotelo 1994; Pedraza 1991).

Under these circumstances, family formation trajectories and migration can be hypothesized as factors participating in the reproduction of social differences, including those of gender and social class. Qualitative research has established these connections by describing the multiplicity of family and migration histories according to individuals' socioeconomic background and the gender systems of differentiation that prevail in the countries of origin (Hondagneu-Sotelo 1994; Multiple Authors 2003). There is a dearth of studies that focus on these processes from a quantitative perspective and that move from the study of family events (birth, marriages, divorces) to the study of full trajectories. A quantitative approach is very well suited to capture the structural dimension of class and gender relations in family and migration processes. By structural conditions, I mean differences across groups such as men vs. women, lower-class vs. higher-class, etc.

The Mexican and Latin American Migration projects offer the opportunity to explore this approach as they provide rich retrospective information on family and migration for a relatively large number of men and women from diverse origins. These two projects cover more than 200 local communities in 12 LAC countries and collect information on migrants in the United States, Spain and Canada. Detailed information about the selection of communities can be found in the projects websites: <u>https://lamp.opr.princeton.edu</u> and <u>https://mmp.opr.princeton.edu</u>.

I pool all available waves from eight LAC countries with harmonized information on family and migration. This data allows me to highlight how age at migration, sex, and social class combine to create substantial heterogeneity in family formation trajectories among domestic and international migrants. This variegated display of heterogeneity underlines the necessity to go beyond testing explanatory hypotheses based on mean levels of family events towards the understanding of the family as a process (trajectories) embedded in systems of gender and socioeconomic stratification. I argue this approach allows us to better capture the structural conditions surrounding gender and social class differences, and the role of family formation and migration as both cause and consequence of them.

The contribution of this paper is twofold. First, it offers an in-depth description of family formation trajectories showing communalities and differences by sex and migration status, along with their implications for the reproduction of gender and social class differences. Second, it provides a visual representation of the heterogeneity in the relationship between migration and individual family formation paths. This representation is further used to assess the validity of previously proposed explanations and to identify gaps in our theories. I close the paper with some speculations on the possibility that the concept of social class could be useful to group the hitherto separate explanations provided by the demographic and sociological literature. These speculations are based on recent discussions about the necessity to include a class-based approach to migration studies (Van Hear 2014), as well as on sociological accounts of the strongly stratified nature of LAC societies (Portes 1985; Portes and Hoffman 2003).

## Internal, international migration and family in LAC

Back in the 1960s and 1970s rural to urban migration dominated domestic migration flows in LAC (Rodríguez Vignoli 2004). Excluding Argentina, Chile, Uruguay and Venezuela, the most urbanized countries of the region, the average proportion of people living in urban areas by country increased from 36% in 1950 to 58% in 1990. This massive urbanization was as an important factor for fertility decline and family change

(Guzmán 1996). Studies of the time explained migrant vs. non-migrant differences in aggregated family outcomes (mostly fertility) by testing the so-called *selection*, *assimilation/adaptation*, *disruption* and *socialization* hypotheses. Most of these studies found that the fertility level of rural migrants in urban areas was in between that of rural and urban non-migrants. Depending on the data and context, scholars interpreted these results in terms of one of the four hypotheses. Overarching reviews of these studies conclude that reconciliation is complicated due to differences in data and methodologies (Kulu 2005a; Zárate and Unger De Zárate 1975).

During the same period, international migration took off in the region and, with the economic crisis of the 1970s, emigration rates from LAC countries to the United States, Canada and some European countries experienced sustained growth (Alvarado and Massey 2010; Castles et al. 2014; Donato et al. 2010; Massey and Capoferro 2006). Persistent economic-development gaps between origin and destination countries, and international migration policies (e.g. the Bracero program) helped to consolidate these migration streams (Massey et al. 1987; Organization of American States 2011). Initially, these migration flows were dominated by men, but they quickly became diversified due to family reunification and the increased demand of female labor in the service and care industry (K. Donato 2010; Hondagneu-Sotelo 1994; Sassen-Koob 1984). Figure 3.1 displays the evolution of emigration rates and sex ratios among migrants from the eight LAC countries of this study to three main destination countries: United States, Spain and Canada (White 2016:18).

The growing numbers of LAC migrants in these destinations have attracted considerable attention from scholars, initially at destination, and later from the origin perspective. This scholarly work has also documented the connection between migration and family. Despite some variations in the way hypotheses are stated in these studies, the overall assessment of these works is like that of studies on internal migration: migration and family are connected, and the four explanatory hypotheses are complementary.

For example, Lindstrom and Giorguli-Saucedo (2002) document how temporal separation of Mexican couples due to migration depresses fertility meaning that international migration *disrupt* family schedules. Parrado (2011) shows how period measures of Hispanic fertility in the US are inflated due to the connection between migration and transition to first birth; yet, differences in complete fertility between foreign- and native born are negligible, meaning that there is *assimilation/adaptation*. In Canada, Adserà and Ferrer (2014) show how fertility rates among migrants are low before migration and high one year after, signaling migrants delayed fertility according to their migration plans. Whereas all these studies find evidence of disruption and adaptation, differences across migrants' origin also lead the authors to give validity to the *socialization* hypothesis; migrants from high fertility settings (African countries) tend to maintain a slightly higher risk of having large family at destination compared to migrants from context where families are smaller (European Union) (González-Ferrer et al. 2017; Stephen and Bean 1992).





Sub-region: • • • Central America and the Caribbean — — South America — — Mexico

Notes: migration data comes from the World Bank – Global Migration Database. Population data comes from the United Nations Population Prospects for 2017. Countries are labeled as: Colombia (COL), Dominican Republic (DOM), Ecuador (ECU), El Salvador, Guatemala (GTM), Mexico (MEX) and Peru (PER)

In both internal and international flows, elements of these four hypotheses partially explain the family paths of LAC migrants. Because migration entails substantial costs, migrants tend to be positively selected in terms of socioeconomic status in almost all migration flows. Additionally, because living and labor market conditions differ substantially between origin (LAC countries and rural areas) and destinations (US, Canada and Spain and urban areas in LAC countries), the migration experience implies significant adaptation in economic and financial terms, in ways that affect and depend on the unfolding of a family formation trajectory.

Take a woman born in a rural setting as an example. Once she move to a large city, the separation of the productive and reproductive spaces, along with a devaluation of her skills, probably linked to agricultural production, have been shown to restrict family size (Jelin 1977). Yet, family formation trajectories among migrants are not identical to families at destination, which implies that some elements of the socialization hypothesis are at work as well (Parrado and Morgan 2008; Stephen and Bean 1992).

Despite its consistency, what is somewhat misleading from this complementary narrative is that it abstracts individuals from their gender and social class. As noted by Hein de Hass (2014) and Garip (2012), quantitative accounts about migrants tend to reconstruct the story of an a "average" individual which erases his/her gender and class belonging. This is in part because studies focus on mean levels, with little or no attention to heterogeneity. Put simply, mean levels of fertility and timing of family formation are likely to mask important heterogeneity by gender and across socioeconomic status. Exploring how the relationship between family formation and migration differs along these dimensions seems pertinent for the LAC case because family change and migration were part and parcel of both social change and social stratification endurance.

# Potential sources of variation in the relationship between migration and family trajectories

Decisions to migrate and form a family are intertwined because they are both important markers of transition to adulthood, and because they require a sizable proportion of the lifetime and resources of an individual (Juarez and Gayet 2014; Lindstrom and Giorguli-Saucedo 2007). Therefore, migration-related disruptions on family formation trajectories are likely to vary across migration flows (internal vs. international) and migrants' sociodemographic characteristics including sex, age at migration, and social class.

By changing place of residence migrants are exposed to new social contexts that require them to adjust to new material and non-material conditions. Material conditions include the combined need of migrants to recover the investment they put into migration, maintain themselves in the new setting and, potentially, send remittances to those left behind. Non-material factors consist of expectations, values, and norms at destination, including those related to the family (Alba and Nee 1997). Both types of factors are associated with changes in the family at origin, through remittances, and at destination due to migration-related disruptions (Anwar and Mughal 2016; Davis 2011; Fargues 2011).

This paper focuses on material conditions for two reasons. First, material needs are more important than non-material because the former are of primary order for survival, i.e. they are more immediate and are hardly avoidable. In addition, this type of needs varies substantially across migrant's socioeconomic background and are potentially exacerbated with migration due to traveling, moving, and settling costs. Second, the sociological literature is full of evidence on the correspondence between material conditions and mental schemes, value systems, and beliefs (Bachrach and Morgan 2013; Johnson-Hanks et al. 2011). The intersection of these two dimensions has been referred to as "segmented rationality" and, in a more classical way "habitus" (Bourdieu 1996; McNicoll 1980). In addition, material conditions are easier to observe and compare in quantitative surveys.

Adaptations strategies to new material conditions are likely to include actions that help increase or preserve resources. For example, in the case of Colombian and Ecuadorian migrants in Spain, lower fertility and higher marital stability have been associated with the migration experience as they reduce the financial needs of the household and potentially boost its pecuniary capacity, i.e. its capacity to organize international or internal moves (Bueno and Vidal-Coso 2019; Castro-Martin and Rosero-Bixby 2011). It is the relatively vulnerable condition of these migrant families that is associated with their reduced size and its higher propensity (need) to remain attached. This relationship can also run in the other direction. Parrado (2004) shows how transition to marriage accelerates and marriage stability is boosted among Western Mexican migrants when they return to Mexico due to the wealth and assets the acquire during their time abroad. In addition, the migration experience itself may imply delays in family formation insofar as planning and moving consume individuals' time and resources that could otherwise have been used to form a family. It is also possible that family formation is a precondition or a trigger for migration due to the economic, social, and emotional support family members provide to each other, and that consequently foster individuals' intentions to migrate.

Whether family formation occurs before or after migration, and how an individual family formation trajectory unfolds, varies across social classes because both processes are strongly determined by an individual's opportunity structure. Qualitative studies have underlined how these complex interactions between cultural background, migration experience, and context of reception translate into high heterogeneity in family trajectories (Herrera 2012; Hondagneu-Sotelo 1994; Zentgraf and Chinchilla 2012).

Even though internal migration is not a necessary precondition for international migration, there is a hierarchical relationship between the two. In general, international migration is riskier, requires more resources, and implies more contextual changes than internal. Therefore, the relationship between family formation and migration could vary according to the type of migration. International migration may imply longer periods of separation and more uncertainty within the couple; yet, formal marriage may facilitate or

be a requirement for family reunification. Perhaps the only exception are migration flows of people of Mexican origin to the US. Well-established migrant networks may decrease the cost and risk associated with migration and even facilitate circular migration (Fussell 2010; Massey 1990); yet, this does not erase the difference between internal and international migration. Instead, domestic migration is less affected by these features. Couple migration and migration with children are, in principle easier; distance between origin and destination is shorter and formal marriage is not required for family reunification. In other words, the potential disruption associated with internal migrating may be of a more temporary nature compared to disruptions associated with internal moves (Macisco and Myers 1975).

Given the stratified nature of family formation and migration, it is also expected that their relationship varies by social class in ways that tend to reproduce social class differences. For upper-class individuals, migration could be associated with delayed transitions to family formation and less traditional family life paths, e.g. career-oriented individuals who migrate to pursue higher education from middle-upper classes in origin areas. In contrast, migrants who move to escape poverty (by themselves or as dependents) are more likely to stick to traditional family forms, i.e. early, stable and universal marriages. For the lower classes, marriage is an asset that helps individuals coping with the financial and emotional costs associated with migration (Parrado and Flippen 2005). There is a two-way relationship between both family formation and migration, on the one side, and resource accumulation, on the other. People with better access to material and cultural favor resource preservation. On the contrary, groups with less favorable opportunity structures are more likely to experience disruptions associated with negative family and socioeconomic outcomes.

Finally, the intertwined nature of family formation and migration could have different implications for men and women. Because family formation occurs earlier among the latter, especially among those from lower classes, migration could further accentuate class differences among women. An important branch of the gender literature on migration in LAC has shown how lower class women can migrate before age 18 without being fully supported by their parents if they are married to an older male migrant (Donato 2016; Herrera 2012). Their life experience and opportunities are substantially different from those of higher-class women who migrate as dependents, i.e. as daughters within economically and socially advantaged families. This latter group of women have better socioeconomic opportunities thanks to their families' support before, during, and after migration. This is truer in the context of international moves because gender roles, labor-market conditions, and migration policies have largely favored male migration, making women's international mobility more dependent on their marital status (Kanaiaupuni 2000). The Dominican Republic constitutes an exception given that women are more likely to have the role of providing financial support for the household. Consequently, they are more likely to be the leaders in the migration strategy of the household.

### Class and gender in the context of domestic and international migration

Class structures and social inequalities in LAC are historically rooted and pervasive (Portes and Hoffman 2003; Torche 2014). Likewise, the connection between social reproduction and family formation trajectories is strong. For example, recent studies have shown the emergence of a bimodal pattern in the age at first birth by educational attainment, meaning that low-educated women are accelerating transition to childbearing, whereas the reserve is true for the high-educated (Lima et al. 2018). These differences in timing may have implications for educational attainment and economic prospects of mothers and their children. These dynamics are not new; on the contrary, they have been in place since the start of the fertility transition in virtually all LAC countries (Bongaarts, Mensch, and Blanc 2017; Castro Torres 2017).

As for gender differences in LAC countries, men and women do not start family formation at the same age. Despite modest declines, the age difference within couples continues to favor men. By starting families later, men have more time to accumulate assets and educational degrees than women. Once in a couple, women are expected to undertake most of the care work at home and they are often underemployed; men are responsible for the financial support of the household and typically have better jobs (Urdinola, Torres Avilés, and Velasco 2017). Not to mention the disproportionally high level of domestic violence that women suffer (Landale and Oropesa 2007; United Nations 2017a).

In addition, international mobility is more restricted for women than men. Women depend more on family and kinship networks when they want (or need) to migrate than men (Curran and Rivero-Fuentes 2003). In her study on the development of 'weak-ties' among the Maya community in Houston, Hagan (1998) shows how the gendered nature of immigrant networks is detrimental for women's long-term legal settlement in the US. Residential isolation along with other working conditions among women working as domestic servants, for example, prevent them from developing horizontal relationships with non-Mayan people, which translates into less social and cultural capital to interact with US institutions. This is not the case at all for men, who typically have occupations that allow them to have more frequent interaction with US-born individuals which in turns favors their capacity to navigate institutions and integrate to the US society. These differences between men and women, are not limited to the development on short- and long-term migration networks, they are also present in virtually all dimensions of the migration experience. These dimensions include the timing of migration, the destination, and the decision making and labor division within the household (Donato 2016; Hondagneu-Sotelo 1994; Massey, Fischer, and Capoferro 2006; Pedraza 1991).

All these gendered dynamics are not always detrimental for women, there are instances when migration favored women's empowerment and financial independence as they are more likely to join the labor market and are more aware of their capacity to be financially autonomous (Parrado and Flippen 2005). Yet, aggregate trends at origin and destination suggest that negative consequences override positive ones translating into worse socioeconomic and labor conditions for women (Sassen 1998). This is especially the case of women in less privileged positions socioeconomically speaking. Using a class and

gender lens to understand migration and family formation dynamics in the region is then necessary.

### Two unique sources to study migration and family in the Americas

Data and methods were selected to capture and depict the multiple ways in which family formation trajectories and migration are related to one another in LAC as a region. By pooling data from the Mexico-US migration stream (largest stream worldwide) with much smaller migration flows from other LAC countries the analysis incorporates diverse migration experiences and heterogeneous family formation trajectories favoring the generalizability of the results. As for the methods, cluster analysis is used to capture the main features of the heterogeneity in family trajectories and graphical representations of *family profiles* serve us to display the entire set of associations between outcomes (family trajectories) and explanatory variables (sex, migration type, age at migration and educational attainment).

The strongest advantage of the Mexican Migration Project and the Latin American Migration Project (MMP and LAMP herein) is their ability to capture the history and heterogeneity of migration dynamics across LAC countries from a multisite perspective (Beauchemin 2014; Massey 1987a; Riosmena 2016). Whereas the MPP includes only the US and Canada as destination countries, the LAMP provides information on Colombian, Ecuadorian, and Peruvian migrants in Spain. Households are randomly chosen in preselected local communities in origin countries and a snow-bowling sampling strategy is used to collect information on migrants at destination. To increase the probability of including households with at least one migrant and to collect information directly from the migrants themselves, data collection focuses on local areas with high prevalence of emigration and it takes place during the end of the year (time when migrants are likely to be visiting their families). Both datasets are locally representative within in each country.

The MMP and LAMP data are biased towards return migrants, migrants with stronger families ties and consequently more stable family formation trajectories. Despite positive assessment on the capacity of these data sets to truly capture national dynamics of emigration, a cautious interpretation of the results regarding family dynamics is necessary, especially when pooling different datasets as they are only locally representative (Massey and Zenteno 2000). This cautious interpretation includes looking at family trends in national representative surveys in origin countries to verify consistency or asses the importance of the deviations. I go back to these issues in the concluding section.

Despite these limitations the MMP and LAMP are a unique source to study family and migration trajectories jointly in the Americas. They shared methodological and theoretical grounds for which information across countries is highly comparable. I focus on eight countries with harmonized birth, marital, and migration histories for household heads and their partners: Mexico, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Nicaragua, and Peru. I add partners assuming they share the marital and birth history with the household head. This assumption is not problematic given the high level of marital stability among the cohorts of study (Fussell and Palloni 2004). Moreover, adding partner increases significantly the number of women in the sample.

# Reconstructing family trajectories and identifying migrants

Using information from the life histories grids, I reconstruct the sequence of all familyrelated events (births, unions, marriages, separations and divorces) for household heads 39 to 50 years old. I use four categories to classify individuals' marital status: never married, married, cohabiting and separated or divorced. The last category also includes widows. Because the proportion of individuals in this category is demographically unimportant, I refer to it only as separated and divorce. Four categories for the number of children ever born were defined: zero, one, two and three or more. Combining these two variables at each age produces a categorical variable with 16 categories, i.e. family statuses. Table 3.1 displays the total number of men and women for which family trajectories were reconstructed by type of migration and age at migration.

A	Sex	T = 4 = 1			
Age at migration -	Women	Men	Total		
Non-migrant	5,265	3,708	8,973		
Internal					
Before 18	1,051	966	2,017		
19 to 24	579	649	1,228		
25 to 30	292	341	633		
After 30	266	390	656		
<b>International</b>					
Before 18	98	390	488		
19 to 24	152	618	770		
25 to 30	149	468	617		
After 30	199	632	831		
Total	8,051	8,162	16,213		

Table 3.1: Analytical sample by sex, type of migration, and age at migration

Individuals are classified as non-migrants if they did not report any domestic or international move. Following the definitions of the MMP and LAMP, I classify international trips as migration moves if it meet two conditions: (1) the trip lasted at least three months, and (2) the trip implied work or active job search. This definition is convenient for this study because it does not consider short trips and visits to family members as migration. Arguably, short trips and visits are less likely to affect family formation trajectories. Results were consistent when I only consider as international migrants individuals who lived abroad at least one or two years. These two alternatives are less desirable because they implied smaller sample sizes. Domestic moves are identified using the same criteria. Individuals who reported both international and domestic migration are classified as international migrants. Ages at migration are calculated as the difference between the year of the first migration and the year of birth.

Note: the analytical sample includes household heads and partners that were born between 1940 and 1980 in eight Latin American and Caribbean countries.

Hence, the dependent variable of this paper comprises about 16 thousand individual family formation trajectories. Each family trajectory is a 25-length sequence representing individuals' family status from age 15 to age 39. The main explanatory variables are age at migration (including non-migrants), coded into eight categories as displayed in Table 3.1, and educational attainment. Educational attainment is coded into four categories: lowest, low, medium and high. These categories correspond to the number of completed years of schooling: zero to four, five to eight, nine to twelve and more than twelve, respectively. Despite national differences in the content of educational grades, these cut off points provide meaningful categories to distinguish individuals' social class. Less than four years of schooling only assure basic literacy and numeracy skills. Five to eight instead, imply basic competence for unskilled jobs. Nine to twelve are equivalent to high school completion in the US system, and more than twelve years implied college education. Typically, individuals finish 11th and 12th grade by age 18, which is also the legal age of majority in LAC countries.

I follow a two-step analytical strategy to correlate family formation trajectories with explanatory variables. First, I use Sequence and Cluster Analysis (SA and CA) techniques to build a family typology for the individual family formation trajectories. This typology comprises six family categories that are maximally different between them, and as homogeneous as possible within them. Second, I use crosstabulation and multinomial logistic regression models to estimate the conditional distribution of the family typology by migration type, age at migration, and educational attainment (this latter variable is use as a proxy for the socioeconomic position of individuals). I use the expression *family profiles* to refer to these conditional distributions. Differences across *family profiles* by age at migration and educational attainment reflect the complex ways in which migration, social class, and family trajectories relate to one another. All analyses are conducted separately for men and women. Weights are standardized so that each country has the same total weight in the analysis.

#### Methodological approach for visualizing and exploring heterogeneity

My approach for the construction of family typologies is in close connection with the Weberian concept of ideal type. An ideal type is a construction made by the researcher in order to approach a social phenomenon, it serves as a reference point to compare against observed behavior. Consequently, I do not assume that SA and CA should find preexisting clusters in the dataset. Rather, I understand these steps as the construction of the objects of study, i.e. ideal types of family formation paths. Put simply, the family typology is the result of a recodification process which aims to produce a categorical variable with certain characteristics. In this case, this categorical variable groups men and women with similar family experiences in terms of the ordering, timing and type of family-related transitions they undertook between ages 15 and 39.

Recodification into categories necessarily implies some loss of precision in the measurement of separated outcomes (age at first birth, age at first union, etc.), more so when categories collapse multiple dimensions. However, two arguments justify this tradeoff between complexity and loss of accuracy. First, taking seriously the life-course perspective implies analyzing full-individual life-courses, i.e. the joint set of family outcomes that occur to an individual over his/her life history (Abbot and Tsay 2000; Billari 2001). Second, the relative loss of accuracy in the typology, measured as the proportion of unexplained variance across individuals' family trajectories, is low: 18% and 19% for men and women, respectively. Put differently, the family typology explains almost 80% of the total dissimilarity in family formation trajectories.

I estimate *family profiles* using multinomial models with and without control variables. Control variables include country of origin and birth cohort. Since both approaches yield similar results, I present only the latter as they yield a lower value in the AIC meaning a higher goodness of fit. I estimate *family profiles* interacting age at migration and educational attainment. This interaction yields a table with 36 *family profiles* per sex. I rely on a factorial representation of these tables to highlight the main patterns and to facilitate interpretation.

As in the case of the typology building, not all the variance across *family profiles* is displayed in the factorial representations. For both men and women, the proportion of unexplained variance is around 15%. Hence, accounting for the two steps of data reduction, figures summarizing the associations between family, migration and educational attainment account for about 65% of the total variance. This is a high proportion of explained variation compared to both, studies using sequence, cluster and factorial representations, and studies using more standard techniques such as regression analysis in individual-level data. In the context of a regression analysis on individual-level data it is rare to find proportions of explained variance ( $\mathbb{R}^2$ ) above 50%. This is possible with factorial techniques because they almost always include at least two orthogonal factors without and explicit outcome variable. More importantly, this approach is specially well suited to depict patterns and heterogeneity.

### Differential selection by sex and type of migration

Sex differences in the prevalence of international migration reflect the higher opportunity for mobility of men compared to women. As seen in Table 3.2, whereas roughly one third of all men migrated to another country, only 12% of women in the sample did so. This relationship holds across all age at migration groups. Instead, the prevalence of domestic migration is indistinguishable between the sexes with a slight negative gradient over age. Compared to women, men are more likely to migrate domestically after age 25, whereas women are more likely to migrate before age 18. This is potentially a consequence of age differences in union formation.

According to Table 3.2, migrants of both sexes are positively selected in terms of educational attainment in domestic and international streams. The flow-selection favors men in domestic flows and women in international ones. Because most of the domestic moves occur within schooling ages for men and women (about 70% before age 25), sex differences in the flow-selection signal that domestic migration is associated with higher

educational attainment for women, but this association does not erase sex differences. For instance, among domestic migrants the sex ratio in the proportion of individuals with higher education is 1.36 (men/women), meaning that migrant men are 36% more likely to acquired higher education than migrant women. This ratio is similar across all ages at migration and among non-migrants: 1.28 (before 18), 1.56 (19 to 24), 1.37 (25 to 30), 1.16 (after 30), and 1.53 (non-migrants).

				U	U							
Age at	Warnan	Edu	icational	attainme	nt	Ман	Educational attainment					
migration	women	Lowest	Low	Med.	High	Men	Lowest	Low	Med.	High		
Non-migrant	60.7	59.4	18.3	12.5	9.8	41.2	53.8	17.0	14.2	15.0		
	(1.8)	(2.2)	(1.3)	(1.0)	(1.3)	(2.1)	(2.3)	(1.4)	(1.2)	(1.5)		
Internal migrants by age at migration												
<18	13.0	58.4	10.9	13.8	16.9	10.9	50.6	14.5	13.4	21.6		
	(1.1)	(3.0)	(1.3)	(1.5)	(2.1)	(0.8)	(2.9)	(1.6)	(1.6)	(2.6)		
19 to 24	7.3	50.7	11.4	17.6	20.3	7.8	45.7	9.4	13.3	31.6		
	(0.5)	(3.8)	(1.5)	(2.3)	(2.5)	(0.6)	(3.6)	(1.5)	(1.9)	(3.4)		
25 to 30	3.3	57.2	11.2	16.4	15.2	3.9	52.3	14.0	12.9	20.8		
	(0.3)	(3.8)	(1.9)	(2.6)	(2.4)	(0.3)	(4.6)	(2.4)	(2.4)	(2.9)		
> 30	3.6	57.6	10.3	17.1	15.0	5.0	58.7	14.0	9.9	17.4		
	(0.4)	(4.6)	(2.4)	(2.9)	(3.0)	(0.5)	(3.4)	(2.1)	(1.5)	(3.0)		
Internationa	al migrant	ts by age	at migrat	tion								
<18	2.2	41.3	23.2	27.9	7.5	5.8	58.3	18.3	11.0	12.4		
	(0.4)	(10.3)	(6.4)	(7.8)	(4.8)	(0.8)	(5.3)	(3.7)	(3.1)	(2.8)		
19 to 24	3.8	47.3	14.0	17.8	20.8	10.4	61.8	17.9	8.7	11.6		
	(0.8)	(8.0)	(3.8)	(7.3)	(5.8)	(1.2)	(3.8)	(2.6)	(2.0)	(2.2)		
25 to 30	2.7	35.6	18.7	19.7	26.0	7.2	61.2	10.2	16.7	11.9		
	(0.5)	(5.8)	(4.9)	(4.5)	(5.6)	(0.7)	(4.9)	(1.8)	(4.7)	(3.3)		
> 30	3.5	50.2	10.5	15.7	23.7	7.9	54.5	20.8	10.2	14.5		
	(0.5)	(7.4)	(2.8)	(2.9)	(7.0)	(0.6)	(4.1)	(3.5)	(1.9)	(2.7)		

**Table 3.2:** Migration prevalence and educational attainment by sex, type of migration, and age at migration

Note: educational attainment categories are based on completed years of schooling: 0 to 4 (Lowest), 5 to 8 (Low), 8 to 12 (Med.) and 13 or more (High). Standard errors, in parentheses, are clustered at the community level.

For international moves sex differences in the flow-selection are reversed. Women are more positively selected than men. Indeed, men are negatively selected. This implies that migrant women are more likely to be from high social class, both compared to their counterparts who did not migrate, and compared to men. In addition, the negative selection of men is potentially associated with recruitment policies that targeted unskilled men to work in agriculture during the 1960s and 1970s. In short, this reversed flow-selection by sex emerges from the higher constraints for women's mobility and the more favorable migration channels offered to low-educated men.

### Aggregate-level association between family trajectories and migration

State-distribution plots over age display the aggregate-level associations between age at migration and family formation trajectories (Figures 3.2 and 3.3). These associations differ by sex, type of migration, and age at migration. In the case of women, as seen in Figure 3.2, migration before age 18 is associated with faster transition to family formation, whereas migration after age 25 is associated with the opposite. Moreover, age at migration and completed fertility are negatively associated. This association is stronger among international migrants than domestic. Figure 3.2 also shows that the prevalence of cohabitation, separation, and divorce is higher among domestic migrants, compared to non-migrants and international migrants.

State-distribution plots for men look different than those of women mainly because of age gaps within couples. Men are on average 3.5 years older than their female partners, which implies, for instance, that the prevalence of divorce and separation is lower for men than women because it occurs later for the former. Moreover, Figure 3.3 also shows that the association between family formation trajectories and age at migration is similar for men and women, but weaker for the former. In other words, men's family formation trajectories seem to be less affected by migration.





Note: figures account for sample weights. Axes are drawn horizontally at 0.5 and vertically at age 27.

But state distributions plots could be misleading because they do not represent individual trajectories. Individual-level heterogeneity is masked by aggregated analyses. A better approach to account for this heterogeneity is to build a family typology. Next section presents the main results of the identification a six-category family typology.


**Figure 3.3:** State distribution plots of family statuses over age by type of migration and age at migration –men

Note: figures account for sample weights. Axes are drawn horizontally at 0.5 and vertically at age 27.

## Typical family formation and dissolution trajectories among women and men

Figure 3.4 displays individual family trajectories for women (left) and men (right) along with a family typology for each sex. Individual are sorted by their completed fertility from lowest (bottom) to highest (top). This sorting also organizes family trajectories in terms of their mean age of transition to family formation from latest to the earliest. Hence, the bottom area of the plot contains trajectories of low intensity of family events and delayed transitions to union formation and childbearing, i.e. lower prevalence of marriage, union formation and low fertility, whereas the top contains life courses of high intensity in family events. The intermediate area includes 'atypical' family trajectories (unstable and lifelong cohabitation). The typology comprises six 'ideal types', i.e. six

fairly distinct family experiences along the lines of intensity and deviation from the normative family trajectory. This typology accounts for 83 and 84% of the total squared discrepancy (a concept equivalent to that of variance) across family formation trajectories of women and men, respectively. I use labels to summarize the main aspects of this typology.





Note: individual trajectories are sorted by complete fertility within each family category. Even though figures account for sample weights, interpretations should be cautious due to over plotting.

With 7% of women in it, the "*Never married*" is a category of singleness and single motherhood. Only a very small number of women in this category enter unions. For all other categories transition to union formation is universal, it is delayed among the 12% of women in the second category ("*Delayed*"), and it occurs earlier among the 20% and 5% of women in "*Norm-late*" and "*Unstable*" categories. Virtually all women in the "*Unstable*" category are separated or divorced by age 39. Women in the two-top groups, move to union formation very early and have the highest completed fertility of all categories. Because all women in the fifth category cohabited for the most part of the observation time, I label this group "*Cohabiters*". The last group is labeled as "*Norm-early*" because it comprises the largest share of women 45% and is associated with early, universal, and stable marriage. Among men, there is no category of unstable marriages and an additional category of very delayed transitions to union formation and low fertility is observed ("*Latest*").

The overall delayed schedule and the absence of the "Unstable" category among men reflect the gendered nature of the family formation and dissolution process and its potential role in the reproduction of gender inequalities. To the extent that family formation is a time-consuming task with potential labor-market and educational penalties; women have substantially less time than men to accumulate cultural capital and valuable assets for the labor market. On average, men remain single and without children 37% of their lifetime between ages 15 and 39, whereas women do so only 25% (3.3-year difference). Likewise, the reason why the "Unstable" category only appears for women is because by age 39 more women have experienced union dissolution than men. Hence, on average, women spend 3.7% of their lifetime between ages 15 and 39 separated or divorced, whereas this proportion among men is only 1.2%.

#### Heterogeneity by sex, age at migration and educational attainment

Exploring heterogeneity by educational attainment and age of migration implies the comparison of 36 *family profiles* by sex. Because tables with 36 *family profiles* are difficult to interpret, Figures 3.5 and 3.6 summarize the main patterns among them via factorial axes for women and men, respectively. The center of the plot corresponds to the mean *family profile*, and all the deviations from the center reflect heterogeneity by age at migration and educational attainment. I separate domestic (left) and international migrants (right) to favor clarity. Both planes contain the Non-migrant group and can be interpreted jointly.

Figure 3.5: Disruption in *family profiles* by type of migration, age at migration, and educational attainment for women



Notes: the mean *family profile* is: Never married (9.9), Delayed (18.1), Norm-late (24.3), Unstable (5.3), Cohabiters (6.7) and Norm-early (35.7).

Proximity between two (or more) family categories implies that across the age at migration and educational attainment groups the proportion of individuals in these categories is simultaneously high. For example, the two closest family categories in Figure 3.5 are "*Norm-early*" and "*Unstable*", meaning that among groups where the proportion of women in the "*Norm-early*" category is high (relative to the mean), the proportion of women in the "*Unstable*" category is also high. In contrast, separation between two (or more) categories implies negative association. Hence, the horizontal axis in Figure 3.5 separates high intensity family formation trajectories (left side: *Cohabiters, Unstable, Norm-early*), from low-intensity family life paths (right side: *Never married, Delayed-stable* and *Early-stable*). The vertical direction separates normative categories (bottom) from less/non-normative trajectories (top).

Each age at migration and educational attainment group is represented as a point in the plane. Colors are used to distinguish age at migration and shapes differentiate educational attainment levels. A line connects educational attainment categories for each age at migration group to better depict educational profiles. Proximity between a group and a family category implies positive association; distance/separation implies the opposite. Non-migrant women display well-documented differences in their *family profiles*: highly educated women are more likely to be in less intense family categories, whereas less educated women are more likely to be in high intense family life paths.

Differences in *family profiles* across educational attainment groups accentuate with domestic mobility. The only exception are women who migrated between ages 25 to 30. For them, *family profiles* have higher proportions in the "*Never married*" and "*Delayed*" categories for all educational attainment groups. Domestic migration also separates *family profiles* of young migrants (19 to 24) from adult migrants, the former being strongly associate with more traditional family trajectories and the latter with less traditional ones. This pattern is observed for all educational attainment groups. Notably, educational differences across *family profiles* keep the direction (horizontal) for all ages at migration among domestic migrant women.

*Family profiles* among international migrants display larger and less patterned deviations across educational categories than among domestic migrants, meaning that international mobility is more disruptive than domestic and, that disruptions are more heterogeneous. Being educational attainment a strong predictor of family outcomes, the disruption of educational profiles among international migrant women signal importance of the migration experience for family formation trajectories. For example, among women who migrated as adolescents, the distance between the low- and highly educated is the largest. This separation suggests the existence of two distinct family-migration paths: one the one side, low-educated women in normative trajectories, who probably migrated independently interrupting their studies. On the other, women who also migrated as adolescents but completed higher education, probably because they had parental support, before, during and after migration.

Among women, migration between ages 19 to 24 is strongly associated with the "*Norm-late*" category. Among these women, union formation, union stability, and migration are strongly intertwined. Because the MMP and LAMP samples include return migrants, this result is consistent with previous research that have underscore the importance of family ties (partners and children left behind) in the probability of returning to Mexico. Similar results have been documented among Senegalese migrants in Europe (Arenas et al. 2015; Baizán, Beauchemin, and González-Ferrer 2014). It is possible that, obligations and rights derived from these kinship relations are unaltered by migration or, even more, get reinforced due to the investment family members must make during the process of (temporary) migration.

*Family profiles* for women who migrated between ages 25 and 30 are strongly disrupted. These women are more likely to follow low intensity and non-normative family paths, except for those with higher education. The last age at migration group displays more modest deviations from the non-migrants with a higher propensity towards less traditional family forms. Overall, international migration is negatively associated with cohabitation, only one out of the 16 *family profiles* among international migrants appears

in the same quadrant of the "*Cohabiters*" category. This reinforces the interpretation of formal unions (marriages) as an asset for women's international mobility.

As seen in Figure 3.6 for men, factorial axes also oppose less intense family trajectories (right) from more intense ones (left) and, normative from less/non-normative trajectories along the vertical direction. *Family profiles* in the context of domestic migration display less disruption compared to women, with three important similarities. First, differences across educational attainment levels follow the same direction, higher education goes along with lower intensity and less normative trajectories. Second, late migration is associated with less intense and less normative family trajectories. Third, migration between ages 19 to 24 is strongly associated with normative trajectories.

Figure 3.6: Disruption in *family profiles* by type of migration, age at migration, and educational attainment for men



Notes: the mean profile is Never married (7.6), Latest (8.9), Delayed (17.6), Norm-late (26.7), Cohabiters (5.1) and Norm-early (34.2).

Men's *family profiles* in the international migration context are strongly disrupted and less patterned than among women. There are, however, three distinguishable patterns pertaining to the last three age at migration groups. International migration among young-adult migrants (19 to 24) from lower classes is associated with a higher propensity of being in the "*Norm-late*" category, located in the bottom right area of the plot. Although this displacement towards the right is observed for other age at migration groups, it is strongly marked for low-class young adult migrants, especially when compared to their class-counterparts that migrated internally. This result is consistent with Parrado's (2004) conclusion on the role of international migration in delaying transition to marriage while simultaneously facilitating marriage after return due to its positive impact on wealth and assets accumulation.

Migration between ages 25 and 30 is associated with the largest class differences separating highly educated men in "*Delayed*" categories from low-educated men, who tend to follow the "*Norm-early*" and "*Cohabiters*" trajectories. Finally, low-class men who migrated after age 30 display almost identical *family profiles* to those who did not migrate. Instead, highly educated men who migrated late are substantially more likely to be in the "*Latest*" and "*Never married*" categories compared to their non-migrant class counterparts.

## **Conclusions and discussion**

The development of international and internal migration streams during the post-war period in LAC countries was part and parcel of the major societal transformations of the region. These migration flows were strongly associated with *family profiles* that deviate from that of non-migrants. At the same time, secular family change in these countries opened the possibility for migration flows to become more diverse, especially as women started to migrate more or as much as men. The LAC experience is an illustrative example on the necessity to look at how the relationship between these two demographic

phenomena varies by migration flow, along the lines of gender and, across social classes. I explore this heterogeneity using family histories of 16 thousand men and women from eight LAC countries.

Migration is not univocally associated with a family formation trajectory, or with change in a certain direction, e.g. toward more modern family. Narratives based on the experiences of the "average" internal and international migrant have erroneously neglected the heterogeneity of this association. In general, family formation trajectories among socially and economically privileged individuals do not seem to be affected by migration. It is among disadvantaged populations that the migration experience is associated with large disruptions in family paths. This overall conclusion confirms that socioeconomic inequalities are the background of family differences; migration can disrupt these roots without erasing them completely. Frank and Heuveline (2005) have referred to this as the necessity to frame studies on fertility behavior within a racial stratification perspective; I have shown evidence here on the necessity to include also a gender perspective.

Men and women do not have the same opportunity structure neither to form families nor to undertake international migration. Domestic migration is instead similar in intensity for both sexes. Family formation starts considerable earlier for women than men, and women need a larger amount of capital to be able to undertake international migration. These differences are consequential for the reproduction of gender gaps in socioeconomic outcomes. Women have considerably less time available for the accumulation of educational degrees and valuable assets for the labor market, a difference that is further increased by the disparities in the distribution of care work, heavily burdened on women. To the extent that migration is also a time- and resource-consuming process, women may face twofold disadvantages as migration-related disruptions affect a smaller base-line of time and resources compared to men. The implications of these differences can be sharper for low and middle-low class women because the timing of family formation among these two groups is the earliest. Sex and class differences also manifest in the way migration and family relate to one another. For women, domestic migration is associated with less traditional family trajectories if migration occurred after age 25, especially for women who migrate between ages 25 to 30, meaning that it is the delay in family formation what potentially foster migration. Among men, instead, the positive association between migration and less normative trajectories is only true among those who migrated after age 30. For both sexes, migration between ages 19 and 24 is associated with more normative family paths. Domestic migration appears as a factor capable of both triggering social change towards less traditional *family profiles* (late migration relative to each sex) and contributing to social stability (early migration relative to each sex). These two associations are independent (perpendicular) with respect to social class differences. In other words, despite its disruptive nature for *family profiles*, domestic migration does not erase class differences; if anything, domestic migration accentuates them among young migrants.

This last conclusion does not hold for international migration. Class differences in *family profiles* among international migrants are disturbed and display a major qualitative difference by sex. For women, class differences are heightened if migration happens before age 18—certainly the group for which educational attainment is good indicator of social class background—and diminished when migration occurs between ages 19 to 24 and 25 to 30. These strong disruptions among women from all social classes arise from the fact that transnational samples include very diverse migration histories, some of which include multiple trips, return migration, and periods of illegal permanency at destination, all conditions that can exacerbate the disruptive elements of the migration experience.

For men, patterns across ages at migration and educational attainment are more erratic. These less patterned associations and the low explanatory power of social class and age at migration reflect men's privileged positions in the realm of family formation and migration. Put simply, men's family formation paths are less affected by their social class and migration history than women's. At the very least, this result reflects scholarly incapacity to establish the appropriate socioeconomic and demographic variables (i.e. variables across which family patterns would appear) explaining men's *family profiles*.

Data limitations and biases associated to the collection strategies of the MMP and LAMP are not consequential for these results (see Beauchemin and González-Ferrer (2011) for a discussion on the issues of building representative samples for migrant populations). If individuals included in the MMP and LAMP have indeed stronger family ties, this would imply that the disruptions documented in this paper constitute conservative estimate of the actual role of migration on disturbing *family profiles*. Family oriented individuals should be more likely to maintain an intact family despite of migration. Moreover, the fact that social class patterns appear even though the data conflates diverse migration streams and countries (e.g. Mexico-US, Dominican Republic-US, Colombia-Spain, etc.) signals the strength of social stratification systems in LAC societies, and the usefulness of the concept of social class. This is further confirmed by the fact that patterns are more marked among women, for whom the sample of international migrants is both smaller and more diverse in terms of countries of origin.

The stability of differences in family formation trajectories by socioeconomic status, increasing complexity of migration histories (captured in the MMP and LAMP, although not explicitly explored here) and, the gendered natured of the migration experience and its consequences are features that have been largely documented among Mexican in the US and Colombians and Ecuadorians in Spain (Cortina and Esteve 2012; Coubes, Solis, and Zavala de Cosio 2016:chapters 1 and 6). These other works make me confident on the robustness of the results I presented here, despite the limitations of the data.

# Chapter 4. The role of internal migration on fertility and partnership trajectories in Latin America and the Caribbean

## Introduction

Due to its sheer size and the socioeconomic composition of the flows, internal migration is directly associated with demographic change in origin and destination areas (Portes 2010). In contrast to international migration, internal migration is a widespread phenomenon. In 2013, one of each six people worldwide was an internal migrant (United Nations 2013). Internal migration is less selective than international migration because, in general, distances are shorter, migration costs are lower, and constraints are lesser than for international migration. This means that internal migration flows are much more diverse than international in terms of the socioeconomic characteristics of the migrants. In addition, due to its tendency to be permanent, internal migration has been one of the major contributors to sustained processes of societal change including urbanization; first across high-income countries and later one among low- and middle-income ones (Davis and Casis 1946; Ebank 1993; Preston 1979)

Urbanization is one of the major transformations of modern societies and it is also strongly tied to demographic change in the realm of mortality and fertility, both as a cause and as consequence (Dyson 2011; Todaro 1980). Because one of the main drivers of urbanization is rural-to-urban migration, the study of fertility outcomes among rural migrants in urban settings has largely dominated scholarly research on the relationship between internal migration and family. Since the classic work of Goldberg (1959) on the 'Two-generations Urbanites,' and until the mid-1980s, the study of the relationship between domestic migration and fertility flourished across developed and less developed countries (Goldstein 1973; Goldstein and Goldstein 1981; Hervitz 1985; Macisco and Myers 1975; Martine 1975). After slightly less than two decades of stagnation, the period between the mids-1990 and the 2000s witnessed a revival of scholarly interest on internal migration and fertility in low- and middle-income countries. These studies include the Philippines, Turkey, Guatemala, Brazil, Thailand, Cameroon, and other Sub-Saharan African nations (Brockerhoff and Yang 1994; Eryurt and KOÇ 2012; Jensen and Ahlburg 2004; Lee 1992; Lindstrom 2003; Lindstrom and Hernández 2006).

In these studies, migrant-non-migrant differences in fertility outcomes are explained in terms of four hypotheses, often presented as competing explanations: *selection*, *socialization*, *disruption* and *adaptation*. The first two explanations focus on conditions prior to migration, such as family norms and values learned during childhood (*socialization*) and the less family-oriented attitudes or anticipatory behavior of migrants (*selection*). The last two emphasize how changing circumstances caused by migration (e.g. mid- or long-term spousal separation) could lead to a *disruption* in migrants' family formation trajectories or how these circumstances lead them to *adapt* their transition to form families and having children to the socioeconomic conditions at destination. For example, the higher cost of schooling in cities compared to rural areas can discourage fertility among rural migrants.

Based on mean levels of fertility indicators, researchers often favor one explanation over the others. The reconciliation of results is difficult due to differences across the data and methodologies (Zárate and Unger De Zárate 1975). More importantly, this concentration on mean fertility levels across groups of women with different migration status has downplayed the importance of heterogeneity, i.e. the multiple ways in which migration and family formation relate to one another across different dimensions. Important neglected dimensions among include migration flows other than rural-to-urban (e.g. urban-to-rural and rural-to-rural), age at migration, and the socioeconomic background of migrants, i.e. their social class. Moreover, the implications of changing place of residence are also likely to affect family formation dynamics other than fertility, e.g. marriage patterns, marital stability, etc. And yet, the role of domestic migration on partnership formation and dissolution remains understudied, which counterintuitively assumes fertility and partnerships are not related. This chapter focuses on internal migration in Latin American and the Caribbean (LAC). As a region, LAC experience a rapid and rather unplanned process of urbanization after 1950; a process that went along with unstable economic growth and increasing inequality (Dufour and Piperata 2004; Williamson 2010). Family formation indicators have remained rather stable compared to other regions of the world; yet, this stability is more apparent than real, as differences among social groups in family formation dynamics have increased (Arriagada 2007; Grant and Furstenberg 2007; Lima et al. 2018)

To directly account for the heterogeneity in fertility and partnership trajectories (family trajectories herein), this work builds a seven-category typology that groups women with similar timing, order and quantity of family formation and dissolution events (unions, marriages, separations and childbirths). These family categories range from never married and childless women (low-intensity family trajectories), to women who transitioned to union formation at early ages, had multiple partners and high fertility (high intensity). Family categories also vary in the prevalence of marriage, cohabitation, divorce and separation, which allows for separating normative family paths (universal, unique and stable marriages) from less normative ones (dual regime of marriage and cohabitation, unstable unions and multiple partnerships). Using multinomial logistic models, conditional distributions of this family typology, termed *family profiles*, are estimated for non-migrant and migrant women by age at migration, educational attainment (as a proxy for social class), and place of residence during childhood (urban vs. rural).

The analysis distinguishes three destination areas: large cities, other urban areas and rural areas. Although imperfect, this distinction allows me to explore the role of the context of reception beyond the Urban/Rural categorization, which is in accord with the reality of LAC nations. In LAC countries, resources are concentrated and living standards are considerably higher in large cities compared to other urban and rural areas (Portes 1989). In addition, inequality and segregation levels in these large cities are the highest, compared to other urban locations and rural areas (Morley 2001; Williamson 2010).

Differences and patterns across *family profiles* by migration flow (origin-destination), age at migration and educational attainment, reflect the heterogeneous ways in which domestic migration, family formation, and social class are interconnected. These analyses allow me to assess the scope and limitations of the four classic explanations, their complementary nature, as well as to uncover undocumented patterns. In addition, comparing results by socioeconomic status uncover the reasons why explanations of family change based on the modernization theory fail to account for the experienced of women in the lower classes. Modernization did not occur homogeneously and their consequences were different across social classes; not accounting for this has erroneously led to either over- or underestimate the role of structural factors, for example, in fertility decline (Cutright, Hout, and Johnson 1976).

Data from several countries and birth cohorts are pooled to maximize the variation in patterns of fertility, partnership and migration, and development levels across countries. Due to the substantial heterogeneity of the sample, discrete and consistent patterns across these *family profiles* are conservative estimates of the connection between family formation and migration. Analyzing this patterned heterogeneity provides new insights to our understanding of societal change in LAC throughout the second half of the twentieth century.

## Context

In LAC countries, the process of urbanization was paralleled by rapid family change after 1950 (Ducoff et al. 1965; Dufour and Piperata 2004; Elizaga, Lee, and Arias 1965; Rodríguez Vignoli and Busso 2009). Between 1950 and 1990, fertility declined substantially, and cohabitation and marital instability increased (Arriagada 2007; Brea 2003; Esteve and Lesthaeghe 2016). Only the mean ages of transition to first birth and first married remained relatively stable (Esteve and Florez-Paredes 2014; Pantelides 2004; Rodríguez Vignoli 2010). By the end of the century, only a handful of countries in the region had total fertility rates above 3.5 children per women, and the share of the

population living in rural areas was for the most part below 40%. Figure 4.1 shows the temporal correspondence between fertility decline (left panel) and the decline in the proportion of people living in rural areas (right panel). Black lines correspond to countries included in this chapter and gray lines display the trend among other LAC nations.

Figure 4.1: Fertility decline and urbanization in Latin America and the Caribbean from 1950 to 2000



Sur-region: ••• The Caribbean ——South America ——Central America

Note: data comes from the Economic Commission for Latin America and the Caribbean and the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. Accessed: <u>https://www.cepal.org/en/datos-y-estadisticas</u>.

During this time period, most countries went from high (more than 6 children per woman) to low fertility levels, in one of the fastest fertility transitions observed across low- and middle-income countries (Bongaarts 2003; Castro Martin and Juarez 1995; Cosio 1992; Guzmán 1996). In spite of the persistence early ages of transitions to marriage, there are three important features that are increasing in LAC societies: cohabitation, family instability, and out-of-wedlock fertility (Fussell and Palloni 2004; García and de Oliveira 2011). These transitions did not mimic processes observed in

other places, in terms of the factors associated with them, and because differences across socioeconomic status groups and geographical areas within countries enlarged. Within all LAC countries, differences in fertility, marriage, cohabitation, and union stability across socioeconomic status and between urban and rural areas are pervasive (Bongaarts et al. 2017; Carvalho, Paiva, and Sawyer 1981; Martine 1996; Schkolnik and Chackiel 2004).

Internal migration—voluntary and forced—boosted urbanization all over the region with different paces across countries (Bernard et al. 2017). Government-led initiatives towards industrialization strongly promoted rural-to-urban migration, especially during the 1950-1970 period (Arnaut 2010; Bethell 1998). Despite cross-national differences in the relative success of these initiatives, a common trend of decline in the proportion of people living in rural areas is observed among virtually all countries, especially among those included in this study. These marked declines do not mean that internal migration flows were unidirectional. Indeed, a considerable part of the population moved from urban to rural areas, between cities and between rural areas. These latter flows were especially prevalent after 1970, when national economies started to abandon the import substitutions models and the so-called structural reforms imposed important restrictions in social expenditures (Baer 1972; Bethell 1998; Gilbert 1993; Portes 1989). Rural areas were negatively affected by these reforms as incentives to invest in disperse and lowdensity areas have always been low (Babb 2005; Sassen-Koob 1984). These reforms fueled migration flows in multiple directions as some regions and economic sectors benefited more than others creating the need and opportunities for people to migrate in search of better economic prospects. Additionally, in countries like Peru, Mexico, El Salvador, Nicaragua, and Colombia, internal displaced populations moved across different places due to armed conflicts and generalized violence primarily concentrated in rural areas (Alvarado and Massey 2010).

This context of sustained heterogeneity in family formation and migration dynamics offer three advantages to extend our understanding of the relationship between internal migration and family dynamics in a broad demographical and sociological sense. First, birth cohorts that transitioned to adulthood during this period have already exited or are close to exit reproductive ages, which allows me to study almost-completed family formation trajectories. Second, taking family trajectories as objects of study contributes to qualify our accounts of demographic change by extending previous research on single variables to interconnected family outcomes. This approach is in line with the plea for a relational approach to sociological research where the study of social reality through univariate categories (married, single, childless, etc.) is substituted by the study of processes (Abbot 1988; Emirbayer 1997). Third, the high level of cross-national variation in fertility and partnership regimes and urbanization trends strengthen the robustness of the results. Differences and patterns that emerge from a variegated sample of countries and cohorts reflect overarching mechanisms behind the interaction between the migration experience and family dynamics.

## **Demographic and Health Surveys (DHS)**

Data selection for this analysis is guided by the idea that if patterns are found using data that combines countries of different size, diverse demographic regimes and different levels of development, their significance will be greater as they will reveal general mechanisms associated with the migration experience in a conservative fashion. This same argument has been posed by Portes and Smith (2008) in their study about institutions in LAC.

Therefore, I use data from 27 waves of the DHS covering 10 LAC countries. Waves are selected to maximize geographical and temporal coverage, and according to the availability of information regarding childhood place of residence and domestic migration. DHS are nationally representative of women of reproductive ages (15 to 49) and were collected between 1986 and 2012. I focus on women age 39 and above, i.e. women whose family trajectories unfolded throughout the second half of the twentieth century. Countries are not equally represented in all birth cohorts due to differences in the survey years and number of waves. However, results were consistent across three different birth-cohort subsets: 1937-1959 (oldest cohorts), 1960-1974 (youngest cohorts)

and 1945-1965 (birth cohorts with the most even representation of countries). This consistency suggests results are not driven by one country or by the specific composition of the analytical sample.

Table 4.1 displays the sample size by country and women's current place of residence. This latter variable is coded into three categories: rural, urban and large cities. Even though large cities are part of the urban area of a country, I separate them because they differ from other urban areas in aspects that could affect family formation trajectories. These include the prevalence of a service economy, higher costs of living, better access to basic services, and less opportunities to reconcile childrearing and work. In each country, the capital city plus cities of more than 500 thousand inhabitants are coded as Large cities.

r										
Country	Plac	ce of resid	Total	Number						
Country	L. Cities	Urban	Rural	Total	of waves					
Bolivia	2,622	2,885	3,562	9,069	3					
Brazil	2,910	913	1,179	5,002	3					
Colombia	4,040	7,062	1,210	12,312	4					
Dominican Republic	1,368	4,416	3,796	9,580	4					
Guatemala	103	132	392	627	1					
Haiti	454	641	1,998	3,093	2					
Mexico	441	611	643	1,695	1					
Nicaragua	638	2,288	2,077	5,003	2					
Paraguay	293	262	593	1,148	1					
Peru	7,179	25,305	18,032	50,516	6					
Total	20,048	44,515	33,482	98,045	27					

**Table 4.1:** Analytical sample by country and current place of residence, and number of waves per country

Note: the analytical sample includes women age 39 and above who were interviewed by the Demographic and Health Surveys from 1986 to 2012.

All the analyses are conducted accounting for the sample design. In addition, sample weights are standardized by the number of waves per country so that each country has the same relative weight in all analyses.

#### Cluster analysis and stratified multinomial models

Because not all the DHS contain full marital histories, six variables are used to proxy women's family formation paths in a way that incorporate both fertility and partnership dynamics. These variables are: age at first marriage or union, age at first and last birth, number of children ever born, current marital status and whether the woman had multiple unions or marriages. Because these variables are measured in different scales, scale harmonization is needed before conducting a cluster analysis.

Scale harmonization across is done via Multiple Correspondence Analysis (MCA) on the six above-mentioned variables. This technique is advantageous as it produces numerical standardized variables that capture the main correlations across the different dimensions of women's family formation paths. In addition, these variables, named factorial coordinates are orthogonal to one another, which in turns favors the efficiency of clustering. See Kaufman and Rousseeuw (1990) and Lebart (1997) for the technical details and more indepth discussion about cluster analysis and MCA, respectively.

The first four factorial coordinates resulting from the MCA account for 78% of the total variance across the six original variables. These coordinates are used to cluster women following a two-step process. First, a pair-wise distance matrix is computed. The generic term of this matrix,  $d_{ij}$  measures the Euclidean distance between women *i* and *j* using the values of the four factorial coordinates. The greater this number the more dissimilar are women in terms of their family formation trajectories. Then, women are grouped using the Ward method followed by a consolidation phase that relies on the *k-means* algorithm. This strategy creates groups of women with similar features by minimizing the withingroup dissimilarity, i.e. the sum of the  $d_{ij}$ . In other words, this strategy allows me to identify groups of women with similar timing and number of births, type and timing of partnership formation, and the experience of multiple partners and separation/divorce (See Pardo and Del Campo (2007) for a detailed description of the combination of these two methods). I use the expressions family typology to refer to these clusters and family category to refer to each group.

For measuring migration and social class I create two categorical variables. Migration categories combine information on childhood place of residence, current place of residence, and time since arrival to the latter. These three variables allow me to distinguish nine groups of women. First, non-migrant women are those who have lived their entire life in the place they were interviewed. Migrant women are separated according to their childhood place of residence as women of urban and rural origin and based on their age at migration in four categories: before age 18, 19 to 24, 25 to 30 and after age 30.

These age groups reflect crucial stages in women's transition to adulthood and in their autonomy gaining trajectories. Age 18 is the legal age of majority in all these countries for which women in this groups could be thought as dependent migrants. At the other end of the age at migration categories (after age 30), migration occurs after most of the key transitions to adulthood had taken place, i.e. finishing school, leaving parental home, entering the job market, etc. These women migrate as autonomous adults. The intermediate age at migration groups are suited to study the connection between migration and family formation, and the potential disruptions that internal mobility entails.

To measure women's social class, I use educational attainment. I categorize the total years of schooling as lowest (0 to 4), low (5 to 8), medium (9 to 12) and high (13 and more). The first category comprises the very bottom-end of LAC social stratification systems. Women with less than five years of schooling are a very negatively selected group (especially among younger cohorts) that reflect the enduring unequal opportunity structure of LAC countries. Likewise, women with 5 to 8 years of schooling are expected to have only basic literacy and numeracy skills. No training for the labor market is involved during these school years. Women in the 9 to 12 group have a considerable advantage because they finished educational cycles that involve title granting: basic secondary education (typically after 9<sup>th</sup> grade) and high school (typically after 11<sup>th</sup> or 12<sup>th</sup> grade). At least formally, a secondary education diploma gives access to the formal labor market and, a high school diploma to the higher educational system. Despite cross-

national differences in educational systems, the extent to which these formal expectations on educational degrees translate into formal jobs and tertiary education is generally doubtful due to large quality gaps between urban and rural schools, and between the public and private educational systems (Torche 2014).

Finally, women with 13 years or more are the most privileged ones for two reasons. First, they grew up in families and contexts that allowed them to be students (partially dependent) for a very long period. Second, they have the best socioeconomic prospects when entering the labor market given the raising returns to education that changes in LAC economies entailed. This interpretation of educational attainment categories in terms of social class is consistent with research on the role of educational systems in LAC societies. According to this research, LAC educational systems have largely failed in promoting social mobility as opportunities and quality are highly unequal (Hoffman and Centeno 2003; Torche 2014).

Combined, age at migration and educational attainment define 9 x 4 = 36 groups, observed across three different areas of residence (Large cities, urban areas and rural areas) for a total of 108 groups. The conditional distribution of the family typology in each of these groups is termed *family profile*. The size and direction of the deviations between non-migrant's and migrant's *family profiles* reflect the association between family formation and migration.

If the *family profiles* of migrants and non-migrants do not differ, we will conclude that family formation trajectories and internal migration are independent. On the contrary, if migration and family trajectories are not independent, migrant women should be overrepresented (positive association) or underrepresented (negative association) in certain categories of the family typology. Moreover, disaggregating by age at migration and educational attainment allows me to explore heterogeneous patterns in these associations.

#### Prevalence of migration and migrant's socioeconomic characteristics

Table 4.2 presents women's distribution by age at migration and childhood place of residence along with the educational and wealth profile for each of these groups.

Women's distribution by age at migration shows the relevance of domestic moves, the higher mobility of urban women compared to rural, and the age pattern of these moves. At least 44% of women in the three areas of residence are domestic migrants, this proportion surpasses 50% in urban contexts meaning that more than half of the women had domestic migration experience in both urban areas and large cities. Migrant women of urban origin are the most mobile representing 39, 32 and 14% of women in large cities, urban and rural areas, respectively. Women of rural origin are less mobile, except in rural-to-rural migration. They represent 16, 22 and 27% of the women across the three areas of residence. In terms of age patterns, the lowest migration prevalence tends to be for ages 25 to 30, except for rural-to-rural moves.

Differences across areas of residence in educational attainment and wealth reveal structural disparities in access to formal education and basic services. Institutions granting medium and high-level degrees are strongly concentrated in cities, and the provision of basic services is very precarious in rural areas. For example, the proportion of women with more than 13 years of schooling (Higher) is 25% in large cities, 18% in urban areas and only 1% in rural. In terms of wealth, the percent of women in the 5<sup>th</sup> quintile is 52, 33 and 3% among women living in these three places, respectively.

Educational and wealth profiles of migrants vary substantially across origin, destination and age at migration. These variations reflect the complexity of this phenomena as processes of selection, adaptation and equalizing socioeconomic conditions appear to be associated with migration. Migration flows to urban areas and large cities are positively selected. The reverse is true for migration flows to rural areas.

Childh. place	Age at	<b>D</b> (	Edu	ıcational	attainme	ent		Wea	Weatlh quintile		
of residence	migration	Percent	Lowest	Low	Med.	High	1st	2nd	3rd	4th	5th
Large cities	Non migrant	42.2	19.3	25.2	31.1	24.5	1.7	6.3	13.4	26.4	52.2
0	0	(2.1)	(4.1)	(4.0)	(2.6)	(4.9)	(0.6)	(1.6)	(1.3)	(1.1)	(2.9)
Urban	<18	13.6	26.8	28.8	27.0	17.4	1.3	6.9	16.2	26.4	49.3
		(0.9)	(3.8)	(2.5)	(2.5)	(3.0)	(0.4)	(1.3)	(1.8)	(1.6)	(1.9)
	19-24	8.7	24.9	27.9	28.9	18.3	1.7	6.3	16.2	28.3	47.5
		(0.4)	(3.6)	(2.5)	(2.6)	(2.6)	(0.4)	(1.1)	(1.6)	(1.2)	(2.1)
	25-30	6.7	26.5	28.5	25.9	19.1	1.2	9.6	18.1	32.9	38.2
		(0.4)	(4.3)	(3.4)	(2.2)	(3.3)	(0.6)	(1.8)	(1.0)	(1.9)	(2.8)
	>30	11.9	30.1	26.8	24.2	18.9	2.9	10.3	18.0	24.8	44.0
		(1.0)	(4.0)	(2.5)	(1.7)	(2.8)	(0.6)	(2.1)	(1.3)	(1.3)	(3.3)
Rural	<18	4.8	46.2	28.8	18.2	6.8	2.4	10.8	21.2	33.2	32.4
		(0.6)	(5.4)	(2.4)	(3.3)	(1.8)	(1.0)	(2.0)	(1.8)	(2.3)	(3.2)
	19-24	4.2	51.3	26.7	15.7	6.3	3.0	10.5	24.5	31.2	30.8
		(0.5)	(5.9)	(1.7)	(3.8)	(1.6)	(0.6)	(1.8)	(3.4)	(3.6)	(3.3)
	25-30	2.8	62.5	24.1	9.4	4.1	5.4	17.3	23.7	32.7	20.8
		(0.4)	(6.1)	(3.7)	(2.3)	(1.5)	(1.9)	(3.2)	(3.2)	(2.1)	(3.1)
	>30	5.2	62.5	21.1	12.0	4.4	9.0	22.6	23.7	26.7	18.0
		(0.8)	(5.1)	(2.6)	(2.2)	(0.9)	(2.0)	(3.1)	(2.1)	(3.4)	(3.0)
Urban are as	Non migrant	42.7	26.7	27.4	27.5	18.4	4.3	11.9	20.7	30.0	33.1
		(1.8)	(4.6)	(2.2)	(2.6)	(3.6)	(0.8)	(1.2)	(0.8)	(0.9)	(1.3)
Urban origin	<18	9.4	24.3	28.6	28.2	18.9	2.7	10.0	20.6	29.0	37.6
0		(0.8)	(3.1)	(2.0)	(1.9)	(2.9)	(0.6)	(1.3)	(0.9)	(1.6)	(2.2)
	19-24	7.1	24.6	27.2	27.1	21.1	2.2	8.6	21.4	28.3	39.5
		(0.6)	(3.1)	(2.0)	(2.2)	(2.3)	(0.6)	(1.1)	(1.1)	(1.2)	(1.7)
	25-30	6.2	21.7	27.9	25.9	24.5	2.9	10.9	20.2	28.6	37.3
		(0.4)	(2.8)	(2.6)	(1.7)	(3.9)	(0.7)	(1.3)	(1.3)	(1.2)	(1.5)
	>30	11.3	25.1	27.8	26.8	20.3	4.2	14.7	21.2	27.6	32.2
		(0.6)	(2.9)	(2.2)	(1.4)	(3.2)	(0.6)	(1.1)	(1.7)	(1.0)	(1.7)
Rural origin	<18	5.5	46.0	30.0	16.3	7.6	4.7	15.0	26.0	30.0	24.3
_		(0.4)	(5.5)	(2.1)	(3.2)	(1.3)	(1.1)	(1.2)	(1.2)	(1.8)	(2.5)
	19-24	4.9	52.0	27.6	13.8	6.6	5.3	18.3	27.3	29.4	19.7
		(0.4)	(5.4)	(2.0)	(2.8)	(1.1)	(1.0)	(1.2)	(1.4)	(1.7)	(2.3)
	25-30	4.3	50.9	28.9	14.5	5.8	6.3	22.4	27.6	25.6	18.2
		(0.4)	(4.3)	(1.3)	(2.5)	(1.2)	(0.9)	(1.6)	(2.5)	(1.8)	(2.4)
	>30	8.5	59.4	26.0	9.4	5.2	11.8	26.9	27.2	21.2	12.9
		(0.6)	(5.6)	(2.8)	(2.0)	(1.0)	(1.1)	(1.6)	(2.4)	(1.2)	(1.9)
Rural areas	Non migrant	56.8	76.8	17.3	4.5	1.3	44.9	32.7	14.2	5.5	2.7
		(2.3)	(4.0)	(2.7)	(1.1)	(0.3)	(3.7)	(2.3)	(1.1)	(1.0)	(0.9)
Urban origin	<18	2.7	64.2	24.2	8.6	3.0	28.4	35.7	18.4	9.3	8.2
		(0.3)	(5.4)	(2.5)	(2.7)	(1.0)	(2.7)	(3.1)	(2.5)	(1.1)	(2.7)
	19-24	3.5	54.6	27.8	13.7	3.8	28.1	32.0	23.9	9.9	6.2
		(0.3)	(5.1)	(2.6)	(2.8)	(1.1)	(2.9)	(3.1)	(2.0)	(2.0)	(2.0)
	25-30	2.8	55.8	26.8	11.1	6.4	31.7	30.6	18.7	11.7	7.3
		(0.2)	(4.9)	(2.6)	(2.3)	(2.0)	(4.2)	(2.2)	(2.5)	(1.8)	(3.3)
	>30	5.4	57.2	21.9	11.3	9.6	34.4	29.7	17.6	10.2	8.0
		(0.4)	(4.9)	(1.5)	(2.0)	(2.2)	(2.7)	(2.3)	(1.3)	(1.1)	(3.5)
Rural origin	<18	5.3	80.2	16.2	2.9	0.7	44.8	31.7	14.3	6.2	3.0
C		(0.5)	(3.6)	(2.6)	(0.9)	(0.3)	(3.3)	(2.5)	(1.1)	(0.8)	(1.7)
	19-24	7.1	78.2	17.0	3.8	1.0	47.4	31.6	13.8	4.7	2.5
		(0.6)	(4.8)	(3.4)	(1.1)	(0.4)	(3.7)	(2.4)	(1.2)	(0.9)	(1.0)
	25-30	5.7	77.2	17.5	3.9	1.4	47.2	30.0	14.3	7.0	1.6
		(0.4)	(4.5)	(3.1)	(1.0)	(0.5)	(4.0)	(2.3)	(1.1)	(1.9)	(0.6)
	>30	10.7	79.0	15.8	4.0	1.3	46.7	30.6	14.4	5.7	2.7
		(0.6)	(3.5)	(2.2)	(1.1)	(0.4)	(2.8)	(2.2)	(1.2)	(1.1)	(1.3)

**Table 4.2:** Migration prevalence, educational profiles, and wealth profiles by area of residence, residence during childhood, and age at migration

Note: standard errors, in parentheses, are clustered at the primary sample unit level.

Despite the positive selection of rural-to-urban and rural-to-large-cities migrants, their educational and wealth profiles are worse than those of non-migrant women at destination. This association displays a clear pattern by age at migration: migration is more beneficial when it occurs at early ages. Take the educational profile of rural migrants in large cities as an example. Among those who moved after age 30, the proportion of uneducated women (Lowest) is 62.5%, whereas among those who move before age 18 this figure is 46.2%. In both cases, these women are better off than non-migrant women in rural areas among which the prevalence of Lowest education is 76.8%. Wealth profiles of women of rural origin are also better among migrant than non-migrant. These differences are larger than those observed in educational profiles because of the way wealth is measured by the DHS (Smits and Steendijk 2015). In urban contexts, accessing the basic services included in the DHS-wealth index (water supply, electricity, etc.) is easier than accessing formal education.

Migrant women of urban origin are slightly disadvantage in terms of educational attainment and wealth when they move to large cities compared to women at destination, but better off than those who did not migrate. This means that the urban-large cities migration flow is also positively selected. For example, in large cities, the proportion of women in the highest educational level among migrants of urban origin ranges from 17 to 19%, which is close to the 24% among non-migrant at destination. This relation reverses when considering urban areas as destination. In these areas, migrant women or urban origin have better educational and wealth profiles than non-migrants. Finally, in rural areas women of urban origin have better educational and wealth profiles than non-migrant destination flow is negatively selected. Similarly, migrant women of rural origin have slightly worse educational and wealth profiles than their non-migrant counterparts.

This heterogeneity across destination, origin and age at migration is likely to play a role in the way migration relates to family trajectories. Since family formation is a resourceconsuming process, it is more likely that vulnerable groups, socioeconomically speaking, experience the largest disruption in their family trajectories, or that family related resources, such as a stable formal marriage, become an important source to cope with the challenges of being disadvantaged with respect to the population at destination. This hypothesis is more likely to be valid for women who migrate during young-adult ages (19 to 24) due the confluence of key life-course transitions including finishing school, entering the job market, starting a family, gaining financial independence, etc.

#### A family typology for women in Latin American and Caribbean countries

Figure 4.2 presents the individual family formation trajectories sorted by age at first marriage/union within the seven-group family typology. Categories of the family typology are sorted by average complete fertility. Only overarching patterns should be interpreted in Figure 4.2 as it suffers from over plotting issues (Fasang and Liao 2014). Individual trajectories start at the age 15 and are colored after the age at first marriage/union according to woman's current and previous marital statuses. Lines of married women and women in consensual unions, who declared having only one partner are colored with a green (Married) and yellow (In union) respectively. Because the timing of high-order marriages and unions cannot be identified in the DHS, women who reported more than one marriage or union are colored in red regardless of their current marital status. Similarly, women who were separated, divorced or widow at the time of the survey are colored in grey (Unknown) because it is not possible to located when did the separation, divorce or death of the partner occurred. Purple dots of varying shade represent the first, second, third, and last births.

These groups reflect the heterogeneous ways family formation paths can take and the importance of accounting for this heterogeneity. Aggregated mean levels of key indicators including age at marriage/union, first birth, last birth and prevalence of divorce/separation, can hardly be used to describe the experience of women in these groups. To emphasize their distinctiveness, I label them according to their most salient characteristic. The Normative-late (*Norm-late*) category is the most prevalent in large cities and urban areas, whereas the Normative-early (*Norm-early*) is the largest among

women who live in rural areas. Both are label as normative categories because their main characteristics are the high prevalence of marriage (71% in the *Norm-late* and 85% in *Norm-early*) and the high proportion of women who declared having only one partner (93% in *Norm-late* and 92% in *Norm-early*). These figures mean these two groups comprise mainly intact marriages.



Figure 4.2: Individual family trajectories and family typology by area of residence

Note: Data is unweighted. Individual trajectories are sorted by age at first marriage, children ever born and age at first birth within each family category. Interpretations should be cautious due to over plotting.

From bottom to top, the first three categories of the family typology are groups of low intensity, delayed transitions and compressed family formation schedules, meaning that women in these groups form unions (through marriage or consensually) at late ages and have their (few) children in a very short period of their lives. The first family category

comprises mainly women who did not have a child and/or did not get married (*Never married*). Among the few women who marry and gave birth in this group, the mean ages at first birth and marriage are largely above the overall mean. The second category has the highest ages of transition to childbearing, marriage and union formation (*Latest*). This is the only group where, on average, first births and first union occur simultaneously, at about age 33. Complete fertility in this group is relatively low with only 2.2 children per woman. Women in the third group (*Delayed*) experience transition to union formation and first birth relatively late, at about ages 27 and 28, respectively. Women in this group have, on average, 2.7 children. These three groups are minoritarian and non-traditional with respect to the others, due the very low prevalence and delayed transition to partnership and fertility.

The remaining four groups comprise two categories of early transition to family formation, high-intensity and unstable marriages and unions, and two categories of normative family paths, i.e. stable formal marriages. The Unstable group is characterized by early transitions to union formation and childbearing. This group has the largest percent of divorced and separated women (38.9%), as well as the largest proportion of women who had been in more than one marriage or union (54.9%), meaning that 38.9+54.9=93.8% of these women experienced couple dissolution at some point in their lives. Average fertility is 3.3 with the lowest mean age at last birth (27.1 years), potentially associated with couple separation. The fifth group includes mostly stable unions that start around age 20 (Norm-late). The average complete fertility of this group is 3.9 children. Women in the sixth group have the youngest ages of transition to marriage, union formation and childbearing (Earliest), and a high average complete fertility (7.7 children). Marriages and unions in this group are also highly unstable with about 54% of women experiencing couple dissolution at least once. Finally, the last trajectory (Norm-early) is characterized by an early transition to marriage and childbearing and the highest complete fertility (8.1 children). These marriages are stable with only 9.4% of women experiencing couple dissolution.

There is some heterogeneity that is not accounted for by this family typology. Measured as the ratio of the within-clusters variance over the total variance (sum of squared distances among individual observations), this proportion is 0.25, which is analogous to an  $R^2$  in a regression framework of 75%. This is a high level of explained variance given that it comes from individual-level information on six variables. Beyond this technical criterion, the seven groups do describe quite distinct fertility and partnership trajectories and their distribution across areas of residence and over time, is consistent with the literature on family dynamics in LAC countries presented in the previous section.

## Family profiles and migration-related disruptions

The marginal distribution of the family typology for a group of women, e.g. women living in large cities, is termed *family profile*. Table 4.3 displays the *family profiles* of non-migrant women in the three areas of residence, and, for illustrative purposes, the *family profile* of rural migrants in large cities. There are clear differences in the prevalence of the first- and last-two family categories across areas of residence. Whereas the prevalence of the three intermediate categories is high, at similar levels, in large cities and urban areas. One can think of distance across *family profiles* in terms of their similarity (or dissimilarity). For example, the *family profile* of women in large cities is close to (like) that of women in urban areas, and it is distant from (different from) the *family profile* of rural women.

Letting aside, for a while, differences in the educational composition, the *family profile* of rural migrants in large cities suggests that both *socialization* and *adaptation* mechanisms are at play. First, the proportion of women in the *Never married* category is equal for non-migrants in rural areas and rural migrants in large cities, meaning that the higher propensity to form families in rural areas is carried on by rural migrants when they move to a large city. Meanwhile, the *family profile* of rural migrants displays strong adaptation to the family regime in large cities. Compared to non-migrants in rural areas, rural migrants in large cities are more likely to be in the *Latest, Delayed, Unstable* and *Norm*-

*late* categories. Indeed, the proportion of women in these last two categories is very similar to the one observed among non-migrant women at destination. In other words, the adaptation of rural migrants to the family regime in large cities, implies relatively delayed transition to family formation and higher marital/union instability. In terms of distances, the *family profile* of rural migrants in large cities approaches (are more similar) to the *family profile* of non-migrant women at destination. This approximation does not mean that the *family profiles* become identical, as some features of the family in rural areas remain, e.g. higher prevalence of *Earliest* and *Norm-early* categories.

	Family typology								
Group	Never married	Latest	Delayed	Unstable	Norm-L	Earliest	Norm-E	Total	
Large cities	12.2 (1.2)	5.9 (0.9)	17.8 (1.5)	18.7 (2.0)	30.2 (1.0)	9.3 (1.4)	5.9 (1.1)	100	
Urban areas	10.4 (1.1)	5.3 (0.5)	14.1 (1.0)	18.2 (1.8)	31.4 (1.0)	12.5 (1.7)	<b>8.1</b> (1.3)	100	
Rural areas	6.7 (0.5)	3.2 (0.3)	8.0 (0.5)	10.5 (1.4)	20.8 (1.6)	21.4 (1.7)	29.5 (2.4)	100	
Rural migrants in large cities	6.6 (1.2)	4.5 (0.5)	13.6 (1.0)	19.8 (2.6)	32.5 (1.9)	12.2 (1.1)	10.7 (2.0)	100	

 Table 4.3: Family profiles for non-migrants and rural migrants in Large cities

Note: standard errors, in parentheses, are clustered at the primary sample unit level.

Comparing *family profiles* across the 108 groups defined above allows me to maintain the focus on heterogeneity because they include all possible family forms and not just the 'average' one. Because *family profiles* vary across countries and birth cohorts, I included these two variables as controls when predicting the family typology via multinomial models. Hence, predicted *family profiles* reflect differential propensities to be in family categories across age at migration and social classes, net of cross-country and cross-cohort variation. Results from models without control variables are very similar to those presented here.

Figure 4.2, 4.3 and 4.4 present a factorial representation of the *family profiles* in large cities, urban areas and rural areas, respectively. The left panel includes migrants of urban origin and the right panel migrants of rural origin. Family categories (x-markers of grey color) and groups of women by age at migration and educational attainment ( $\circ$ ,  $\Delta$ ,  $\blacksquare$ , and  $\bullet$  markers) are jointly displayed. Proximity between two (or more) family categories implies that across the 108 groups, the proportion of women signal that the *family profiles* of the two groups are similar. Finally, proximity between a family category and a group implies positive association, i.e. higher prevalence of the family category with respect to the mean. The center of the plot corresponds to the mean *family profile*, i.e. the unweighted average across the 108 groups.

The horizontal and vertical axes organize family categories in terms of intensity and the prevalence of the *Norm-late* category, respectively. From left to right, family categories are organized from high to low intensity. The two most intense family categories are *Earliest* and *Norm-early*, whereas the least are *Latest*, *Never married* and *Delayed*. The vertical axis separates the *Norm-late* category from the rest, i.e. from bottom to top, this axis splits normative trajectories from less normative one (top) passing by the *Unstable* category.

Women's distribution across these axes reflect disparities among *family profiles*. There are clear differences by educational attainment where the proportion of women in less intense family categories is higher among highly educated women than low educated. Among non-migrant women in large cities the proportion in the *Never married* category goes from 20.5% in the highest educational level to 8% among the lowest one. Likewise, the proportion of women in the *Latest* and *Delayed* categories decrease from 11.7 (highest) to 3.3% (lowest), and from 28.3 (highest) to 7.5% (lowest), respectively. Therefore, the points representing each of these groups appear separated from one another. On the contrary, points representing women in the last two educational attainment levels (lowest and low) appear close to each other, meaning that the *family profiles* of these two groups are similar.





Notes: the mean profile in Large cities is *Never married* (8.7), *Latest* (6.5), *Delayed* (19.1), *Unstable* (18.1), *Norm-late* (32.6) and *Norm-early* (8.7) and *Earliest* (6.5).

As for migrants, the left panel shows that *family profiles* of migrant women of urban origin replicate the educational disparities observed among non-migrant. This means that urban-to-large cities migration is not associated with disruptions in *family profiles*. The only slight exception are women of low and medium educational attainment who migrated between ages 19 and 24. Among these two groups of women the proportions in the *Norm-late* category are 46 and 44%, respectively. These figures are high compared to the 30% of women in the *Norm-late* category in large cities.

The right panel displays stronger disruptions in the *family profiles* of migrant women, signaling the adaptation of rural *family profiles* to large cities' context. This is especially the case of women in the lowest and low educational levels (most of rural migrants, refer

to Table 4.2). Women in these two groups who migrated from rural areas to large cities are less likely to be in the *Earliest* and *Norm-early* categories compared to those who stayed in rural areas. Therefore, migrant women of rural origin are more likely to be in the *Unstable* and *Norm-late* categories than non-migrant, meaning that rural-to-large cities migration is associated with lower fertility, higher marriage/union instability and delayed transition to family formation with respect to the origin area.

Notably, educational differences remain across all age at migration groups, meaning that domestic migration does not erase the role of educational attainment in differentiating women's *family profiles* or for that matter the socially stratified nature of family paths in LAC. Women who migrated between ages 25 and 30 and achieved the highest educational level display an unexpected pattern as they appear slightly separated from the least-intense family categories. While intriguing, this pattern is demographically unimportant as these women represent only 4% of the total women who migrated within these age range.

In the left panel of Figure 4.3, *family profiles'* distribution of urban-to-urban migrant women overlap with the *family profile* of non-migrant, meaning that this type of migration is not associated with any disruption in the distribution of the family typology. Non-migrant and migrant women (with urban residential background) in urban areas have very similar *family profiles* at all educational attainment levels. As in large cities, the only exception are women who migrated as young adults (19 to 24). Women in this group are more likely to be in the *Norm-late* category, especially those with medium and high educational attainment. Among these two groups, the proportion in the *Norm-late* category is 50 and 45%, respectively, which confirms the higher propensity of young-adult urban migrants to follow family trajectories of intermediate fertility levels, intermediate timing of transition to union formation and childbearing, and unique and stable marriages.



Figure 4.3: Disruption in *family profiles* by origin, age at migration, and educational attainment in Urban areas

Notes: the mean profile in Large cities is *Never married* (7.4), *Latest* (4.9), *Delayed* (16.1), *Unstable* (17.3), *Norm-late* (33.8) and *Norm-early* (12.0) and *Earliest* (8.5).

-25 to 30

-After age 30

-19 to 24

For women of rural origin, migration to urban areas, is associated with a higher proportion in the *Norm-late* and *Unstable* categories. This adaptation to more urban-like *family profiles* is weaker than the one observed in Figure 4.2 for large cities, except among young adult migrants (19 to 24) for whom *family profiles* move significantly towards the bottom area of the plot. Educational differences in *family profiles* remain as all the lines representing migrant women are U-shaped having low-educated and highly educated women in the two extremes. Together, these patterns mean that migration from rural to urban areas is associated with more normative family pathways, while weakly attached to the degree of intensity of family trajectories. This latter aspect (intensity) maps on more closely to women's educational attainment.

Finally, in Figure 4.4, migration to rural areas displays two main patterns related to early and late migration. For women who migrated before age 18 and between ages 19 and 24, the distance between the group of women at the two extremes of the educational ladder is the largest. And it is not U-shaped, meaning that early migration to rural areas and high educational attainment are not associated with the family categories of delayed transitions to family formation and low fertility. Instead, these group of women are more likely to be in the *Norm-late* category. This result should not be overestimated because it refers to a very small proportion of women. Instead, at the other end of the educational ladder, migrant women with the lowest and low educational attainment are more likely to follow high-intensity family trajectories, compared to their non-migrant counterparts both in urban and rural areas.

**Figure 4.4:** Disruption in *family profiles* by origin, age at migration, and educational attainment in Rural areas



Notes: the mean profile in Large cities is *Never married* (6.3), *Latest* (4.8), *Delayed* (14.8), *Unstable* (13.1), *Norm-late* (32.3) and *Norm-early* (13.1) and *Earliest* (15.6).

As for late migration, i.e. after age 25, groups' distribution replicates the educational discrepancies of rural non-migrants (right panel) meaning that women who migrated from urban to rural areas have similar *family profiles* compared to rural non-migrants. This pattern is consistent with the idea that late migration between similar context should be associated with disruption in the family formation trajectory of migrants. In other words, when migration takes place later in life and across similar contexts (rural to rural), family paths are not expected to be disturbed.

## **Conclusions and discussion**

This paper analyzes the various ways in which internal migration and family formation trajectories relate to one another. A data-driven seven-category typology describes the distinct family paths of women born between 1935 and 1970 in 10 LAC countries. Two hierarchically related constructs separate the seven family categories of this typology. First, family categories go from low-intensity and delayed trajectories to high-intensity and early-transition family paths. Second, marriage stability and prevalence distinguish normative and non-normative trajectories. Women's socioeconomic status is strongly correlated with the first construct, whereas the second one relates more to women's age at migration in ways that vary according to their age at migration, origin, and destination.

I study these associations through *family profiles*, i.e. the distribution of women across the seven family categories by age at migration and educational attainment. The patterned distribution of *family profiles* across these variables reflects the structural and socially stratified nature of family paths, i.e. the differential opportunity structure that shape the likelihood of people to follow certain family formation trajectories in large cities, other urban areas and rural areas. These opportunity structures include the unequal access to formal education, employment, and economic prospects for individuals across areas. More importantly, these results underline the fact that it is among vulnerable individuals that *family profiles* differ more from the *family profile* of non-migrants. Vulnerability is understood here in terms of low socioeconomic status and ages at migration that coincide
with ages of transition to union formation and childbearing. To the extent that both acts require resources (time, money, social support, etc.), their temporal coincidence may be more demanding for low-SES individuals than high-SES. Indeed, high socioeconomic status and late migration are both associated with very little disruption in *family profiles*.

Differences in the above-described opportunity structures among large cities, urban areas, and rural areas, allow me to speculate about the potential mechanisms driving the heterogeneity in family profiles. Because living in large cities imposes material restrictions to family expansion and stability, similarity in family outcomes between migrant and non-migrant groups can be interpreted as a structural adaptation, i.e. as related to material constraints such as higher childbearing and childrearing costs, and the predominance of a monetary economy; this latter aspect likely undermines the economic prospects of the low-educated women who come into cities from rural areas. Hence, limiting fertility, being part of a stable formal marriage, or having multiple partners over the life course, become features of the family paths among migrants in large cities. That this association is stronger among more vulnerable groups, i.e. low-educated women of rural origin who migrated as young adults, makes the constraint-oriented interpretation plausible (Castro Torres 2017). Research in Guatemala, Colombia and Peru has previously shown how migrant women of rural background are more likely to face obstacles to access contraceptive methods and reproductive health services at destination (Lindstrom and Hernández 2006; Miller 2009; Subaiya 2007)

Other urban areas represent an intermediate context between the economic and financial demands of large cities and the more flexible conditions, economically speaking, that characterize rural settings. For that reason, only women who migrated to urban areas between ages 19 to 24 display disruptions in their *family profiles*, compared to those who did not migrate. For women of urban origin, migrating to other urban area is associated with a lower propensity to avoid early family formation among the low educated, and family formation, in general, among the highly educated. In other words, even though the association between migration and family formation means relatively delayed-unstable family paths for lower educated women, and relatively stable-normative family

trajectories for the highly educated, migration and family are closely linked in both cases. Among women of rural origin, the displacement of *family profiles* towards the *Unstable* and *Normative* family categories is very clear and it is stronger for those who migrated before age 24.

In rural areas, two main patterns confirm the close connection between family formation and migration. First, it is among women who migrated before and during crucial ages for family formation that *family profiles* depict the largest deviations with respect to *family profiles* of women at origin. The fact that these deviations are larger among the highly educated than less educated highlights the importance of the context of reception for family formation trajectories. Despite the fact of being highly educated, young-adultmigrant women in rural areas are underrepresented in low-intensity, delayed transition and no-transition family categories. On the contrary, for women who migrated after age 25 and 30, migration-related disruptions in *family profile* are smaller and *family profiles* tend to replicate the educational differences of women at destination. This result could be interpreted in terms of selection, i.e. women who move to rural areas at later ages in life have similar family preferences, and hence, similar family formation trajectories, compared to non-migrant women at destination.

Internal migration in LAC countries involves the mobility of many women with diverse educational and wealth profiles across very distinct contexts and, possibly, for a very diverse set of reasons from more voluntary to forced displacement. This diversity produces heterogeneous patterns in the relationship between family formation and migration that have not been jointly studied before. Hypothesis-based approaches are incapable of accounting for this heterogeneity as most of these patterns become invisible when the focus is to measure the degree of *selection, assimilation, adaptation* or *socialization*, separately; without accounting for the socially stratified nature of family dynamics. For all these patterns exist within concrete stratification systems, the interpretation of these separate explanations as complementary is doubtful.

Results in this chapter shows that the migration and family formation processes are embedded in the social structure in several ways. First, because migration requires material resources, migrants are hardly non-selected. Second, only when socioeconomic opportunities at origin and destination are similar for a given group of migrants, migration is not disruptive for family formation trajectories. Third, both socialization and assimilation/adaptation mechanisms seem to be at play; the former are especially notable among low-SES which makes this group of women a major contributor to family change during this time period. These inequalities in socioeconomic conditions are unlikely to disappear soon as they are rooted in the class structure of LAC societies and the political system that underlies them (Babb 2005; Huber, Pribble, and Stephens 2006; Williamson 2010). Likewise, family change will continue with fertility reaching replacement levels, rising cohabitation and out-of-wedlock fertility, and the emergence of a bimodal pattern in the age of transition to first births (Laplante et al. 2016; Laplante, Castro-Martín, and Cortina 2018; Lima et al. 2018). Futures studies of demographic trends will need to continue using the inequality framework to understand demographics in this region, and perhaps in any other low- and middle-income region where family dynamics are also stratified (Juarez and Gayet 2014; Sacco and Borges 2018).

Focusing on one mechanism or another prevent us from having an overarching understanding of how migration and family formation dynamic relate in a broad sociological and demographical sense. What seems to be at a higher level of generality is that all these mechanisms contributed to fertility and family change in the region while always remaining subordinated to the socially stratified nature of the family and the unequal opportunities to migrate.

# Chapter 5. Half a century of migration and family formation in Latin America and the Caribbean

## Back to the socioeconomic and demographic context

International and internal migration were integral parts of demographic change in Latin American and Caribbean (LAC) countries through the second half of the 20th century. From being historically rural and having positive international migration balances, LAC countries became urban and sending areas of international migrants during the last 50 years of the century (Donato et al. 2010; Rodríguez Vignoli 2004). Meanwhile, mortality and fertility declined, and family forms under this emerging demographic equilibrium diversified in response to the unequal spread of development and the socioeconomic inequalities associated with it, between and within countries (Arriagada 2007; Schkolnik and Chackiel 2004).

These changes occurred in tandem with multiple and drastic sweeps in the economy. From 1930 to 1970, and despite modest economic growth during the post-war period, virtually all countries failed in their attempts to industrialize national economies. The following decades were not better as the growing external debt led countries to the implement structural adjustments measures. These measures opened economies, impose important restriction to social expenditures, boosted socioeconomic inequality, and truncated industrial development (Arnaut 2010; Baer 1972).

Despite increases in educational attainment, sustained levels of socioeconomic inequality did not reverse (Hoffman and Centeno 2003; Torche 2014; Williamson 2010). These macro-economic transformations encountered strong resistance from different population sectors causing strong and violent socio-political upheavals (Babb 2005). From 1950 to 1990, quite a few countries in the region went through decades of military governments, authoritarian dictatorships, and political regimes that restricted democracy; this latter situation sparked decades of bloody armed internal conflicts in some countries, some of

which involved intervention from more developed countries, notably the United States (Alvarado and Massey 2010; Bethell 1998).

It was not until the late 1980s that all democracies of the region were reestablished. These democratic systems carried on vicious legacies of governmental corruption, clientelism, and unresolved social conflicts, especially related to the concentration of landholding in rural areas. These prevented development and deepened dependency with respect to more developed countries (Escobar 2007; Huber et al. 2006).

Demographic change must be understood as part and parcel of the societal dynamics occurring during this historical time. For example, decline in marriage rates was certainly an important factor for fertility decline; yet, other aspects such as internal migration, armed conflicts, and economic hardship—to mention a few—also played an important role in the dynamics of both marriage and fertility, and the connection among these phenomena is more complex than one-to-one linear causality. Likewise, explanations of family change based on the so-called modernization theory are hard to generalize to the entire population because modernization did not occur homogeneously; therefore, its implications were not the same for different socioeconomic groups. For example, there are several aspects of LAC societies that have historically undermined women's opportunity structure, including unequal opportunities to migrate internally and internationally, unequal division of care labor, and domestic violence (Kanaiaupuni 2000; United Nations 2017a). In other words, men and women did not have the same experience through these decades; each gender experienced them from its relative position of privilege or disadvantage.

An interpretation of demographic change based on the concrete and material conditions of socioeconomically distinct groups, namely by social classes and gender, offer a richer and more nuanced understanding of demographic change in the region. The three empirical studies of this dissertation focus on the relationship between migration and family formation trajectories, with a concentration on the heterogeneity of this association across social classes and gender in international and internal migration flows. The assumption here is that the various versions of this association account for a sizable proportion of the social reproduction of class and gender relationships. This two-way relationship assumption is not new, but it has not been systematically explored in the context of different migration flows or over a long and large "enough" historical period and geographical area (Mason 1997; Portes 2010).

By choosing to study one phenomenon (e.g. fertility change) as the consequence of the other (e.g. international migration) and by concentrating on deductively-formulated hypotheses (adaptation/assimilation, disruption, selection and socialization), previous studies have overlooked the two-sided nature of this relationship; and, more importantly, its heterogeneity across migration flows, social class, and gender. The empirical analyses of this dissertation examine this heterogeneity bringing the specificities of international and internal migration flows into a common theoretical framework based on three theoretical premises. Frist, results of migration studies depend on the point of view of the observer, and social scientists should incorporate as many perspectives as possible. Second, social theory should aim to explain patterned heterogeneity. And third, a material interpretation of inductively-produced results can further our understanding of the complex interactions between demographic dynamics and the socioeconomic processes that underlie them. Under these premises, some patterns find their explanation in the above-mentioned hypotheses and some others do not. While the common theoretical framework of this dissertation can account for some of the unexplained patterns, there are also some that remain unresolved.

The three empirical analyses show that during this time period, the relationship between individuals' migration experience and their family formation trajectories varied substantially by sex, age at migration, social class, and across the two main migration types studied here: internal and international. Due to differing sample characteristics, some features of this relationship are more salient than others from certain perspectives. In all cases, migration and family formation appear as closely tied events in individual life-courses. This association arises from the fact transitions to family formation (marriages, unions and births or the absence of them) are, in some cases a precondition

for, and in some others a consequence of, the migration act. In other words, there is a strong synergy in the confluence of these two milestone events; as time- and resource-consuming processes, they contribute to both social change and stability.

In this concluding chapter, I derive general lessons on the various guises of the relationship between migration and family formation paths by looking at the commonalities and differences across chapters.

### What do we learn from a multi-site, class/gender-based, and relational-approach?

Observing migrants from different perspectives requires data sources built upon different sampling frames (Beauchemin 2014). There is no standardization in the timing and methodologies for data collection across data sources. Yet, post-collection standardization along with a concentration on birth cohorts provides some space for comparisons, along with the well-known benefits of studying demographic change having cohorts as the unit of analysis (Ryder 1965). In all cases, commonalities and differences in results ought to be interpreted as both potentially coming from intrinsic differences across data sets and as signals of more general processes related to the migration experience.

<u>Commonalities:</u> the most important common result across perspectives is that individual family formation trajectories are, first and foremost, gendered and socially stratified; migration can disrupt these relations without erasing or drastically reversing them. This result is not new, but its description through family typologies in contexts of international and internal migration is. Social class and gender differences are the primary basis of differentiation in *family profiles* and migration only comes into the picture as a secondary factor. Put formally, the processes by which family formation trajectories unfold among migrants (*adaptation, selection, assimilation*, or *socialization*) are segmented, i.e. influenced by their gender and social class. I am borrowing the term 'segmented' from the works of McNicoll (1980) and Portes and Zhou (1993) who have previously used the

concepts of "segmented rationality" and "segmented assimilation" to explain differences in fertility and migrants' socioeconomic outcomes, respectively.

This general result confirms that family typologies can be used to conduct comparative research across perspectives. As seen in Table 5.1, a relatively small and similar number of clusters in all chapters is associated with an  $R^2$  of at least 0.75, meaning that the family typologies account for at least three quarters of the total variance across individuals' family formation trajectories in the three data sets, and for both sexes in chapter 2 and 3. These proportions of explained variance reflect the strong connection among the different dimensions of family formation schedules: the timing, ordering, and quantity of unions/marriages, separations/divorces, and childbirths.

Number -		Char	oter 2	•	Chapter 3				Chapter 4	
	Women		Men		Women		Men		Women	
	ASW	$\mathbf{R}^2$	ASW	$\mathbf{R}^2$	ASW	$\mathbf{R}^2$	ASW	$\mathbf{R}^2$	ASW	$\mathbf{R}^2$
2	0.38	0.44	0.45	0.49	0.49	0.44	0.51	0.57	0.36	0.22
3	0.34	0.60	0.36	0.65	0.49	0.61	0.41	0.69	0.33	0.41
4	0.33	0.66	0.35	0.70	0.46	0.69	0.47	0.78	0.31	0.51
5	0.31	0.72	0.32	0.74	0.51	0.79	0.41	0.82	0.35	0.68
6	0.32	0.76	0.35	0.79	0.43	0.83	0.41	0.84	0.35	0.73
7	0.28	0.78	0.32	0.80	0.45	0.85	0.41	0.86	0.34	0.76
8	0.30	0.81	0.34	0.83	0.38	0.86	0.39	0.87	0.35	0.79
9	0.26	0.82	0.31	0.84	0.38	0.87	0.41	0.90	0.35	0.81
10	0.28	0.83	0.30	0.85	0.35	0.88	0.36	0.91	0.35	0.83
11	0.26	0.84	0.31	0.85	0.36	0.89	0.37	0.91	0.34	0.84
12	0.26	0.85	0.31	0.86	0.36	0.90	0.38	0.92	0.34	0.84
13	0.27	0.85	0.29	0.86	0.34	0.90	0.37	0.93	0.35	0.85
14	0.26	0.86	0.28	0.87	0.34	0.91	0.38	0.93	0.36	0.87
15	0.26	0.87	0.29	0.87	0.34	0.91	0.38	0.93	0.37	0.87

**Table 5.1:** Cluster solutions' coherence (ASW) and proportion of explained variance (R<sup>2</sup>) of individual family trajectories by chapter and sex

Note: ASW and  $R^2$  indicators can take values between 0 and 1. The higher the ASW the stronger the coherence of the cluster. The  $R^2$  corresponds to the proportion of explained variance. While the  $R^2$  is monotonic the ASW is not. For a technical overview of cluster-quality indicators see Studer (2013).

These cluster solutions are also consistent according to the Average Silhouette Width criteria (ASW). The ASW measures the average consistency of the clustering where higher values indicate higher cohesiveness within groups (see Studer (2013) for the technical details of this indicator). The ASW indicator displays similar values in all chapters (between 0.3 and 0.4). The negative or very small marginal change in the ASW between the solutions of 6 and 7 cluster in chapters 2 and 3, and between the solutions of 7 and 8 clusters in chapter 4, mean that an adequate, parsimonious and coherent cluster solution corresponds to 6 groups in chapter 2 and 3, and 7 clusters in chapter 4.

The similarity in the number of clusters that provide an adequate description of individual family formation trajectories means that it is feasible to study their heterogeneity using a low number of categories (clusters) despite their inherent complexity, and even though they come from different data sources. Beyond these technical criteria, the family typology of each chapter does capture meaningfully distinct family paths where the type, timing, and ordering of family events have, taken together, implications for other dimensions of individuals' lives, including their migration histories. In addition, their correlation with socioeconomic variables is consistent with previous studies that have looked separately at family events at origin and destination (Landale and Oropesa 2007).

Since family categories are not the same across chapters, the factorial representations of the *family profiles* do not pertain to the same space; strictly speaking, factorial planes cannot be superposed. Yet, overall similarities in the characteristics of the factorial axes and the distribution of family categories and *family profiles* across them suggest that a joint interpretation is reasonable. Indeed, all factorial planes are plotted within the same scale, i.e. between -3.8 and +3.8 in both the x- and the y-axis. This common scale highlights the higher relative importance of the first factorial dimension (x-axis) and facilitates the comparison of the dispersion of family categories and *family categories* and *family profiles* across chapters.

As seen in Table 5.2, the first and second axes combined account for at least 60% of the total variance in *family profiles* in all chapters. The first factorial axis comprises at least

38% of the total variance across *family profiles*, that is at least 1.8 times the variance comprised in the second axis (refer to the 1st/2nd row). This dominant primary axis separates family trajectories of early marriage/union formation and high fertility from trajectories of delayed transition to family formation, low fertility and trajectories of no transition to family formation at all. In all cases, this separation goes along with women's social class and, to a lesser extent, with men's socioeconomic position. Likewise, the relative importance and meaning of the second factorial axis is similar across chapters, accounting for between 20 and 23% of the total variance. This secondary axis separates more normative from less normative family categories. It is along this secondary axis that *family profiles* differ by age at migration. The third axis comprises a relatively low proportion of the variance, always below the average (1.2 in chapters 2 and 3, and 1.17 in chapter 4). This makes this tertiary axis unimportant for revealing main patterns.

Factorial axis	Chapter 2				Chapter 3				Chapter 4	
	Women		Men		Women		Men		Women	
	Variance	(%)	Variance	(%)	Variance	(%)	Variance	(%)	Variance	(%)
1st	3.41	56.8	3.30	55.0	2.28	37.9	2.47	41.23	3.87	55.3
2nd	1.40	23.3	1.21	20.2	1.30	21.6	1.24	20.72	1.38	19.7
3rd	0.58	9.7	0.78	13.1	0.98	16.3	1.02	17.06	0.88	12.5
4th	0.41	6.8	0.55	9.2	0.82	13.7	0.76	12.61	0.40	5.8
5th	0.21	3.5	0.15	2.5	0.63	10.5	0.50	8.38	0.29	4.1
6th									0.19	2.7
Total	6	100	6	100	6	100	6	100	7	100
Mean	1.20		1.20		1.20		1.20		1.17	16.7
1st/2nd	2.44		2.73		1.76		1.99		2.81	
1st+2nd	4.80	80.0	4.51	75.2	3.57	59.5	3.72	62.0	5.25	74.9

**Table 5.2:** Variance decomposition of *family profiles* across factorial axes by chapter and sex, and summary measures for factorial axes

Note: variance decomposition is conducted via Principal Component Analysis using the table of estimated *family profiles* as input. Chapter 3 six factorial axes because the family typology comprises seven categories, i.e. one more than in chapters 1 and 2. Bold numbers correspond to those included in the analysis.

Transition to family formation and migration are strongly connected in all contexts and across all data sets. This means two things: the first has a strong demographic relevance

and the second is more interesting sociologically speaking. First, when migration occurs between ages 19 and 24, individuals are more likely to be in normative family categories, i.e. categories comprising a large share of the native-born population, where marriages precede childbearing, marriages are stable over time, and complete fertility is intermediate (neither high nor low). This connection is important for demographers because it could affect quantities such as the proportion married and period measures of fertility (Adserà and Ferrer 2015; Parrado 2015).

Second, this connection has different implications by social class, and it is much clearer for women than men. Differences in the timing of family formation and level of fertility across women's social classes do not disappear among migrants. Even if both low- and high-class migrant women are more likely to follow normative trajectories, the former do so by transitioning to family formation before migration, whereas the latter are more likely to start a family after migrating. I interpret this result as the primacy of social stratification over the migration experience on influencing family paths. This interpretation is in line with Portes' (2010) understanding of the rather limited potential of migration to trigger profound social change. According to him, changes in family trajectories associated with migration do not modify the material and symbolic core pillars of the institution of the family. Despite migration, the family remains a fundamental unit in society and a privileged place (almost unique in these contexts) for biological reproduction. In addition, obligations and rights derived from kinship relations are almost unaltered by migration; on the contrary, some of these features get reinforced due to the investment family members must make during the process. This does not mean migration is powerless in term of triggering social change. Migration could induce change in the origin and reception societies; yet, this potential is modest, and it will hardly take the shape of a revolutionary leap.

In chapter 2 and 3, international migration before age 18 is associated with the largest differences in *family profiles* by social class, again, a much clearer phenomenon among women than men. This means that early migration, a type of migration that involves the longest exposure to the context of reception, displays the features of segmented

assimilation: the family categories where migrants are overrepresented depend on their socioeconomic background. In both, the NSFG and the MMP and LAMP samples, low-class women who migrated before age 18 are more likely to follow family formation trajectories of early transition to marriage and high fertility, whereas high-class migrant women are strongly overrepresented in family categories of delayed transition to family formation, low fertility and in categories of no transition to family formation whatsoever.

In these two chapters also, patterns in the *family profiles* of international migrant men are erratic; they continue to reflect social class differences, but their variation by age at migration has no clear pattern. This lack of pattern occurs despite the higher prevalence of international migration among men than women. To the extent that this higher prevalence means less constraints for migrating, it can be said that men's privileged position with respect to women lowers the potential of the migration experience to organize their *family profiles* according to a distinguishable pattern by age at migration. The fact that this lack of pattern is observed in both the NSFG (where the samples of women and men are independent) and the MMP and LAMP (where family formation trajectories correspond to household heads and their partners) confirms that the association between migration and family formation trajectories is gendered, i.e. social class and age at migration are more significant factors for the family paths of women than men.

Finally, the very last age at migration group serves as a "placebo" and displays consistent results in almost all the cases. These group can be treated as a placebo because individuals who migrated after age 30 experienced primary socialization, teenage years, and transition to adulthood at origin. This means that their *family profiles* should be like those of non-migrants at origin. If anything, migration after age 30 could be associated with very delayed transition to family formation due to anticipatory behavior. These are precisely the results for all cases of domestic migration examined among women in the DHS. For both sexes in the MMP and LAMP samples, the overrepresentation of this group of migrants in strongly delayed trajectories and trajectories of no transition to family formation.

Differences: the family typology is not the same across data sets. Whereas the NSFG and the DHS data capture a wide spectrum of family categories that are in accord with other studies, the MMP and LAMP samples display some biases. These biases towards less heterogeneous family trajectories are potentially associated with three things: (1) MMP and LAMP samples are not nationally representative and the analytical sample is restricted to household heads and partners, (2) the subsample of international migrants interviewed at destination is collected through a snow-ball strategy (i.e. it is not random), (3) the timing of data collection (holiday times) favors the inclusion of individuals with stronger family ties. For these reasons the typology in chapter 3 must be interpreted as locally representative of sending communities and with a bias towards individual reports of intact family histories (Massey and Zenteno 2000; Riosmena 2016).

Beyond this intrinsic limitation of the MMP and LAMP samples, there are sociologically meaningful differences across perspectives. In chapter 2, the immigration perspective, differences in *family profiles* among non-migrant women by educational attainment and race/ethnicity (i.e. social class) are the largest compared to non-migrant in other chapters. This result speaks to the strongly stratified nature of US society. Previous studies have documented increased heterogeneity by socioeconomic status in several family outcomes in the US (Bianchi and Casper 2000; McLanahan 2004; Multiple Authors 2015). Family profiles among migrant women in the NSFG replicate these social class differences to a lower degree when migration occurs after age 18; on the contrary, these differences are augmented when migration occur before this age. At the same time, family profiles among migrant women in the NSFG remained distant (i.e. different from) family profiles of non-white non-migrant women. In other words, an immigration perspective clearly shows how *adaptation/assimilation* does not simply mean the acquisition of the demographic behavior of the majority, but rather the partial replication of the socially determined differences in family outcomes of the host society. This effect is very evident among teenage migrants because this group has the longest exposure to the context of reception.

Marriage with someone from the racial/ethnic majoritarian group at destination is considered as a proxy for ultimate assimilation (Choi and Tienda 2017; Kalmijn 1998). Data in chapter 2 is the only source that allows me to directly examine this issue. It would be unthinkable to conduct family research in the US without referring to racial/ethnic endogamy in marriage. And it is hard to find comparable sources of information on race and ethnicity across LAC countries. It is not that racial/ethnic differences among families do not exist in LAC, but they seem to be of lesser interest for family scholars. Thanks to the immigration perspective I can examine the relative permeability of racial/ethnic boundaries for migrants. The higher propensity of women to marry a NH-white compared to men, along with the positive correlation between exogamy and educational attainment confirm the importance of resources in the process of assimilation or, for that matter segmented assimilation.

In chapter 3, the transnational perspective, differences by social class among non-migrant women are smaller than in chapter 2. Among international migrant women, the association between intermediate ages at migration and certain family categories is strong for all social classes, which reflects the disruptive potential of the migration experience when it occurs at ages where transitions to family formation and childbearing are concentrated. This is the case for 19- to 24-year-old migrant women who are more likely to follow normative family trajectories, as well as the 25- to 30-year-old migrant women who are more likely to be in categories of delayed transition to family formation, or no transition to family formation at all. These results arise from the fact that transnational samples include a more diverse set of migration histories, some of which include multiple trips, return migration, and periods of illegal permanency at destination. In other words, migration experiences included in the MMP and LAMP exacerbate the disruptive elements of the migration experience.

Another feature that is neatly captured with transnational data is the negative association between international migration and life-long cohabitation. This negative association is very clear for women, and it is also visible for men despite the erratic distribution of their *family profiles*. Only low-class men and low-class women who migrated after age 30 are

as likely as their non-migrant class-counterparts to follow family formation trajectories of cohabitation. All other age-at-migration groups display a negative association with (are distant from) the family category of life-long cohabiters. It is true that this category does not exist in the family typologies of chapters 2 and 4, to some extent due to data limitations; yet, this does not erase the importance of noting this negative association.

Chapter 3 also reveals that, contrary to international migration, internal migration is positively associated with cohabitation. Indeed, low-class migrants of both sexes are relative to the mean more likely to be in this family category. This contrast between internal and international migration confirms the appropriateness of a class approach to understand the possibilities to migrate as unequally distributed, and the institution of marriage as a potential source of support and a costly requirement in the context of international migration. Hence, cohabitation appears in the MMP and the LAMP as a feature of low-class internal migrants. Because most of the internal migrants in these two samples are rural-to-urban migrants, this association could be explained by the mechanisms invoked by the *socialization* hypothesis, i.e. internal migrants of rural origin carry with them the low symbolic valued attached to legal marriage when they move to urban areas.

Results from chapter 4 add more nuances to this explanation, showing that the *family profiles* of low-class rural migrants in large cities and urban areas are better accounted for by economic *adaptation* than primary *socialization*. This is a very important result because this group was a major contributor to sociodemographic change during the period of interest. More generally, this latter result contests explanations of family change in LAC based on the modernization theory because it is precisely among low-class migrant women that the "family-modernization forces" have operated the least; these include proclivity towards a quality-quantity trade off calculation for childbearing, delayed transition to family formation due to educational expansion, access to modern contraceptive methods, etc. (Castro Torres 2017).

Compared to their non-migrant class counterparts at origin, rural migrants in large cities and urban areas were more likely to follow not only normative trajectories (as in other migration streams) but more so trajectories of unstable unions, multiple partners and intermediate completed fertility (as opposed to high fertility among non-migrants at origin) over the life course. This result is clearer in large cities than other urban areas because conditions triggering *adaptation* such as under- and unemployment, lower economic opportunities, and precarious living standards are more likely to be encountered in large cities than in other urban areas (Portes 1989). Indeed, urban development in LAC has concentrated in few cities making some of the places classified as urban much more like rural areas in terms of provision of basic services, access to formal education, economy type, job-market structure, etc. (Davis and Casis 1946; Rodríguez Vignoli 2004). Data limitations prevent me from separating these places.

A more general version of this result on rural migrants in large cities pertains to the entire group of low-class internal migrant women and, for that matter, to women in the upper classes. In all contexts of receptions (large cities, urban, and rural areas), the strongest disruptions in *family profiles* by age at migration (i.e. the longest distance from the *family profile* of non-migrants at origin) are observed among the low-class migrants, in particular, among those who migrated before age 25, the most vulnerable groups in terms of resource availability and readiness for family formation. At the other end of the class spectrum, *family profiles* of high-class women are very similar regardless of their age at migration, meaning that the privileged position of these women is associated with less migration-related disruptions.

Even though *family profiles* in rural settings display the largest variation by social class and age at migration, family outcomes among migrants in these settings are understudied. None of the four explanations I discuss in this dissertation have been adapted to these two migration flows. It is unclear why low-class migrant women in rural settings are more likely than any other group to follow family trajectories with the earliest transition to family formation and highest fertility. This result is in striking contrast with the overall association between migration and delayed transition to childbearing and union formation. And, for the moment, an explanation for it remains elusive.

Two additional remarks on the distinct nature of results from chapter 4 are worth noting. First, internal mobility is a demographic behavior that affects more than a half of all women in the analysis (and about one sixth of the world population). This number is substantially higher than the 15% and 12% of international migrant women in chapter 2 and 3, respectively; and the 27% women with internal migration history in chapter 3. Hence, chapter 4 deals with the analysis of a very widespread behavior. This means that internal migration has quantitatively much larger potential to spark sociodemographic change because it touches the majority (Portes 2010). Second, even though the DHS have a large temporal and spatial coverage, it was not possible for me to conduct a parallel analysis using DHS men's files. The data was insufficient both in terms of the lack of a comparable sample, and the lack of variables to assure comparability with women. This side result can be related to the dearth of understanding of family- and fertility-related behaviors among migrant men that continues to pervade demographic studies.

#### **Concluding remarks and implications for future research**

Notwithstanding the inherent differences across data sets and leveraging the specificities of each perspective, results confirm the overall importance of using a gender and class lens to understand the various ways in which migration relates to family formation and dissolution trajectories. These various relationship-guises can be jointly understood as consequences of the unequal distribution of resources (financial, social, marital, cultural, etc.), and therefore of opportunities, across individuals of different genders and social classes. In addition, these dynamics pertain to contexts of asymmetric relationships between origin and destination, e.g. low- and middle-income sending countries of international migrants, urban areas where economic prospects for young adults are restricted, and rural areas where multiple threats related to social conflict, violence and

economic uncertainty affect daily life. The evidence presented in the three empirical analyses confirm that social theory cannot be either of 'one-size-fit-all', or of multiple ad hoc explanations for all contexts. Rather, a resource-based material explanation is supported by the analysis as an overarching framework that is flexible enough to explain the basic roots of the differences in *family profiles* across gender, class and migration status.

There are two aspects in which this framework is theoretically superior than the interpretation of deductive hypotheses in complementary terms. First, this approach allows me to consider that multiple mechanisms (e.g. poverty, inequality, unequal access to means of mobility, etc.) affect the family formation path of individuals according to their social and economic position within society (gender and class). Moreover, differentiating individuals by age at migration and comparing family profiles across different destinations allows me to incorporate differential lengths of exposure to destination contexts and the degree of divergence between origin and destination. Second, by focusing on the experience of groups of individuals such as people with similar family formation trajectories, people of the same social class and gender, etc., rather than on the correlation among variables, this approach forces the account to be about subpopulations defined in a relational manner i.e. the actual characters of demographic and societal change (Emirbayer 1997). This change is not minor, as it implies building scientific narratives where the subjects of the statements are not variables or their associations, e.g. education does X, unemployment prevents from Y, migration causes Z, but social relationships in terms of class, gender and their mutual oppositions.

For example, each chapter identifies one or two subpopulation groups—always defined in relational terms—that, despite their demographic importance, display family patterns that are not accounted for by mainstream explanations. *Family profiles* among teenage migrants in the US reveal the segmented nature of assimilation of migrants into the US family regime (chapter 2). In addition, chapter 3 reveals that *family profiles* among male international migrants are poorly explained by social class and age at migration. Finally,

chapter 4 portrays low-class rural migrants in large cities as one of the major contributors to family and fertility change in the region despite the lack of influence that the so-called modernization forces of the family had on them. In all cases, the narratives are not about variables but about how these groups of individuals are embedded in a set of social and economic relations that translate to demographic outcomes. These nuances enrich our understanding as they describe the experience of large groups in relatively disadvantage (low-class) or privileged (men) socioeconomic positions. In doing so, scholarly thought is less prone to fall into what I defined in the first chapter, following Bourdieu (1990), as the scholastic illusion, i.e. the propensity to formulate explanatory models that privilege the mental schemes of the scholarly standpoint, that is, of a socioeconomically privileged standpoint.

This departure from variable-based approaches and deductive models is also accompanied with a change from the analysis of single outcomes (e.g. births, marriages, separations) to the study of processes (Abbott 1988). Processes are more complex than single outcomes and they have features of sociological interest that cannot be examined unless they are considered jointly. Their study almost necessarily implies combining features that would otherwise be separated, and the procedure to obtain results are often deemed arbitrary (i.e. as following the researcher's preconceptions about reality). For example, it is still possible to find two individuals with divergent timing or complete fertility in given cluster; and this situation may be differ depending on the strategy that the researcher selects to construct the typology.

This is an unavoidable cost and there are two reasons to incur it. First, individuals' life courses are made of sequences of events, where the type, ordering and timing of these events are relevant when taken together; they may differ in one single outcome, but their overall similarity across these dimensions is what matters in the study of processes. Second, researcher's intervention in the construction of a family typology should not be regarded as an arbitrary process, or for that matter as the unique process where the researchers' intervention is necessarily subjective. It is unclear to me why these techniques are the target of such critique, as it is well known that all processes of data

collection, survey questionnaire-design and even data processing carry researchers' subjectivity about what is important to be asked, how the question should be phrased, and what are the indicators that scholarly discussions should care about, in one word what Kuhn (1962) has termed *normal science*. In all cases, what matters most is transparency and the ability to interpret results according to the limitations of the data and procedures that are used to generate them.

Hence, the study of variation in demographic processes among relationally defined groups is a promising approach to further understanding of how demographic dynamics unfold within the broader socioeconomic context. This approach seems to me very much in line with Elder's (1994) central themes on the paradigm of the life-course perspective, especially those that highlight the importance of context (historical times) and age, this latter as a key symbolic marker for roles and expectations about people's behavior. The concentration on social-class and gender relationships adds to Elder's central themes what Emirbayer (1997) has termed a transactional understanding of social life. This approach privileges the study of relations over entities, which includes defining categories of study in a relational way. As put by Somers (quoted by Emirbayer), relational thinking implies:

"[A] shift away from thinking about a concept as a singular *categorical* expression to regarding concepts as embedded in complex relational networks that are both intersubjective and public [...] That is, concepts cannot be defined on their own as single ontological entities; rather, the meaning of one concept can be deciphered only in terms of its 'place' in relation to the other concepts in its web. What appear to be autonomous categories defined by their attributes are reconceived more accurately as historically shifting sets of relationships that are contingently stabilized" (Somers 1995:136)

The concepts of family typology and *family profile*, along with the joint study of their variations across key structural dimensions of social life (origin vs. destination, social class and gender), exemplify the usefulness of relational thinking for understanding demographic change. By applying them to the study of a half century of migration and family change in LAC, this dissertation has confirmed previously observed patterns and pointed to neglected ones, reorganizing the narrative around concrete actors defined in

terms of their social relations. Whereas some of these patterns find consistent explanations on a class- and gender-based interpretation, some others require further investigation.

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