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# **Family Matters:**

Three Essays on Living Arrangements across Societies

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## Doctor of Demography

## **Family Matters:**

### Three Essays on Living Arrangements across Societies

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#### **PREFACE**

This work is comprised of a collection of three essays, centered on the topic of family coresidence with a cross-national perspective, showing change over time. Each paper had been shaped and molded by the various opportunities and inspirations that presented themselves along my research journey. Although all three essays stem from the same central theme of family demography, each essay uses entirely distinct theoretical frameworks on different populations. Together, they seek to answer the questions: Under what circumstances do family members live with one another today? What are the implications of social and demographic change on family life and living arrangements? How do these implications vary in form and pace of change across societies?

The first essay, "Family and household composition in Asia" was a work funded by the European Research Council grant (ERC-2009-StG-240978) awarded to the research project, "Towards a Unified Analysis of World Population: Family Patterns in Multilevel Perspective" a.k.a. WORLDFAM, led by Dr. Albert Esteve of the Center for Demographic Studies. It will be published in chapter form in the Routledge Handbook of Asian Demography, edited by Zhongwei Zhao and Adrian C. Hayes. This particular work, exploratory in nature, relies heavily on descriptive statistics from large datasets of various sources and focuses mainly on family coresidential patterns in 12 Asian countries and changes over time. Since other chapters of the Routledge handbook cover topics such as changing marriage patterns and fertility decline in the recent years in Asia, we concentrate our analysis on intergenerational coresidence as a form of old age support, a salient demographic feature in many Asian countries.

One of the most challenging tasks in writing this essay is the range of data needed. Countries such as Afghanistan have very little published demographic data, and countries such as China exert strict control over the access of their official data. The Integrated Public-Use Microdata Series International (IPUMS-i) encompassed an extensive collection of census samples from most of the Asian countries of interest, but to fill in the missing pieces, we needed to add a few other data sources. Luxembourg Income Studies, Demographic Health Surveys, United Nations data, and aggregate data from several national statistical offices, were also used to enrich and geographically expand our analysis. With the help of Dr. Hyun Ok Lee of Yonsei University, I was also able to add an interesting case, South Korea, to this chapter. The use of microdata from South Korean censuses from 1980 to 2010 illuminates rapid family changes that are occurring alongside economic progress as South Korea

emerges as a new global economic superpower. After the completion of the chapter on Asia, we moved on to the topic of living arrangements in Latin America, focusing on gender as a key dimension.

To take advantage of the expertise and resources of the Centre for Demographic Studies (CED), I started developing the idea of working on the topic of female headship and the feminization of poverty in Latin America with my thesis supervisor, Dr. Albert Esteve and our third collaborator for the essay, Dr. Rocío Treviño. The project aimed to compare female-headed households with male-headed households in 14 Latin American countries, across the span of 40 years. This work mainly used tools such as content review of questionnaires, asset index building, and logistic regressions to reveal changes of headship definition over time, and the relationship between the sex of the household head and household living conditions. Our initial idea of the feminization of poverty became better historicized and developed after constructive comments from three anonymous reviewers and two revisions.

The second chapter, "Female-headed households and living conditions in Latin America," relied on the experience of Dr. Iñaki Permanyer and Dr. Joan García in building asset indices using census microdata. Their expertise guided the methodology we employed in this essay. Dr. Sylvia Chant from the London School of Economics provided invaluable comments and reading suggestions that strengthened the theoretical background of this work. We submitted the final form of the essay to *World Development* upon completion, and it was accepted for publication in November 2016.

The final chapter of this work focuses on the coresidential patterns of Moroccans in Spain. The original intention for the third essay was to study the living arrangements of migrants, such as Mexicans in the United States. After a review of relevant literature, I noticed that although studies based on the first, 1.5 and second generations on all migrant groups, especially Mexicans, are abundant in the United States, fewer studies focused their attention on migrant living arrangements in Europe, especially in countries that have only recently emerged as major migrant recipients, such as Spain. The availability of the 2011 Spanish census provided the opportunity to explore second generation individuals who were unidentifiable in previous censuses due to the lack of crucial variables, namely, the birth place of one's father and mother. This work updates findings from previous studies through the contextualization of changes over time, using both descriptive statistics and logistic regression to measure the propensity of individuals living or not living with nuclear family.

A large portion of the revision phase of the second chapter and the writing phase of the third chapter was completed under the supervision and guidance of Dr. Ann Berrington during my research stay at the Centre for Population Change (CPC) of the University of Southampton. I received invaluable suggestions and comments on the topics of principle component analysis from Dr. Amos Channon, migration from Dr. Jakub Bijak, family and marriage from Dr. Brienna Perelli-Harris, Dr. Agnese Vitali and Dr. Jennifer Holland, all of which strengthened the methodological and theoretical framework employed by this dissertation.

During my short unofficial stay at the Department of Sociology at the University of Surrey, I benefited from meeting with one of the editors of *Ethnic and Racial Studies*, Dr. Victoria Redclift, who helped me further develop on the idea of migrant generational changes. Along with my supervisor Dr. Esteve and our co-author Dr. Treviño, the essay was further streamlined and shaped into the manuscript that it is today. We aim to submit this manuscript for publication by the time of my thesis defense.

The motivation to explore, update, and challenge current knowledge on living arrangements across the world inspired the conception of this thesis. Due to various funding and other practical concerns, the three essays vary in themes and geography. The first chapter examines Asia, the second Latin America, and the third Spain and Morocco. But, regardless of diversity, some general truths about how humans arrange themselves into households can still be extracted from the three case studies. The wide range of topics facilitates a multi-dimensional and comprehensive look at family life both through a household perspective and a person-centered perspective.

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## FAMILY MATTERS: INTRODUCTION

Family as an institution has historically governed human sexuality, social activities, resource allocation, and emotional affiliation. Through union formation and childbearing, the establishment of one's own nuclear family is often thought of as the grand entrance into adulthood, or a rite of passage which entails new sets of responsibilities. Like a living, breathing organism, family dynamics are rarely static. With the passage of time, the roles of care-provider and care-receiver may reverse, members may join or drop out due to union formation, dissolution, birth or death, and the intensity of influence from one member to another may strengthen or weaken. The pace, prevalence, and timing of each event differ across time, societies, and social strata.

The question, "What constitutes a family?" has been scrutinized by family sociologists and demographers who wonder whether it is love and affection, religious sanction, personal support, government licensure, community endorsement, or a combination of the above (Thornton et al., 2007) that serves as the essential building blocks of a marriage, which in turn becomes the pillar of what we understand as family life. Across the world, both *structure* and *belief systems* of the family vary from society to society, influencing individuals to live family lives as they see fit, while guided by the ideologies of their culture, or in the form of "ideology in action" (Muncie, 1995).

Beyond cultural influences, the amplification of modern life choices has also led to shifts in family models. Catherine Hakim's preference theory pointed out five major social changes that created new options for women: the contraceptive revolution, the equal opportunities revolution, the expansion of white-collar occupations, the creation of jobs for secondary earners, and the increasing importance of attitudes, values and personal preferences in the lifestyle choices of affluent modern societies (Hakim, 2003). Bearing the increasingly dynamic opportunities for all people, especially women, we are faced with the new challenge of interpreting the ever-evolving meaning of family ties. As a response, I embarked on three separate journeys that embody the theme of understanding family life through living arrangements across time.

This thesis seeks to shed light on recent developments in coresidential patterns and family structures by drawing upon three case studies of prominent family features around the world: intergenerational coresidence in Asia, female headship in Latin America, and unique family strategies for migrants, with the example of Moroccans in Spain. Each chapter shows a paradox of multi-dimensional nature of family. The first chapter wrestles with the persistence of intergenerational coresidence in many Asian countries, the second reevaluates the meaning of female headship, and the third adds migration experience into the mix of determinants of family living arrangements. All three studies heavily relied on the Integrated Public-Use Microdata Series International (Minnesota Population Center, 2015).

#### **ABOUT DATA**

One of the main goals of this dissertation is to compare the changes of household structures over time across multiple countries, which calls for the use of large-scale person records organized into households, such as census data samples. The Integrated Public-Use Microdata Series International (IPUMS-i), managed by the Minnesota Population Center, accounts or 614 million persons living in 82 countries across the world. The massive collection of data allows us to take a peek into the family lives of individuals with information on who lives with whom in each household.

The use of IPUMS-i has several advantages. First, the microdata samples are representative of register data or censuses that were conducted on the populations of interest, thus they are methodologically reliable and offer full coverage. Second, the datasets are harmonized to allow for international comparisons. Third, cross-sectional data of different time points capture panoramic changes of population over time. Lastly, the wealth of information in censuses enables us to control for demographic characteristics of individuals and material characteristics of households. Although it does not replace longitudinal data which facilitates the establishment of causalities, it serves as a proxy for looking at the evolution of family changes one snapshot at a time, with the added benefit of its richness of information.

The first chapter, "Family and household composition in Asia," analyzes 12 Asian countries from 1980 to 2010, employed 32 samples. To expand the analysis to 13 more countries, I used aggregate data from the United Nations Development Program for Myanmar, the United Nations Population Fund for Iran, the Demographic Health Survey for Bangladesh, the Luxembourg Income Survey for China, Japan, South Korea, and Taiwan, on top of any available information provided by the statistical offices of each country. The second chapter, "Female-Headed Households and Living Conditions in Latin America," zooms in on 14 Latin American countries from 1970 to 2010, utilized a total of 50

samples from IPUMS-i. The third chapter, "Living Arrangements of Migrants by Gender, Generation and Time: The Case of Moroccans in Spain," uses three data samples from IPUMS-i, and one data sample from the most recent census microdata published by the Spanish Statistical Office (INE).

#### **MAIN THEMES**

My dissertation focuses on three aspects of family living arrangements: intergenerational coresidence, female headship, and migrant coresidential patterns. The first chapter, "Family and household composition in Asia," targets patterns and trends in household size and living arrangements in Asia with a focus on the prevalent characteristic of Asian families: interdependence between generations manifested in the form of coresidence. The second essay, "Female-headed households and living conditions in Latin America" investigates the increase of households headed by women in 14 Latin American countries and its relationship with the material conditions of households. The last essay, "Living Arrangements of Migrants by Gender, Generation and Time: The Case of Moroccans in Spain" targets migrants' or children of migrants' prospect of living with their parents, spouse and children. These three essays, covering a wide range of topics on family living arrangements in different regions of the world, offer a snapshot of the evolution of coresidential patterns in the past few decades.

#### INTERGENERATIONAL CORESIDENCE

Globally, living arrangements can be telling of the generational economy of richer and poorer countries (Lee & Mason, 2011). Richer economies tend to invest in generous health care and public pension programs which support independent living arrangements, whereas poorer economies lean toward leaving intergenerational care to private provisions, in the form of inter or intra household transfer of capital or goods among kin (Lee & Mason, 2011). The proportion of the older population living alone generally is higher in Europe or countries with a large percentage of European descendants, and lower in Africa and Asia (United Nations, 2005). In particular, the countries with the highest proportions of older persons living with adult children are in Asia (United Nations, 2005).

Intergenerational coresidence is a salient characteristic of Asian households, with great variations of form, level of observance, and persistence among different countries. William J. Goode (1963) predicted that large, intergenerational families will decline in numbers, and family size will converge globally following modernization. Decades later, Andrew J. Cherlin (2012) reviewed these claims, and saw that some of Goode's hypotheses proved prescient while others did not. Goode's prediction

of global family convergence was incorrect, and in some ways, family forms even diversified within nation-states. Notwithstanding, Goode's assertion that the Western conjugal ideology would spread broadly has been widely confirmed and supported by evidence. In the case of Asia, although simplification of household has taken place along with economic development in certain countries, patriarchal elements of the yesteryear by and large persist and show few signs of tapering (Chu et al., 2011).

Up to a certain age, almost all children live exclusively with at least one of their own biological or adoptive parents. Once the child grows up, the timing of when and if he or she ever leaves home, becomes of interest to family sociologists and demographers for their social and economic impact on the society at large. Although whether intergenerational coresidence of adult children with their parents facilitates more so the needs of the adult children or the needs of the senior parents may prove to be more of a two-way street then one (Smits, et al., 2010; Dykstra, 2010), studies on intergenerational coresidence often splinters into either targeting dependent adult children or dependent elderly parents.

Studies on dependent adult children tend to focus on how housing, welfare, or economic conditions influence the children's transition into adulthood (Berrington et al., 2009; Buchmann & Kriesi, 2011; Cobb-Clark, 2008) and cultural factors or social norms that influence the timing of leaving home (Billari & Liefbroer, 2007; Giuliano, 2007). In this paradigm, employment, union formation, and fertility of propsects and propensity of children are often scrutinized. Literature on dependent parents heavily center on the coresidence of elderly individuals living with adult children as a form of oldage care (Hermalin, 2002; Ruggles & Heggeness, 2008; Takagi, et al., 2007; Korinek, et al., 2011). In countries with limited government-sponsored elderly care provisions, the examination of this particular form of intergenerational coresidence is crucial when considering the well-being of older adults.

With the increase of life expectancy and the decrease of birth rate in developed nations, a rising aged dependency ratio entails that a growing number of countries now face the challenge of long-term care for senior citizens with a shrinking work force. Population ageing is certainly not an issue that concerns only Asia. However, many European countries have adequate pension systems and social programs firmly in place to allow some level of senior independence, and perhaps solo residence. Up to 39% of Danish and 35% Dutch seniors 60+ live alone in 1994, compared to a mere 7.3% in Indonesia in 1997, as reported by the United Nations (2005). In comparison, most Asian countries are still unprepared for the impending dilemma of having too few adult children to support too many seniors while well-functioning pension systems are not yet in place (Park, 2012).

The first chapter highlights the importance of coresidence as a form of support for aging parents in Asia, a region with high levels of intergenerational coresidence (United Nations, 2005). Intergenerational coresidence can be partially explained by filial obligations as part of family values deeply entrenched in many Asian countries, particularly in countries with strong Confucian influences such as China, Japan, or Taiwan. Moreover, demographic, economic and social and welfare realities also play a role in whether an elderly person is able to live alone and remain self-sufficient. The main goals of Chapter 1 are to examine patterns and trends in living arrangements in Asian countries, and to observe whether family systems vary geographically, and whether the simplification of household occurs alongside economic growth and development. The takeaway of this chapter serves as the building block of future studies aimed to inform policies related to old age care in the most populous region of the world.

#### FEMALE HEADSHIP

Household headship is an aspect of living arrangements that can reveal the economic and social dynamic within each household. Although the definition of "household head" varies from country to country and changes over time, the general assumption is that the household head is the person mainly responsible for the economic well-being of the household (Chant, 1997; Kishor & Neitzel, 1996). Most studies conducted on household headship center on the theme of gender, specifically, female headship. Female-headed households are also known as "female-maintained" or "female-supported" households (Chant, 1997).

The traditional narrative of female headship tells the story of single mothers raising children with limited male assistance, whereas in modern reality female headship occurs under a plethora of circumstances. In Latin America, the phenomenon of high female headship rate has been widespread across the continent for decades (Socolow, 2000). The region has not only experienced a rise in cohabitation, but the spread of non-traditional households has reached even the higher strata of the societies, as predicted by the second demographic transition (Esteve & Lesthaeghe, 2016; LaPlante, et al., 2015; Lesthaeghe, 2014). Following the educational expansion and increase of labor force participation of women, the context of female-headed households has been furtively changing along with evolving gender dynamics. The question of whether or not being a female household head bears the same meaning it did a few decades ago remains largely unexplored.

The relationship between female-headed households and the feminization of poverty has inspired vigorous debates (Alvarado Merino & Lara, 2016; Chant, 2003; Damián, 2003; Klasen et al., 2015). Scholars have long contended that female-headed households are particularly vulnerable to economic

deprivation compared to male-headed households under the theoretical framework of the feminization of poverty (Minkler & Stone, 1985; Pearce, 1978;), while critics of the theory either provided counter evidence (Whitehead & Lockwood, 2000; Klasen et al., 2015) or questioned the validity of framing poverty as a "female" issue (Razavi, 2000). The second chapter, "Female Headship and Living Conditions in Latin America," joins the debate by providing evidence from 14 countries in Latin America, wrestling with the topic of feminization of poverty in a region with deep historical roots behind its high number of women heading households. With women's increasing participation in education and the work place, this chapter offers a nuanced view of a growing number of women who see themselves as being principally responsible for their households fiscally and socially, a trend that has shown no sign of tapering in Latin America.

It is worth noting that female headship can be seen as a manifestation of female empowerment, instead of a sign of depravity. The comparatively lower female headship rate in the past may be due to the powerful ideology of "togetherness" which women are particularly expected to subscribe to, which made seeking the opportunity to set up autonomous household units neither socially nor individually desirable (Kabeer, 1996). The increase of females setting up their own shop can also be a sign of women having lower tolerance for poor treatment within her household and unwilling to settle for an unsatisfactory domestic life (Chant, 2009).

Along with the increase of female economic power and social participation, echoing the idea of headship centers on the traditional framework of a male breadwinner supporting his family, in the recent years, many countries have moved past the concept of "headship" and adopted the usage of "reference person" in its place in household surveys and census questionnaires, such as in the United States, Canada, France, Italy and Switzerland (Chant, 1997). Meanwhile, many countries continue the usage of headship, despite the fact that standardization of the meaning of headship across countries is virtually impossible. Looking into the future, whether the concept of household headship will remain relevant in a world of increasing dual earners, same-sex, complex, single, and other non-traditional households should be reexamined, as family life and living arrangements continue to diversify.

#### LIVING ARRANGEMENT OF MIGRANTS

The unique family circumstances of migrant communities simply cannot be ignored in our quest to explore family forms. From the societal perspective, the study of transition to adulthood of migrants or migrant descendants reveals whether the immigrant community will become an integral part of the host society or remain politically, culturally, and economically distinctive (Bernhardt et al., 2007).

From the migrant's perspective, migration tears individuals apart from homeland kin and thrusts them into uncertain future surrounded by strangers of strange lands, where living arrangements are compromised between the ideal and the practical.

Transnational family has become an increasingly common family form. Uncovering the mechanisms behind family forms and the timing of transition is a crucial stroke in completing the modern portrait of our colorful societies. Despite the fact that countries such as the United States and Spain generally favor and facilitate family migration in policies, migration by itself serves as a disruptive event to family coresidence (Landale et al., 2011). The first waves of migrants often arrive with little or no existing social network in the destination country. Combined with economic constraints that may render living alone difficult, their tendency to live with non-nuclear family members is particularly higher than the native population (Empez Vidal, 2015). Later waves of migrants may live with existing kin in the destination country, and/or cluster in migrant communities (Vitali & Arpino, 2015; Galeano & Sabater, 2016), but their potential for finding a suitable mate may be hampered by social and economic circumstances. Although the second generation individuals are the "new natives" in theory, evidence from the United States, the Netherlands, and France have shown that union formation and childbearing patterns of the children of migrants is markedly different compared to children of non-migrants.

The last chapter focuses on the family living arrangements of Moroccans in Spain by migrant generation. Although Spain has had a long history of experiencing circular migration from Morocco, it is only until recent years that Spain has joined the ranks of the Netherlands, Belgium, and France in becoming one of the largest and most important destination for Moroccan settlement. Today, Spain serves as an ideal laboratory for studying living arrangements of migrants and migrant descendants due its nascent status as a major migrant receiving country, which provides a group of relatively young second generation individuals of whom we know little about in terms of how they are coping, integrating, and adjusting to European life. Together with Spain's fertility decline, migration surge quickly replaces the younger generation, especially in major migrant receiving cities such as Barcelona and Madrid, with children who are born to foreign parents. This demographic shift inevitably changes the social fabric of the society.

As a process of normalization of family life, we are particularly interested in Moroccan migrants' and second generation Moroccans' nuclear family living arrangements, which can be seen as a manifestation of economic and social integration into the receiving country. Moreover, evidence has shown that although 1.5 and second generation children of migrants have similar aspirations as natives, they are often confronted by structural barriers and intergenerational conflicts that mar their

outlook on life (González Ferrer et al., 2015). Due to the high percentage of minors among Moroccan migrants, understanding the mechanisms behind their family situation and transition into adulthood is not a pivotal and urgent matter (Domingo i Valls & Vono de Vilhena, 2012).

Spain differs from other European countries with significant Moroccan populations, such as France, the Netherlands and Belgium, in its characteristically strong family ties (Reher, 1998). Regardless, Spaniards in general marry later and have fewer children than Moroccans. Like the previous two chapters, Chapter 3 pays particular attention to the role gender plays in living arrangements, with women generally more likely to leave parental home, enter union, and bear children at younger ages than men. This chapter contributes to the understanding of how transnational families cope with demographic constraints in coresidential decisions across borders. It seeks to answer the question of whether or not they assimilate to the destination family dynamics, recover the norm observed in the sending country, or form an emergent identity by themselves. This information is particularly relevant today in a world of mobilized individuals in a globalized world.

#### CHANGES THROUGH TIME AND SPACE

There are a few ongoing debates on the topics of the evolution of household structure, female headship, and assimilation process of migrants, of which researchers diverge due to variated opinions over these paradoxes:

- 1. With modernization and urbanization, intergenerational coresidence should decrease as living arrangements simplify. (Goode, 1963)
- 2. Female-headed households tend to suffer poorer living conditions than male-headed households. (Pearce, 1978)
- 3. Per classical assimilation theory, the family life or living arrangement of migrant families should linearly evolve towards the likeness of the mainstream population across migrant generations.

This thesis challenges existing assumptions and updates the dialogue over the multi-faceted and complex nature of family life across time and space. Specifically, they address the following topics in family living arrangements: intergenerational coresidence, female headship, and migrant family forms. Chapter 1 focuses on the changing and persistent trends in family living arrangements in 12 Asian countries, showing that intergenerational coresidence persists in countries such as China and India, despite experiencing dramatic economic development in the recent decades. Chapter 2 uncovers the evolution and the meaning behind female headship in 14 Latin American countries, redefining what it means for a woman to self-report as the household head, especially in the context of living with a male partner. The last chapter, reveals the family coresidential patterns for migrants from Morocco in Spain and their descendants, bearing in mind that migration serves as a disruptive event in family life, and family forms of migrant families may resemble neither that of the destination nor the sending country.

The state of the family has social, economic and psychological implications. The family, regardless of the strength of emotional bond among its members, is inevitably attached to both our purse string and heart string by design. As family structure and dynamic becomes more fluid, our interpretation of what constitutes a normal family must evolve. With this work, I hope to enrich the ongoing conversation of with whom we live and why, and in the process, touch upon subjects that are more relevant than ever in our modern world: elderly care, gender, and transnationalism.

Family Matters: Three Essays on Living Arrangements across Societies

## CHAPTER 1: FAMILY AND HOUSEHOLD COMPOSITION IN ASIA

#### INTRODUCTION

In this chapter, we examine patterns and trends in household size and living arrangements in Asia with the goal of highlighting the prevalent characteristics of Asian families while showing diversity across countries and changes over time. We combine data from censuses and surveys in 13 countries from 1980 to 2010, focusing on two different perspectives. First, we take the household perspective, in which the household is the main unit of analysis. In doing so, we utilize indicators such as household size, distribution of households by number of members, and composition of households by age group. Second, we use the individual as the unit of analysis or take the individual's perspective to identify living arrangements by age for each person within our datasets. For the sake of comparability, we focus on the most common relationships such as parental, spousal, and filial affiliations. Such information is often available when household members are recorded by censuses and surveys (De Vos & Holden, 1988). The individual's perspective facilitates the disentanglement of the internal structure of domestic groups by showing vertical and lateral forms of coresidence. It is essential to remember that such demographic information alone often cannot explain the forces of change underlying cultural norms. Further qualitative studies targeting specific populations are required to fully understand the reasons for shifts in traditional practices.

Asia is divided into the sub-regions of East Asia, South Asia, Southeast Asia, West Asia, and Central Asia. This division is commonly used in demographic and sociological studies on families in Asia (e.g. Quah, 2008; Therborn, 2004). The countries within in each sub-region show some degree of similarity with respect to household, kinship and marriage systems. Because of the scope and introductory nature of this chapter, we do not investigate regional and social differences within countries. For example, India is geographically larger and more populated than Europe, with a striking level of internal diversity regarding the force of patrilocality, arranged marriages and gender roles (Chaudhuri & Roy 2009; Therborn 2004). Ethnic diversity is evident in countries like Malaysia, which harbours three main ethnic groups—Malays, Chinese, and Indians—each displaying unique preferences for intergenerational coresidence (Chan & DaVanzo, 1994). Vietnam is another country

that fosters multiple kinship systems: the ethnic Kinh group observes patrilineal customs similar to Confucian China, whereas the Khmer and Chamic groups are characterized by bilaterality similar to other countries in Southeast Asia (Guilmoto, 2012).

This chapter provides a panoramic view of residential patterns in Asia, sacrificing the details of the historical, cultural, and social influences that drive their internal heterogeneity. Due to the availability of large, harmonized, recently released microdata exemplified by the Integrated Public Use Microdata Series International (IPUMS-i), it is possible to conduct a comparative analysis of cross-national living arrangements in countries ranging from the extensively explored China to the lesser-known Mongolia. For countries that are not represented in the IPUMS dataset, evidence is gathered from national statistical offices and other sources.

#### **BACKGROUND**

Family is one of the most fundamental institutions in people's lives. It determines the context of one's place in his or her social vortex and provide a capacity for collective emotional and financial resource sharing. In the field of Demography, household is often used as a basic unit of analysis, as it determines the social and economic consequences of its members. Understanding family and household composition is essential to unravelling any given society's social norms and practices. However, family and household are concepts distinctive by two main characteristics. First, a household may consist only of one person, whereas a family must contain at least two members. Second, the members of a multi-person household need not be related to one another, hence not all households contain families, whereas the members of a family must be related (McFalls, 2007; United Nations, 2016). Moreover, families may have members beyond the household. Due to the constraints of census definitions, we focus mainly on family relationships within households, with an emphasis on spousal, parental and child relationships. Therefore, the term "families and households" will frequently be used conjointly throughout this chapter.

Living arrangement is determined by the interaction of three factors: demographic, economic, and cultural. First, demography shapes the context of opportunities for coresidence. Societies with high fertility have larger households than societies with low fertility. Increased life expectancy expands opportunities for intergenerational coresidence as the time of overlapping among generations lengthens. Second, economic and cultural factors are the driving forces behind the materialization of

such demographic opportunities for coresidence. In pre-industrial agrarian societies, children relied on parental financial resources, whereas parents counted on filial support as they aged, leading to multigenerational coresidence. Industrialization and wage labor were posited to simplify household structure and increase nuclear households because they reduce intergenerational dependence (Goode, 1963). In modern Asian societies, economic factors such as housing availability and affordability force resource sharing through intergenerational coresidence despite the fact that employment has now been extended beyond family businesses, whereas in the past, individuals lived and worked with family members (Chan & DaVanzo 1994; Chaudhuri & Roy 2009; Martin, 1989). Third, cultural norms assert substantial influence on intergenerational coresidence through the expectation to fulfil filial duties. Confucianism, which stresses the importance of caring for and respecting elderly family members, serves as a foundation of social norms in countries such as China, Japan, and Taiwan (Goody, 1961; Lin et al., 2003; Sereny, 2011; Thornton & Fricke, 1987; Zimmer & Korinek 2010). Demographic, economic and cultural factors can interact in many complex ways that often produce outcomes inconsistent with evolutionary presumptions such as those proposed by modernization theory.

If we were to pinpoint one remarkable attribute of Asian family life that sets Asia apart from the rest of the world, it would be the importance of intergenerational coresidence. The majority of people in Asia, including the elderly, do not live alone. According to Living Arrangements of Older Persons Around the World, published by the United Nations' Population Division in 2005, 74 per cent of individuals in Asia who are aged 60 and over live with children or grandchildren, compared to 26 per cent in Europe. Multigenerational households, either in the form of stem or joint families, are widespread in Asia compared to other parts of the world (Bongaarts & Zimmer, 2002; Ruggles & Heggeness, 2008). The basis of multigenerational households is the exchange in which the elderly benefit from the emotional and financial support of their children, while the children benefit from the family or economic support of their parents. As a region deeply influenced by Confucianism, many countries, especially those in East Asia, hold filial piety as a crucial element of moral integrity (Chu et al., 2011; Goode, 1963; Zimmer & Kwong, 2003). The ideal of filial piety, which demands lifelong devotion to the well-being of one's elders, extends into South Asia with even greater intensity despite the subregion's different religious and moral codes, such as those of Hindus in India and Muslims in Pakistan. South and East Asia remain strongholds of patriarchy, which is manifested in the parental control over children's marriages and the determination of post-marriage patrilocal coresidence. Patrilocality remains a strong institution in countries such as China, India, Pakistan, Japan, Taiwan and South Korea, but its intensity and pace of change vary over time (Chung & Shibusawa 2013;

Frankenberg et al., 2002; Lin et al., 2003; Logan et al., 1998; Martin & Tsuya, 1991; Thornton & Fricke, 1987; Tsuya et al., 2010).

From the adult children's perspective, patrilocality does not mean that all married sons must live with their parents; however, at least one, usually the eldest, should assume that responsibility. When only one married child, usually a son, lives with his spouse and his parents, the family is often named as a stem family. In contrast, in countries like India many families consist of all married sons and unmarried daughters living together with their parents, and they are regarded as joint-families (Allendorf, 2010; Goode, 1963). The distinction between joint and stem family is thus marked by the existence of a single couple per generation in a stem family versus multiple couples of the same generation in a joint-family. In the traditional, patrilocal, stem household system, both men and women marry early and live with the husband's parents (Goody, 1961), although there are some across and within country variations on this pattern (Fauve-Chamoux & Ochiai, 1998). In the joint-household systems, the percentage of married sons who live with their parents tends to be higher than in stem-household systems because multiple married sons are obliged to live with their elderly parents, with the elderly male as the figurehead (Cain, 1986). From the older generation's point of view, a high percentage of parents coreside with their children in both stem and joint-family systems, compared to the nuclear-family system.

Old age support is not confined to the patriarchal system. In a bilateral system, exemplified by Cambodia and Thailand, both sons and daughters are likely to provide personal care to parents through coresidence (Bongaarts & Zimmer, 2002). In Thailand, for example, parents often prefer or are expected to coreside with a married daughter (Knodel et al., 1992; Knodel, et al., 1995; Piotrowski 2008). Under that system, we expect similar proportions of married men and women to live with parents, whereas in a patriarchal system, we expect to observe a much higher proportion of coresidence between parents and their sons because married sons shoulder the major responsibilities of caring for their parents.

A sizeable literature examines the evolution of family systems in Asia. Modernization theory predicts that as countries advance economically, the pervasiveness of multigenerational living arrangements declines as a result of urbanization, economic development, and increased value given to privacy (Goode, 1963; Quah 2008). Supporting this theory, we observe that overall, economically advanced countries such as Japan, Taiwan, and Korea are experiencing a decline in intergenerational households (Frankenberg et al, 2002; Martin & Tsuya, 1991), but very little decline has been detected

in China, India and Vietnam, despite their substantial economic development in recent decades. In contrast to the prediction of modernization theory, the constraint imposed by housing prices and the shift from parental needs to mutual needs have encouraged continual intergenerational coresidence. High levels of intergenerational coresidence have been found in urban settings due to housing constraints and the high cost of living (Chan & DaVanzo, 1994; Chaudhuri & Roy 2009; Logan et al., 1998; Martin, 1989; Teo, 2006). The traditional paradigm built on filial piety, or attendance to parental needs, has also shifted to include attention to children's needs in their life courses, thus creating a more symbiotic living arrangement for both generations (Logan et al., 1998). The older generation often assumes a caretaking role for grandchildren and in some cases, provides housework and financial relief (Frankenberg et al., 2002).

The decline of fertility in Asia has raised concerns over old age support in rapidly greying societies. A smaller number of children implies that fewer sons will be available to take on parental care, challenging the traditional patriarchal system of fully relying on sons as old-age insurance. China's One Child Policy, implemented in 1979 following the 'later-longer-fewer' campaign, was the most extreme antecedent of fertility decline (McNicoll, 1996). Despite China's fertility decline, there is no evidence of major shifts in intergenerational coresidence (Zimmer & Kwong 2003). It can be speculated that because only one child needs to coreside with his or her parents, provided the rate of childlessness remains low, the decline in fertility should not limit the possibility to continue the traditional system of old age care (Knodel et al., 1992; Knodel et al., 1995). However, almost all countries in Asia show a decline in intergenerational coresidence, to varying degrees. It should be noted that the decline of coresidence does not always imply a weakening of filial-parental ties because adult children may live within a short distance and offer financial or emotional support (Freedman et al., 1982; Hermalin, 2002, Knodel & Chayovan, 2008a; Knodel & Chayovan, 2008b; Zhao, 2001).

Within this context, this chapter examines household size and living arrangements in Asia. We scrutinize whether changes in household size have had an impact on internal household structures with respect to the level of intergenerational coresidence. We explore the prevalence of post-marriage intergenerational coresidence, especially the differences between societies with patriarchal and bilateral household systems. We also examine intergenerational coresidence from both the older and younger generations' perspectives.

#### **D**ATA

The inclusion of countries in this study was conditioned by the availability of data and varies between the first and second parts of the analysis (household and individual perspectives). For the household perspective, we present basic indicators such as average household size, which do not require microdata. The individual perspective, however, is more data demanding and requires individual records to be organized into households. Therefore, the total number of countries included in the analysis from the perspective of the household is larger than that from the perspective of the individual because microdata were not readily available for all of the countries within the scope of the study.

To analyze residential patterns from the household perspective, we examine the average size of households, distribution of households by size, and household composition by age of its members. Data for these analyses are obtained from the United Nations Development Program (for Myanmar), the United Nations Population Fund (for Iran), the Demographic Health Survey (for Bangladesh), the Luxembourg Income Survey (for China, Japan, South Korea and Taiwan), the Integrated Public Use Microdata Series—IPUMS (for Cambodia, China, India, Indonesia, Iran, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Thailand and Vietnam), and each country's statistical offices. Aggregating the above datasets, we created household-level analyses for 25 countries.

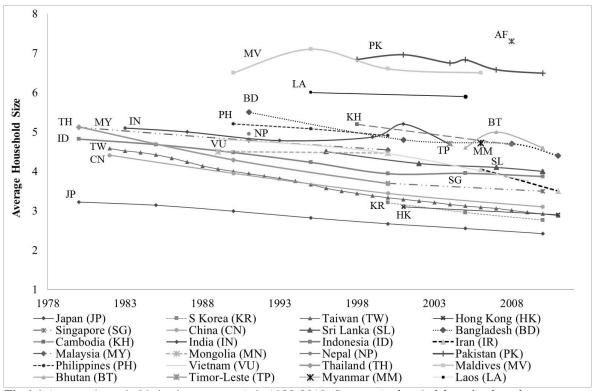
To analyze residential patterns from the perspective of the individual, on the other hand, requires more detailed data. Thus, we have relied heavily on the Integrated Public Use Microdata Series International microdata. The IPUMS is an international collaboration between national statistical offices, which has been led by the Minnesota Population Center. IPUMS provides access to harmonized census microdata for research purposes. For our analysis, we have used data from different years for the following 12 Asian countries with a total of 32 samples: Cambodia (1998, 2008), China (1982, 1990), India (1983, 1987, 1993, 1999, 2004), Indonesia (1980, 1985, 1990, 1995, 2000, 2005, 2010), Iran (2006), Malaysia (1980, 1991, 2000), Mongolia (1989, 2000), Nepal (2001), Pakistan (1998), the Philippines (1990, 1995, 2000), Thailand (1980, 1990, 2000), and Vietnam (1989, 2009). Unfortunately, microdata for Japan, Taiwan, South Korea, and (for recent years) China are not available via IPUMS or other sources. However, the IPUMS samples provide a wide range of harmonized pointer variables that identify the presence of mother, father, spouse and child for all members within a household. Using these pointer variables, we were able to create three new variables: living with at least one parent, living with spouse, and living with at least one child.

Enumeration techniques often vary from census to census regarding how an individual is recorded. Most censuses have followed the de jure approach, such as in India; some were conducted according to the de facto procedure, exemplified by Malaysia; whereas others, namely in Cambodia (in 2008), Mongolia, and Pakistan, used the combination of the two. Considering that the de jure method counts individuals at their official or usual residences, whereas the de facto method records them at their physical locations, the concept of household for countries included in the study is not exactly the same, although the impact on our conclusions is relatively small.

#### HOUSEHOLD PERSPECTIVE

Figure 1.1 shows the average size of households for 25 countries in Asia from 1980 to 2011, and it ranges from 2.4 (Japan, 2010) to 7.3 (Afghanistan, 2008) persons per household. Between those two levels, we observe a cluster of countries where the average size of households was between 3 to 5 persons over the study period. The mean household size was larger than 5 persons in Laos, Pakistan, the Maldives, and Afghanistan. In contrast, the East Asian countries of Japan, South Korea, Hong Kong, Taiwan, and China all have smaller households in comparison with other countries included. Overall, changes over time show a decline in household size. Japan has declined from 3.2 persons in 1980 to 2.4 in 2010, China from 4.4 in 1982 to 3.1 in 2010, and India from 5.1 in 1983 to 4.7 in 2004. Despite the overall decline, we do not observe a convergence in household size, but rather that its cross-country differences remain stable over time. The size of the household largely depends on the number of children as indicated by the fact that larger households are often found in countries with higher fertility, but it is also influenced by the presence of other relatives in addition to the spouse and children of the household head. In countries like India, these live-in relatives are likely to be parents-in-law or children-in-law, though they mainly consist of parents-in-law in Indonesia and the Philippines (Bongaarts, 2001).

The strong relationship between average household size and the level of fertility is clearly revealed by Figure 1.2, which shows the mean size of households and the share of household members aged 0-17, 18-64, and 65 and above for selected Asian countries with more than one data point. Fertility decline has been taking place throughout Asian countries in recent decades. For Asia as a whole, total fertility fell from 5.8 children per woman in 1950-1955 to 2.2 in 2005-2010 (United Nations, 2013). Over the study period, household size has also declined in all countries. The decline in the share of those aged 0-17, used as proxy for children in this chapter, is the main driver of the reduction in household size.



**Fig 1.1** Average household size by country, Asia 1980-2010 (Source: Authors' elaboration based on aggregate data from various statistical offices)

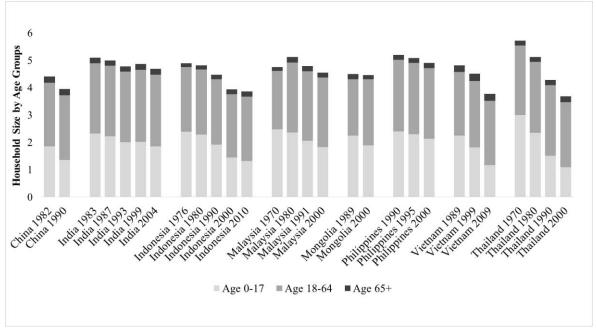


Fig 1.2 Household composition by age groups, selected Asian countries (Source: Authors' elaboration based on census data from IPUMS-i)

For example, in China, the average number of adults and seniors was constant between 1982 and 1990, but the average number of children decreased, leading to a decrease in household size. Government-led family planning programs (e.g., in China), along with the rise of women's reluctance to get married due to the inability to find suitable partners or concerns of having to care for two sets of elderly parents, fear of divorce, etc. have served to effectively decrease the number of children per couple in many countries in Pacific Asia in recent years (Jones, 2007).

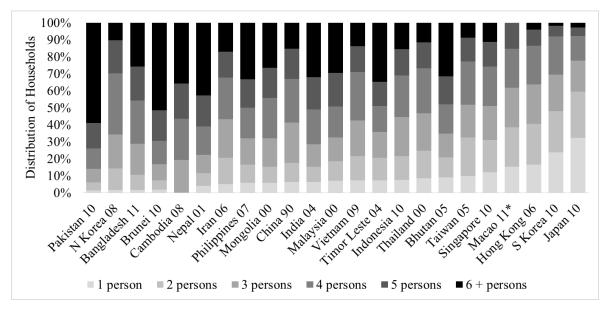
Figure 1.3 shows the percentage distribution of households by the number of household members. The 23 countries are ordered according to the proportion of one-person households, from the smallest to the largest.

More economically developed Asian countries—such as Japan, South Korea, Hong Kong, Macao, Singapore, and Taiwan—cluster around the right side of the chart, whereas developing countries—such as Pakistan, North Korea, and Bangladesh—are on the left side of the chart, indicating that more affluent countries have a higher proportion of one-person households. This is consistent with the idea that economic development is highly associated with independent living and communal living is often the result of practical financial necessities (Chaudhuri & Roy, 2009; De Vos & Holden, 1988).

Countries with low proportions of one-person households tend to have high proportions of large households, such as Pakistan and Brunei where more than 50 per cent of households have six or more members. Large households are uncommon, at 2.8, 1.8 and 3.9 per cent for Japan, South Korea and Hong Kong, respectively. However, the correlation between the share of one-person households and the share of very large (with 6+ persons) households is not straightforward. Except for countries with a high proportion of one-person households, the shares of large households vary across the board due to differences in fertility and to the prevalence of intergenerational coresidence.

#### INDIVIDUAL PERSPECTIVE

Past studies of living arrangements have been dominated by household-level analyses. Households are multi-dimensional entities often comprised of more than one member, each with unique demographic characteristics. Moreover, members are related in diverse ways that are not always easy to analyze (Bongaarts, 2001). IPUMS International census microdata offer considerable details about relationships among household members. One of the strengths of using personal records is that the



**Fig 1.3** Distribution of household size by country, Asia, most recent years (Source: Authors' elaboration based on the compilation of data from DHS, United Nations, LIS, and various statistical offices) \*1

microdata allow a higher level of flexibility for building a standardized framework of analysis for multiple countries in different years. Because it is difficult to obtain longitudinal data on such a scale, we examine living arrangements by age using cross-sectional data. We focus on parental, spousal, and filial relationships within households. As an example, Figure 1.4 shows parental, spousal, and filial coresidence and individual living for India in 2004 by age and sex.

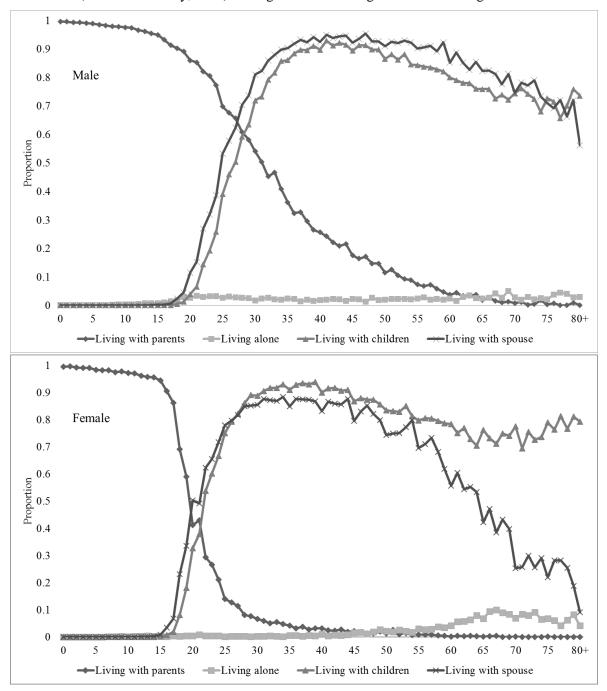
In India in 2004, more than 50 per cent of males coresided with their parents as late as the age of 30, whereas a mere 6.7 per cent of 30-year-old females remained in their parental homes. For the females, living with parents drops drastically between the ages of 15 and 20, which coincides with a sharp rise in the proportion of those who have entered into union. Indian men remain in their parental home even after marriage, and the new bride moves into her husband's home.

With respect to spousal coresidence, Figure 1.4 confirms the universality of marriage in the population. By the age of 35, approximately 85 per cent of women and 90 per cent of men live with a spouse. We observe a drop in spousal coresidence for women starting around age 40, most likely due to widowhood. Men experience a more gradual decline in spousal coresidence at a later age, because they tend to marry younger wives who are more likely to survive them. Living alone is uncommon for both men and women in India, but there is a higher proportion of older women living

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<sup>&</sup>lt;sup>1</sup> Macao tabulated households up to 5+ persons

alone than men, primarily because women tend to outlive their husbands. Women in rural areas are more likely to live alone in comparison with their urban counterparts as their children migrate to urban areas (Chaudhuri & Roy, 2009). Living with children lags behind the timing of union formation.



**Fig 1.4** Parental, spousal, and child coresidence by age and sex, India 2004 (Source: Authors' elaboration based on census data from IPUMS-i)

Coresidence with children is very common for both men and women in India. By the age of 25 for women and 31 for men, roughly three out of four individuals live with at least one child.

To make cross-national comparisons, we created box plots to visualize the phenomena of living alone, living with a spouse, living with parents and living with children in 12 selected Asian populations. The graphs below allow us to visualize differences across countries and between genders by age, as represented by 5-year age groups. Detailed data for the box plots are attached in Appendix 1.2. The data were collected between 2000 and 2010.

#### LIVING ALONE

Living alone is uncommon in Asia, as shown in Figure 1.5. Young children certainly do not live alone and it is also rare for adolescents or adults to form a solitary household. Compared to the Western world, independent living before marriage is uncommon in Asian countries. Leaving the parental home is conditioned by and closely tied to the timing of partnership formation. Proportions living alone tend to increase with age after people reach 50, and the highest share is observed among those aged 80 and over, particularly among widowed women. Children's migration from rural to urban areas may increase the chance of seniors being left behind in their hometowns to live alone. There are great variations in the proportion of old people living alone. Among individuals aged 80 and over, almost 34 per cent of Iranian women live alone, whereas the share is only 11 per cent among the male population. In Vietnam, only 8.5 per cent of men and 16.9 per cent of women lives alone.

#### LIVING WITH PARENTS

Coresidence with parents decreases with age, either because parents die or children leave their parents' home. Prior to age 15, nearly all children live with their parents (Lloyd & Desai, 1992). Cross-country differences begin to emerge between the ages of 15 and 49. Women leave the parental home earlier than men because they tend to marry at younger ages (Jones, 2005; 2007). This pattern remains despite recent increases in marriage age. Moreover, in patrilineal societies, women are less likely to continue to live with their own parents after marriage.

The proportion of women living with parents experiences a sharp decline between the ages of 15 and 25. Women in India, Pakistan, and Nepal leave the parental home at a younger age compared to women in Thailand and China. The proportion of men living with parents dwindles at a more moderate rate between the ages of 20 to 30. Mongolian and Cambodian men are less likely to coreside

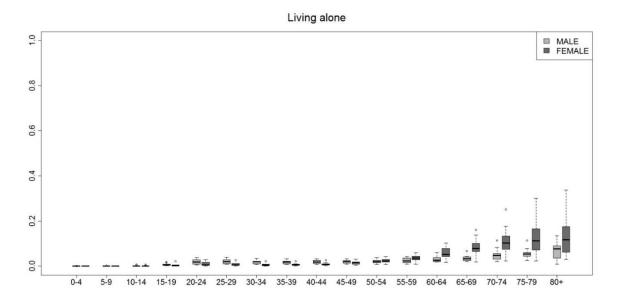


Fig 1.5 Boxplots of individuals living alone in Asia by age, most recent censuses (Authors' elaboration based on census data from IPUMS-i)

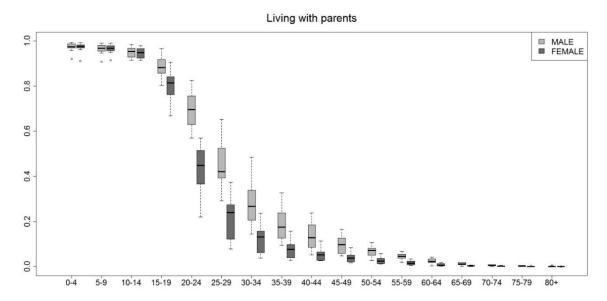


Fig 1.6 Boxplots of individuals living with parents in Asia by age, most recent censuses (Authors' elaboration based on census data from IPUMS-i)

with parents compared to their Pakistani, Indian, and Chinese counterparts. More detailed country-specific results can be found in Appendix 2.

To explore the differences among countries and the pervasiveness of post-marriage intergenerational coresidence, we turn to Table 1.1, which shows the percentage of those aged 25-29 who live with at least one parent in 12 selected Asian countries and the percentage of parental coresidence for those who are married.

**Table 1.1** Percentage of individuals aged 25 to 29 living with parent(s) by sex and marital status, selected Asian countries (Source: Authors' elaboration based on census data from IPUMS-i and Statistics Korea)<sup>2</sup>

	A	All Individu	als (%)			Married	(%)	
•	1980	1990	2000	2010	1980	1990	2000	2010
Male								
Cambodia			20.4	31.6			8.8	12.1
China	48.6	39.7			36.9	30.6		
India	53.6	57.4	61.1	65.3	51.8	53.8	56.4	59.5
Indonesia	26.7	29.8	32.9	41.3	15.9	14.3		17.2
Iran				42.9				12.4
Malaysia	36.8	37.7	38.9		24	19.8	17.8	
Mongolia		18.8	29.1			4.7	7.8	
Nepal			53.2				19.9	
Pakistan			53				42.6	
Philippines		36.7	41.1			9.4	10.3	
Vietnam		41.1	48.2	52		26.3	31.6	35
Thailand	30	36.4	45.5		14.7	15.9	17.6	
South Korea	69.8	65.1	65.5	64.9	76.2	69.3	61.3	50.3
Female								
Cambodia			23.3	30.3			9.4	11.1
China	11.5	8.9			1.3	1.4		
India	7.7	7.9	9.9	11.2	1.3	0.9	1.2	1
Indonesia	14.6	16.1	17.5	24	4.9	4.8		10.5
Iran				26.3				0.7
Malaysia	21.3	23.4	24.1		4.6	6.2	6	
Mongolia		15.8	24.7			2.8	5.9	
Nepal			7.8				0.9	
Pakistan			13.1				0.7	
Philippines		25.9	28.6			5.1	5.9	
Vietnam		23.7	21.1	19.7		3.6	3.4	3.3
Thailand	28	32.8	37.4		12.7	14.9	16.6	
South Korea	10.6	13.9	27.9	47.3	0.2	0.1	0.3	2

With the exception of Cambodia, Mongolia, and Thailand, men are more likely than women to live with their parents. The lower percentage of coresiding with parents for women is due to early entrance into marriage and also to the deeply seated tradition of patrilocality. We subsequently examine only the percentage of 25 to 29 year old married individuals living with parents. Fewer married children than all children live with parents, but the proportion coresiding with parents remains significant

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<sup>&</sup>lt;sup>2</sup> The actual years of the data sets used are: Cambodia 1998, Cambodia 2008, China 1982, China 1990, India 1983, India 1993, India 1999, India 2004, Indonesia 1980, Indonesia 1990, Indonesia 2000, Indonesia 2010, Iran 2006, Malaysia 1980, Malaysia 1991, Malaysia 2000, Mongolia 1989, Mongolia 2000, Nepal 2001, Pakistan 1998, Philippines 1990, Philippines 2000, Vietnam 1989, Vietnam 1999, Vietnam 2009, Thailand 1980, Thailand 1990, Thailand 2000; South Korea 1980, South Korea 2000, an South Korea 2010.

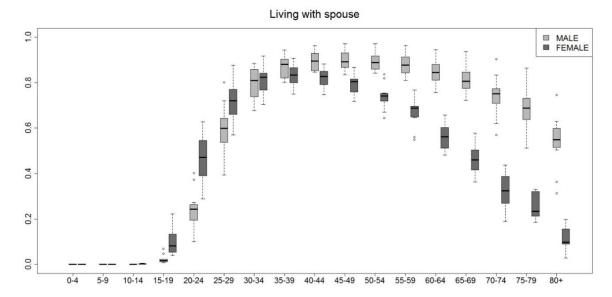
among those married. India shows the highest proportion of men and Thailand shows the highest proportion of women residing with parents after marriage. Sex differentials in post-marriage residential patterns are also striking in some countries. Nearly 60 per cent of all married Indian men live with their parents but only 1 per cent of married Indian women live with their parents. Similarly, approximately 43 per cent of Pakistani married men and less than 1 per cent of Pakistani married women live with their parents.

Gender differences of this kind are less pronounced in Cambodia, Mongolia, and Thailand. The data clearly show the influence of different family systems in Asia. In the South Asian countries (e.g., India and Pakistan), where the joint-family system and the patrilocal residential norm prevail, the percentage of married sons living with their parents is high, compared to the extremely low percentage of married daughters. In parts of Southeast Asia (e.g., Thailand and Cambodia), the level of intergenerational coresidence is more balanced between men and women because those countries have a bilateral family system (Goody, 1961; Knodel et al., 1995; Knodel et al., 1992).

In terms of change over time, intergenerational coresidence shows very little signs of decline in the countries such as China and India, consistent with the results of previous studies on intergenerational coresidence in developing countries (Ruggles & Heggeness, 2008). The coresidence pattern in India shows no sign of decline and displays an upward trend from 51.8 per cent in 1980 to 59.5 per cent in 2010 for married sons. South Korea shows a dramatic increase in young women living with parents, whereas the same trend is stable for men. At the same time, post-marital coresidence with parents has been decreasing for young men and increasing for young women. These results show that the increase in coresidence with parents among South Korean young women is largely due to the delay of marriage.

#### LIVING WITH A SPOUSE

Spousal coresidence is shaped by the formation and dissolution of the union. In Asian countries, age at marriage differs considerably. Females tend to enter unions at younger ages than men, as indicated by a higher proportion of women than men living with spouses in the age groups of 15-19, 20-24, and 25-29. The share of spousal coresidence peaks for females aged 35-39, and for males at ages 45-49 (see Figure 1.7). The subsequent decline in the level of spousal coresidence, which also takes place at a younger age for women than men, is primarily due to widowhood, separation, or divorce.



**Fig 1.7** Boxplots of individuals living with spouse in Asia by age, most recent censuses (Authors' elaboration based on census data from IPUMS-i)

Delay of marriage for both men and women has occurred throughout Asia (Jones, 2005; 2007). Nevertheless, union formation remains prevalent. Cross-national differences are largest at younger ages because the timing of marriage is greatly affected by cultural tradition and its changes. In China, India, and Nepal, more women are married by the age of 29 than in Thailand, Cambodia, and Mongolia. Marriage among teenage girls is rare in China, Cambodia, Malaysia, and Mongolia, whereas it is fairly common in Nepal, Pakistan, and India. Nepalese, Chinese, and Cambodian men tend to marry younger than their Malaysian and Thai counterparts. Marriage is nearly universal for both genders in all countries, with the exception of Mongolian, Thai and Cambodian women. See Appendix 2 for country-specific figures.

#### LIVING WITH CHILDREN

As one might expect from a region where individuals are unlikely to live alone, the practice of intergenerational coresidence is widespread in Asia. From the parent's perspective, as illustrated in Figure 1.8, the highest level of parent-child coresidence in most countries peaks by the time the parent reaches age 40. It then experiences a moderate decline as the children grow up and leave the parental home. One of the notable features of Asian households is that coresidence with children remains high even as children become adults. Women start having children at a younger age than men, and they also spend a longer period of their lives residing with their children.

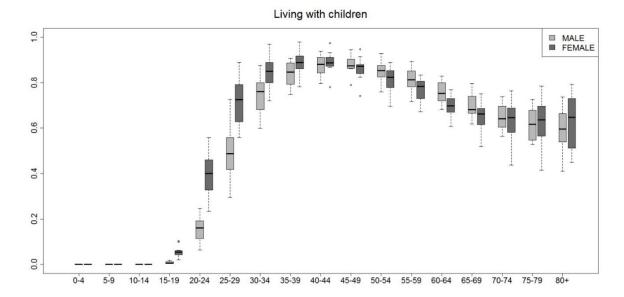


Fig 1.8 Boxplots of individuals living with spouse in Asia by age, most recent censuses (Authors' elaboration based on census data from IPUMS-i)

Coresidence with young children is practically universal, providing few surprises (see Figure 1.8). When parents and children grow older, cross-country variations in such residential patterns become more pronounced. In recent decades, Japan and South Korea have witnessed a sharp decline in intergenerational coresidence among their old populations (see Table 1.2). But such intergenerational coresidence has remained stable in India and shown a modest decrease in China in recent decades. India has the highest level of intergenerational coresidence: more than three-quarters of seniors coreside with children. Overall, despite the differences in the way that households are formed, a high prevalence of intergenerational coresidence remains a dominant feature in Asia.

A comparison of Tables 1.1 and 1.2 shows that the proportion of coresidence with parents among people aged 25-29 has increased slightly in recent years for many countries (as shown in Table 1.1), whereas the proportion of the elderly living with children has not increased but has remained more or less stable (as shown in Table 1.2). This is due to 'ongoing demographic changes that increase the opportunities to reside with parents' such as the rise in age at marriage, 'mortality decline [which] increases the chances that an adult will have a surviving parent,' and fertility decline, which entails that 'a smaller group of adult children for each elderly parent increases the chances that any particular child will coreside with a parent' (Ruggles & Heggeness, 2008). Although the decline in fertility is often lauded as a positive attribute in a developing country, it provokes the concern that an increasing share of elder-care responsibilities will fall upon a shrinking younger generation (Knodel et al., 1992).

**Table 1.2** Percentage of individuals aged 65 or above living with child(ren) by sex, selected Asian countries (Source: Authors' elaboration based on census data from IPUMS-i; Statistics Korea; Statistics Singapore; National Statistics ROC Taiwan; Center for Population and Development Studies and Institute of Gerontology, Renmin University of China.)<sup>3</sup>

		Mai	le			Fema	ıle	
	1980	1990	2000	2010	1980	1990	2000	2010
Cambodia			68.8	67.7			55.1	62.3
China*	67.9	67.6	59.9	51.7	73.6	74	68.7	58.6
India	74.5	75.7	76.2	74.1	76.1	77.8	78.6	76.6
Indonesia	62.1	60.9	53.7	57.7	59.2	58.2	47.8	58.6
Iran				59.8				46.1
Malaysia	65.2	66.4	65.6		63.9	66.6	68.1	
Mongolia		52.8	60.7			51.8	58	
Nepal			71.6				70	
Pakistan			73.2				64.4	
Philippines		62.2	60.9			52.7	55	
Vietnam		77	74.9	62		72.8	72.4	64.9
Thailand	76.3	75.3	66.7		72.5	74.2	70.4	
Japan**	60.6	51.3	41	36.9	60.6	51.3	41	36.9
South Korea	71.9	59.2	40.4	28.3	74.3	65.9	48.6	34.5
Taiwan		56.4	55.2	49.7		68.3	61.2	54.2
Singapore			69.2	63			77.4	69.7

A further examination of the marital status of old people who live with their children finds that women without spouses tend to live with their children, while a higher proportion of men live with both children and a spouse. The latter is related to the fact that many men have a younger wife, and they live with children. In Singapore, for example, 50.9 per cent of men aged 65 or older live with both their spouse and their children, compared to 23.7 per cent of women. Of women aged 65 and over, 46 per cent live with children but without a spouse, in comparison with 12.1 per cent in the male population of the same age group (Wong and Teo, 2011: Table 7).

In all selected populations, old people have been more likely to live with their married sons than married daughters (see Table 1.3). This pattern has been rather consistent overtime. However, in India, Pakistan, China, Vietnam, Iran, Malaysia, and Indonesia, the proportion of old people living with married sons is far higher than that living with married daughters. This difference is markedly greater than that found in Mongolia, Cambodia, The Philippines, and Thailand, where the proportion

<sup>&</sup>lt;sup>3</sup> \*2010 data for China is for seniors 60+, as presented by the Centre for Population and Development Studies and Institute of Gerontology; 1980, 1990, and 2000 data are for seniors 65+ (Sun 2013). \*\*Data by sex unavailable.

**Table 1.3** Percentage individuals aged 65 or above living with married sons or married daughters, selected Asian countries (Source: Authors' elaboration based on census data from IPUMS-i)

	Livi	ing with me	arried son		living	with marri	ied daught	er
	1980	1990	2000	2010	1980	1990	2000	2010
Cambodia			14.9	20.1			8.7	9.2
China	41.8	45.4			1.6	2		
India	56.9	59.7	58.7	60.1	1.2	1	1.01	0.97
Indonesia	29.5	27.6	17.4	26.8	4.1	4.1	2.2	5.3
Iran				16.2				1.8
Malaysia	33.3	31.4	29.5		3.3	4.8	5.3	
Mongolia		10.4	12.3			6.1	9	
Pakistan			47.5				0.6	
Philippines		15	13.5			4.8	5.1	
Vietnam		35.9	38.1			5.5	3.1	
Thailand	30.6	25.4	19.2		13.8	15.4	13	

of old people living with married sons is fairly close to that living with married daughters.

# **CONCLUSIONS**

Family as a crucial part of the social system serves multiple functions that are inclusive of, but not exclusive to, providing a nurturing environment for the young and care and support for the ill and the elderly. Family binds individual life courses through 'unifying the production, distribution, consumption, reproduction, socialization, and transmission of property within and across kinship groups' (Thornton & Fricke, 1987: 748). The norms underlying family systems are often shaped by cultures, demographic realities and economic opportunities. Bearing in mind that these three dimensions of underlying forces drive family changes, we must consider the fact that ideals do not dictate practice, and opportunities do not entirely command change. William Goode has noted that 'even though all systems are more or less under the impact of industrializing and urbanizing forces,' we cannot assume 'that the theoretical relations between a developing industrial system and the conjugal family system is entirely clear' because the impact of traditional values and cultural norms should be acknowledged (Goode, 1963: 369).

In this chapter, we have illustrated that households in Asia have been changing while some of their old elements remain. Large quantitative household surveys and census microdata have allowed us to portray general aggregate measures at the household level while enabling us to contextualize

individuals' living arrangements in their family contexts. Although we did not have data for all Asian countries, we have accessed a harmonized set of microdata through IPUMS International, which has facilitated a broad study of 12 countries in Asia. The Luxembourg Income Study Database, United Nations statistics, and national statistical offices also provided aggregate data or supplementary information for some countries and filled in the gap for those countries we have no microdata on.

Our analysis shows that household size has declined over recent decades, but family structures have remained stable and they continue to reflect the characteristics of different family systems, which have different impacts on men and women. For women, earlier union formation results in departing from the parental home at a younger age than men. Intergenerational coresidence of young adults usually consists of a married couple and the husband's parents under a patrilocal family system as in China, Japan, South Korea, India, Nepal, and Pakistan. However, in countries such as Thailand, the Philippines and some parts of Indonesia, the newlyweds may live with either the husband's or the wife's parents under a bilateral family system (Chung & Shibusawa, 2013). Women are more likely to live alone at older ages because of their earlier widowhood compared to men. However, most widows and widowers live with their children, presumably sons, rather than alone, which is an uncommon arrangement in most Asian countries for both genders in nearly all age groups as indicated by Figure 1.5.

Asia's family and household systems have a number of distinctive features that set them apart from those in Europe and the Americas, for example, the importance of intergenerational coresidence of the elderly living with their married children. Previous studies have shown a decline in intergenerational coresidence in some of the economically advanced Asian countries such as Japan and South Korea (Frankenberg et al., 2002; Martin, 1989; Martin & Tsuya, 1991). The decline in household size is primarily due to families having fewer children in general rather than a simplification of household structures. But it is interesting to note that the proportion of elderly living with children has remained stable in countries like India while the proportion of married sons living with parents has been increasing because, presumably, having fewer siblings entails that each child has a higher probability of residing with at least one parent. Differences in household systems are clear from the examination of the propensity of married women and men to live with their parents. Bilateral household systems show a similar proportion of married sons and daughters living with their parents, but the patrilocal household system shows a higher proportion of married sons coresiding with parents than married daughters.

Fertility decline may put constraints on living arrangements against one's ideal due to a lack of choices in the absence of a son or daughter, but adaptability to such constraints has been observed because Asian parents would rather choose a less-preferred coresidential pattern than live alone (Knodel et al., 1992; Lin et al., 2003). Migration from rural to urban areas may also change household dynamics. However, urban life may not promise household simplification. Instead, housing unaffordability and unavailability encourage coresidence of parents and their married children. The new dynamic that has emerged as social changes have swept Asia is that living arrangements can be shaped by the desires and needs of both the older and the younger generations, as opposed to being the result of solely filial obligations deeply rooted in many Asian societies. For those parents who have not migrated with children into urban areas, living alone is more likely because housing is more affordable in the rural areas (Chaudhuri & Roy, 2009; Martin, 1989).

We have provided a panoramic view of family life in Asia. Due to the unavailability of microdata for many countries and the lack of aggregate data from a few countries such as Afghanistan, North Korea, and Laos, a comprehensive detailed analysis of the entire region is not feasible. This chapter has mainly focused on the coresidence of kin, although family life often extends beyond the roof of a household. For example, some older individuals may elect to live near their children but not in the same household, allowing privacy and daily communication at the same time. This kind of living arrangement is encouraged and supported in Singapore through its housing policies (Teo, 2006). In rural Bangladesh, when sons move out of their parental unit upon marriage, they often remain in the same family-owned compound, maintaining close contact with other members of the clan throughout their lives (Amin, 1998). Similar arrangements are also found in both Taiwan and China (Freedman, et al., 1982; Zhao, 2001).

In the future, researchers are expected to further examine the unravelling of a revolution of family patterns and living arrangements in the process of demographic transition in other Asian countries which follows the footsteps of their more affluent neighbors: Japan, South Korea, Hong Kong, Macao, Singapore, and Taiwan. Because many pre-transition countries were often characterized by different cultural environments, the pace and magnitude of their social and demographic changes tend to vary considerably. The research challenges that we face today will diminish as more coherent, comparable and reliable data become more accessible. Moreover, it may also need time to observe whether the resilience of intergenerational coresidence will endure in the future with further economic advancements and the spread of a media-induced popular culture taking place throughout Asia (Lesthaeghe, 2010). New analysis by social class and status will elucidate whether intergenerational

coresidence is a practice of necessity or primarily a cultural expression, through examining whether more affluent individuals opt out of intergenerational coresidence (Takagi et al., 2007), or adopt a form of parental care outside of coresidence by choosing 'intimacy at a distance' (Martin & Tsuya, 1991). Exploration of internal differences in living arrangements across regions, religious practices, urban and rural settings will also be essential in the quest to decompose current patterns. This chapter has not paid sufficient attention to such details due to data unavailability. With the expansion of data availability, the subject of family life in Asia should be further explored under a wider range of parameters.

**Appendix 1.1** Average household size by country: Asia 1980-2010 (Sources: Various statistical offices, IPUMS-i, DHS, and UN data)

Country	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-13
Japan	3.2	3.1	3	2.8	2.7	2.6	2.4
South Korea					3.2	3	2.8
Taiwan	4.6	4.4	4	3.7	3.3	3.1	2.9
Hong Kong					3.1		2.9
Singapore					3.7		3.5
China	4.4		4		3.4		3.1
Sri Lanka				4.5	4.2	4.1	4
Bangladesh			5.5		4.8	4.7	4.4
Cambodia					5.2		4.7
India	5.1	5	4.8	4.9	4.7		
Indonesia	4.8	4.7	4.5	4.2	3.9	4	3.87
Iran						4.1	3.5
Malaysia	5.1		4.8		4.6		
Mongolia		4.5			4.5		
Nepal			5				
Pakistan				6.8	6.8	6.6	6.49
Philippines			5.2	5.1	4.9		
Vietnam		4.8		4.5		3.8	
Thailand	5.1		4.3		3.7		
Maldives			6.5	7.1	6.6	6.5	
Bhutan						5	4.6
Timor-:Leste					4.7		
Burma						4.7	
Laos				6		5.9	
Afghanistan						7.3	

**Appendix 1.2** Percentage of population living alone, with parent(s), with spouse and with child(ren) by sex and 5 year age group (Source: Authors' elaboration based on census data from IPUMS-i)

			M	ale			Fen	nale	
IPUMS Sample	Age Group	Alone	Parent	Spouse	Child	Alone	Parent	Spouse	Child
	0-4	0	95.9	0	0	0	96.1	0	0
	5-9	0	94.7	0	0	0	94.9	0	0
	10-14	0.1	92.4	0.1	0	0.1	92.5	0	0
	15-19	0.4	88.3	1.1	0.5	0.4	84.2	6.6	4
	20-24	0.6	61.3	27.2	18.8	0.4	54	43.2	37.3
	25-29	0.9	31.6	66.6	56.9	0.6	30.3	67.2	68.1
	30-34	0.9	17.9	85.3	80.2	0.5	17.8	75.2	81.4
	35-39	0.7	11.7	90.9	88.7	0.8	12.3	77.4	86.7
Cambodia 2008	40-44	0.9	8.5	93.7	92.3	1	8.4	76.1	88.5
	45-49	0.8	5.5	94.5	92.4	1.9	5.9	72.9	87.4
	50-54	0.8	5.4	91.3	90.9	2.4	4.2	67	82.6
	55-59	0.8	4.7	91.5	88.7	3.4	3.1	56.1	79.1
	60-64	1.9	1.9	87.9	80	4.2	1.8	48.1	70.4
	65-69	2	1.8	84.3	72.9	6.2	0.4	36.3	64.1
	70-74	2	0.9	76.7	68.8	5.7	0.3	27.4	61.5
	75-79	3.9	0.2	72.5	63.2	5.9	0.1	22.2	60.5
	80+	0.9	0.6	53.7	57.6	5.2	0	9.5	61.9
	0-4	0	99.1	0	0	0.1	98.5	0	0
	5-9	0.1	98.6	0	0	0.1	98.2	0	0
	10-14	0.1	97.8	0	0	0.1	97.8	0	0
	15-19	0.5	95	1.7	0.6	0.2	90.7	4.3	2
	20-24	1.8	75.7	37.3	24.6	0.6	40.5	55.4	42.3
	25-29	1.9	39.7	80.2	72.7	0.4	8.9	87.8	88.8
	30-34	2.2	26.9	88.5	87.6	0.3	3.8	91.8	96.9
	35-39	2.3	22.1	89.9	90.8	0.3	2.8	90.9	97.9
China 1990	40-44	2.7	19.2	89.2	91.5	0.4	2.6	88.1	97.4
	45-49	3.3	15.5	88	90.7	0.8	2.2	86.7	94.7
	50-54	3.8	10.8	86.3	87.2	1.3	1.4	83.7	88.8
	55-59	4.3	6.2	84	80.9	2.5	0.9	76.7	82.2
	60-64	4.9	2.9	79.4	74.3	4.3	0.3	65.7	74.9
	65-69	6.7	1.1	72.2	66.4	8.1	0.1	50.1	68.4
	70-74	8.3	0.2	62.1	62.6	11.6	0	32.7	68
	75-79	11.3	0	51.2	60.2	13	0	20.2	69.6
	80+	13.4	0	36.3	61.5	15.5	0	8.2	69.1
	0-4	0	99.4	0	0	0	99.3	0	0
	5-9	0.1	98.3	0	0	0.1	98.1	0	0
	10-14	0.5	96.7	0	0	0.2	96.4	0.1	0
	15-19	1.5	91.9	1.5	0.3	0.3	80.7	12.8	5.2
	20-24	3	82.6	23.6	13	0.5	32.7	59.3	48.8
	25-29	2.7	65.3	61.9	49.6	0.2	11.2	81.4	81.2
	30-34	2.2	48.6	84.5	77.1	0.2	5.7	86.8	90.7
	35-39	2.1	32.8	91.7	88.1	0.5	3.5	86.6	92.4
India 2004	40-44	2	23.8	93.4	90.7	0.8	2.7	84.9	90.7
	45-49	2.2	16.5	92.9	90	1.7	1.7	81.3	87.1
	50-54	2.1	10.8	91.8	86.5	2.2	1.3	75.4	83.2
	55-59	2.4	6.7	90.3	83.7	3.1	0.7	69.4	79.8
	60-64	2.6	3.7	85.4	78.9	5	0.2	55.5	76.9
	65-69	2.8	1.8	81.4	75.1	7.8	0.1	42.7	75.2
	70-74	2.7	0.8	75.5	73.9	7.3	0	26.2	76.5
	75-79	2.8	0.4	70.2	72	6.5	0.1	23.5	78.5
	80+	3	0.1	56.2	73.6	4.1	0	9.1	79.4

# Appendix 1.2 continued

			M	ale			Fen	nale	
IPUMS Sample	Age Group	Alone	Parent	Spouse	Child	Alone	Parent	Spouse	Child
	0-4	0	97.5	0	0	0	97.6	0	0
	5-9	0.1	96	0	0	0	96	0	0
	10-14	0.7	92.9	0	0	0.7	92.4	0.1	0
	15-19	1.9	84.9	1.2	0.5	2.2	75.9	10.4	5.8
	20-24	3.8	64.8	18.8	11.8	2.7	44	49.8	40.5
	25-29	2.8	41.2	54.1	43.6	1.2	24	75.8	71.9
	30-34	2.2	23.8	77.9	71.6	0.8	12.8	85	84.8
	35-39	1.8	16.6	86.4	83.2	0.8	7.8	86.6	88.7
Indonesia 2010	40-44	1.7	12.4	89.8	87.5	1.2	4.9	85	86.7
	45-49	1.7	9.4	91.5	87.3	1.9	3.1	81.9	82.4
	50-54	1.8	7.2	91.8	82.8	3.6	2.3	74.3	74.4
	55-59	1.9	5.2	91.1	76.8	6	1.1	65.3	67.2
	60-64	2.8	3.3	88.4	68.4	10.2	0.6	51.8	60.7
	65-69	3.6	1.9	85.1	61.9	13.8	0.3	40.6	58
	70-74	5.5	0.8	78.1	56.3	17.7	0.1	26.3	57.3
	75-79	5.3	0.4	73.8	54.1	18	0	18.9	59.5
	80+	7.6	0.1	63	52.1	18.1	0	9.8	61.1
	0-4	0	99.4	0	0	0	99.3	0	0
	5-9	0	99	0	0	0	99	0	0
	10-14	0	98.4	0.1	0	0	97.9	0.6	0.1
	15-19	0.3	96.6	1.2	0.4	0.1	84.2	13.9	5.3
	20-24	0.9	80.6	20.1	8.4	0.3	50.4	47.4	31.4
	25-29	1	42.9	61.8	41	0.3	26.3	71.1	61.9
	30-34	0.9	18.5	86.5	75.2	0.3	14	82.7	80.9
	35-39	0.7	10.1	94.4	90.1	0.5	7.5	87.2	89.1
Iran 2006	40-44	0.7	7.4	96.4	93.9	0.6	4.5	88.2	91.5
	45-49	0.9	5.6	97.1	94.6	0.9	2.6	86.6	91.4
	50-54	0.9	4.5	97.2	92.9	2	1.7	81.9	87.7
	55-59	1.3	3.1	96.3	89.4	4.1	1.2	75.6	81.3
	60-64	1.8	1.8	94.6	82.9	9.8	0.5	65	67
	65-69	2.3	0.7	93.8	74.5	16	0.3	57.8	51.8
	70-74	4	0.2	90.4	61.5	25.1	0.1	43.7	43.8
	75-79	5.5	0	86.5	52.8	30.1	0.1	32.6	41.4
	80+	11.1	0.1	74.7	41	33.7	0	17.1	44.9
	0-4	0	98.3	0	0	0	98	0	0
	5-9	0	97.9	0	0	0	97.8	0	0
	10-14	0	96.9	0.1	0.1	0	96.9	0.2	0.1
	15-19	0.8	87.3	0.7	0.4	0.3	86.3	3.9	2.9
	20-24	3.1	60.5	10	6.4	1.4	50.7	28.8	23.4
	25-29	4	38.9	39.4	29.5	1.2	24.1	63.6	56
	30-34	3.1	26.7	67.7	59.9	0.9	13.4	79.1	77.9
	35-39	2.8	17.1	81.3	76.9	1	9	83.1	84.3
Malaysia 2000	40-44	2.5	13.4	85.4	83.1	0.9	6.2	83.3	87.4
÷	45-49	2.5	10.1	88.8	86.2	1.5	5	80.9	85
	50-54	2.6	7.9	89	85.5	2.4	3.7	74.1	79.1
	55-59	3.4	5.2	88.4	79.6	3.7	1.7	69.9	73.9
	60-64	3.1	3.5	85.6	72.4	5.5	0.9	57.6	69.1
	65-69	4	1.2	82.4	68.1	9.5	0.3	45.2	66.9
	70-74	5	0.8	75.8	65.5	10.8	0.3	29.8	68.5
	75-79	5	0.3	72.6	65.4	12	0	23	67.4
	80+	9.3	0.4	60.7	58.6	13.9	0	8.9	70.3

Appendix 1.2 continued

			M	ale			Fen	nale	
IPUMS Sample	Age Group	Alone	Parent	Spouse	Child	Alone	Parent	Spouse	Child
	0-4	0	97.6	0	0	0	97.6	0	0
	5-9	0	95	0	0	0	95.2	0	0
	10-14	0	92.8	0	0	0	91.6	0	0
	15-19	0.9	80.3	1	0.4	0.3	76.7	4.3	6.2
	20-24	2.6	57	25.3	19.4	0.4	45.6	40.4	46.7
	25-29	2.4	29.1	58.4	55	0.6	24.7	66.7	77.1
	30-34	2.3	14.4	78.2	77.8	0.8	15.3	74.2	87.8
	35-39	1.9	9.5	82.8	83.1	0.6	9.6	76.9	92.8
Mongolia 2000	40-44	2.9	5.3	84.8	86.4	0.7	6	74.7	93.3
	45-49	2.3	4.7	83.6	86.2	1.4	5	71.7	87.8
	50-54	2.8	2.6	84.2	82.4	2.4	2.6	64.5	86.8
	55-59	4.2	1.9	80.9	81.5	3.2	2.2	54.9	83.3
	60-64	6.1	0.3	75.6	73.9	4.9	0.3	49.4	72.9
	65-69	4.3	0	74	66.2	7.8	0.6	36.3	62.3
	70-74	11.4	0	57	56.4	13.9	0.5	19	59
	75-79	7.8	0	53.4	55.3	18.5	0	18.5	53.4
	80+	7.8	0	31.2	55.8	21	0	2.8	50.3
	0-4	0	97.1	0	0	0	97.3	0	0
	5-9	0	96.8	0	0	0	97	0	0
	10-14	0	95	0.1	0	0	93.7	0.3	0
	15-19	0.8	88.1	6.9	1.8	0.3	66.8	22.3	10.2
	20-24	1.9	72.7	40.1	23.7	0.5	22.1	62.9	55.8
	25-29	1.9	53.2	72.1	58.5	0.4	7.8	78.2	83.5
	30-34	1.7	37.2	86.3	79.6	0.3	4.8	83.4	89.7
	35-39	2.1	25.7	89.6	86.3	0.5	3.4	83	91.2
Nepal 2001	40-44	2	17.9	90.8	88.7	0.9	2.6	82.5	90.2
	45-49	2.4	13	89.5	88.7	1.7	2.2	78.8	88
	50-54	1.7	8.3	88.8	88.1	2.5	1.4	73.5	83.7
	55-59	1.9	4.6	86.6	85	3.7	0.7	67.2	77.7
	60-64	2.5	2.6	82.9	79.8	7	0.2	50.6	73
	65-69	3.1	0.7	78.1	73.6	7.7	0.2	43.1	68.9
	70-74	4.3	0.7	72	70.3	9.6	0	32	69.1
	75-79	4.9	0	63	70.4	10.6	0	23.1	69.6
	80+	4.3	0	50.4	69.6	8.4	0	9.8	75.6
	0-4	0	97.2	0	0	0	97.1	0	0
	5-9	0	97.2	0	0	0	97.1	0	0
	10-14	0	95.8	0.2	0.1	0	96	0.5	0.1
	15-19	0.6	81.9	4.7	1.6	0.1	68.7	18.4	10
	20-24	1	67.8	25	15.4	0.1	32.6	53.9	45.3
	25-29	1	53	53.4	42.7	0.1	13.1	75	74.6
	30-34	0.8	39.5	73.6	66.7	0.1	6.8	82.2	85.2
D 11	35-39	0.8	28.8	82.1	78.2	0.1	4.4	84	88.7
Pakistan 1998	40-44	1	19.7	85.1	83.4	0.2	2.9	83	88.8
	45-49	1.1	12.5	86.6	86.3	0.4	1.7	81.2	87.6
	50-54	1.3	7.1	84.5	85.3	0.7	1.2	73.5	81.2
	55-59	1.3	4.4	84	85.2	0.8	0.6	69.5	79.2
	60-64	1.9	2	79.6	80.8	1.7	0.5	53.5	70.4
	65-69	2	1.1	77.1	79.6	1.8	0.2	48.9	70.8
	70-74	2.4	0.7	70.1	73.3	2.4	0.3	33.3	65.8
	75-79	2.6	0.3	65.5	72.5	2.3	0.3	33	64.9
	80+	3	0.1	53.3	63.2	2.9	0.1	16	52

# Appendix 1.2 continued

New York   Name   Nam				М	ale			Fer	nale	
5-9	IPUMS Sample	Age Group	Alone			Child	Alone			Child
10-14										0
15-19										0
20-24										0.2
25-29 1.1 41.1 54.2 47.8 0.4 28.6 65.5 6 30-34 1.2 22.7 74.1 69.6 0.5 16.1 78.2 1 35-39 1.5 13.7 82 80.5 0.6 9.9 82.7 8 45-49 1.8 6.3 86.4 86.4 0.8 4.9 79.9 8 50-54 2.1 4.9 85.7 84.6 1.6 3.5 75.2 8 55-59 2.8 3.3 84.6 81.2 2.6 2.5 69 7 60-64 3.4 1.9 82.5 76.2 4.1 1.2 61.6 6 65-69 3.8 1.2 79.5 68.1 5.6 0.7 52.8 6 70-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75.79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4 75-9 0 96.9 0 0 0 0.1 96.8 0 10-14 0.1 96.7 0 0 0 0.1 96.8 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 13.3 30.7 83.6 80.2 0.8 10.4 82.6 13.5 30.3 42.4 14.1 1.3 1.3 10.7 83.6 80.2 0.8 10.4 82.6 13.5 10.9 93.4 87.6 3 44.4 79  Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 66-69 3 1.9 87.9 89.9 88.7 0.9 7.2 83.7 9 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 66.6 60.4 2.3 4.2 90.5 71.7 8.5 1.4 58.9 66.6 7 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 60.6 50.7 60.9 10.1 10.1 10.1 10.1 10.1 10.1 10.1 1										5.6
No.   1.2   22.7   74.1   69.6   0.5   16.1   78.2   35-39   1.5   13.7   82   80.5   0.6   9.9   82.7   82.4   82.5   83.5   85.2   0.6   6.9   82.4   82.4   82.5   83.5   85.2   0.6   6.9   82.4   82.4   82.5   83.5   84.6   0.8   4.9   79.9   83.5   83.5   84.6   1.6   3.5   75.2   83.5   84.6   81.2   2.6   2.5   69   73.5   60.64   3.4   1.9   82.5   76.2   4.1   1.2   61.6   63.5   65.69   3.8   1.2   79.5   68.1   5.6   0.7   52.8   60.64   3.4   1.9   82.5   76.2   4.1   1.2   61.6   63.6   65.69   3.8   1.2   79.5   68.1   5.6   0.7   52.8   60.6   65.69   3.8   1.2   79.5   68.1   5.6   0.7   52.8   60.6   70.74   5.6   0.5   74.9   60.2   8.7   0.3   42.4   75.79   5.8   0.3   67.4   53.2   8.9   0.3   31.9   53.8   75.79   5.8   0.3   67.4   53.2   8.9   0.3   31.9   53.8   75.9   0.9   96.9   0.0   0.1   96.8   0.1   19.8   40.4   10.1   96.7   0.0   0.1   96.8   0.1   19.8   40.4   10.1   96.7   0.0   0.1   96.5   0.1   19.8   40.4   10.1   96.7   0.0   0.1   96.5   0.1   15.19   0.5   91.8   2.4   1.2   0.6   83.1   8.4   42.2   20.24   1.6   75.6   25.2   17.8   1.8   41.1   46.9   3.2   30.34   1.3   30.7   83.6   80.2   0.8   10.4   82.6   35.39   1.2   20.9   89.9   88.7   0.9   7.2   83.7   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   1.5   5.5   82.5   8.5   9.5										34.2
Philippines 2000										63.8
Philippines 2000										79
45-49 1.8 6.3 86.4 86.4 0.8 4.9 79.9 8 50-54 2.1 4.9 85.7 84.6 1.6 3.5 75.2 8 55-59 2.8 3.3 84.6 81.2 2.6 2.5 69 7 60-64 3.4 1.9 82.5 76.2 4.1 1.2 61.6 6 65-69 3.8 1.2 79.5 68.1 5.6 0.7 52.8 6 70-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4 0-4 0.1 96.7 0 0 0.1 96.8 0 5-9 0 96.9 0 0 0 0.1 96.5 0 10-14 0.1 96.7 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 45-49 1.5 10.9 93.4 87.6 3 44.4 79 50-54 1.9 8.1 92.9 81.3 4.2 3.6 75 7 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 65-69 3 1.9 87.8 67.1 10.8 0.6 50.7 6 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 66 75-79 5.6 0.3 76.4 58.1 15.1 0.1 32.3 6 80+ 8.5 0 59.2 60.6 16.9 0 15.2 6 0-4 0 92.1 0 0 0 0 91.2 0 5-9 0 90.8 0 0 0 0 91.4 0 10-14 0.1 91.5 0.2 0.1 0.1 91.4 0.2 15-19 0.7 86.6 2.3 0.9 0.6 82.2 7.5 5 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 2 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 2 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 2 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 57 20-24 2.3 69.9 17.5 10.8 2.2 57 32.6 70.4										85.7
50-54 2.1 4.9 85.7 84.6 1.6 3.5 75.2 8 55-59 2.8 3.3 84.6 81.2 2.6 2.5 69 7 60-64 3.4 1.9 82.5 76.2 4.1 1.2 61.6 6 65-69 3.8 1.2 79.5 68.1 5.6 0.7 52.8 6 70-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4  0.4 0.1 96.7 0 0 0.1 96.8 0 5-9 0 96.9 0 0 0 0.96.7 0 10-14 0.1 96.7 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 45-49 1.5 10.9 93.4 87.6 3 4.4 79 50-54 1.9 8.1 92.9 81.3 4.2 3.6 75 7 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 65-69 3 1.9 87.8 67.1 10.8 0.6 50.7 6 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 6 75-79 5.6 0.3 76.4 58.1 15.1 0.1 32.3 6 80+ 8.5 0 59.2 60.6 16.9 0 15.2 6 0-4 0 92.1 0 0 0 91.4 0 10-14 0.1 91.5 0.2 0.1 0.1 91.4 0.2 15-19 0.7 86.6 2.3 0.9 0.6 82.2 7.5 5 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 2 25-29 3.9 45.5 45.6 36.9 2.6 37.4 57 5	Philippines 2000									87.2
55-59 2.8 3.3 84.6 81.2 2.6 2.5 69 7 60-64 3.4 1.9 82.5 76.2 4.1 1.2 61.6 6 65-69 3.8 1.2 79.5 68.1 5.6 0.7 52.8 6 70-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4  0-4 0.1 96.7 0 0 0.1 96.8 0 5-9 0 96.9 0 0 0 0 96.7 0 10-14 0.1 96.7 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 3 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 45-49 1.5 10.9 93.4 87.6 3 4.4 79 50-54 1.9 8.1 92.9 81.3 4.2 3.6 75 7 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 66-69 3 1.9 87.8 67.1 10.8 0.6 50.7 66 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 66 75-79 5.6 0.3 76.4 58.1 15.1 0.1 32.3 66 80+ 8.5 0 59.2 60.6 16.9 0 15.2 6										85.8
60-64 3.4 1.9 82.5 76.2 4.1 1.2 61.6 66.65-69 3.8 1.2 79.5 68.1 5.6 0.7 52.8 670-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 580+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 480-75-9 0 96.9 0 0 0 0 96.7 0 10.1 96.5 0 11.5-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4.2 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 32 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 730-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 950-54 1.9 8.1 92.9 81.3 4.2 3.6 75 75 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 75 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 75 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 66.6 66.4 2.3 4.2 90.5 71.7 8.5 1.4 58.9 665-69 3 1.9 87.8 67.1 10.8 0.6 50.7 66.6 65.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0										82.3
65-69 3.8 1.2 79.5 68.1 5.6 0.7 52.8 6 70-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4 0-4 0.1 96.7 0 0 0 0.1 96.8 0 5-9 0 96.9 0 0 0 0 96.7 0 10-14 0.1 96.7 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 45-49 1.5 10.9 93.4 87.6 3 4.4 79 50-54 1.9 8.1 92.9 81.3 4.2 3.6 75 7 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 65-69 3 1.9 87.8 67.1 10.8 0.6 50.7 6 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 65-69 3 1.9 87.8 67.1 10.8 0.6 50.7 6 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 6 75-79 5.6 0.3 76.4 58.1 15.1 0.1 32.3 6 80+ 8.5 0 59.2 60.6 16.9 0 15.2 6 0-4 0 92.1 0 0 0 91.2 0 5-9 0 90.8 0 0 0 91.4 0 10-14 0.1 91.5 0.2 0.1 0.1 91.4 0.2 15-19 0.7 86.6 2.3 0.9 0.6 82.2 7.5 3 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 2 25-29 3.9 45.5 45.6 36.9 2.6 37.4 57 5										76.4
70-74 5.6 0.5 74.9 60.2 8.7 0.3 42.4 75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4 0-4 0.1 96.7 0 0 0.1 96.8 0 10-14 0.1 96.7 0 0 0 0.1 96.5 0 10-14 0.1 96.7 0 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4 12 0.6 83.1 8.4 4 12 0.6 83.1 8.4 4 12 0.6 83.1 8.4 4 12 0.6 83.1 8.4 4 12 0.6 83.1 8.4 4 12 0.6 83.1 8.4 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 1.2 20.9 81.3 4.2 3.6 75 7 1.5 5.5 82.5 8 1.5 10.9 93.4 87.6 3 4.4 79 1.5 10.9 93.4 87.6 3 4.4 79 1.5 10.9 81.9 92.9 81.3 4.2 3.6 75 7 1.5 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 1.9 8.1 92.9 81.3 4.2 3.6 75 7 1.7 1.9 81.9 81.9 87.8 67.1 10.8 0.6 50.7 6 1.9 87.9 1.9 87.8 67.1 10.8 0.6 50.7 6 1.9 87.9 1.9 87.8 67.1 10.8 0.6 50.7 6 1.9 80.4 8.5 0 59.2 60.6 16.9 0 15.2 6 1.0 10-14 0.1 91.5 0.2 0.1 0.1 91.4 0.2 15-19 0.7 86.6 2.3 0.9 0.6 82.2 7.5 3 20.2 4 2.3 69.9 17.5 10.8 2.2 57 32.4 22 5-29 3.9 45.5 45.6 36.9 2.6 37.4 57 5 30.3 4 3.5 27.1 69.6 61.3 2.2 23.6 70.4										68.9
75-79 5.8 0.3 67.4 53.2 8.9 0.3 31.9 5 80+ 7.6 0.3 56.1 51.8 9.6 0.1 19.8 4 0-4 0.1 96.7 0 0 0 0.1 96.8 0 5-9 0 96.9 0 0 0 0 96.7 0 10-14 0.1 96.7 0 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 45-49 1.5 10.9 93.4 87.6 3 4.4 79 50-54 1.9 8.1 92.9 81.3 4.2 3.6 75 7 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 65-69 3 1.9 87.8 67.1 10.8 0.6 50.7 6 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 6 75-79 5.6 0.3 76.4 58.1 15.1 0.1 32.3 6 80+ 8.5 0 59.2 60.6 16.9 0 15.2 6 0-4 0 92.1 0 0 0 91.2 0 5-9 0 90.8 0 0 0 91.4 0 10-14 0.1 91.5 0.2 0.1 0.1 91.4 0.2 15-19 0.7 86.6 2.3 0.9 0.6 82.2 7.5 3 20-24 2.3 69.9 17.5 10.8 2.2 57 32.4 2 25-29 3.9 45.5 45.6 36.9 2.6 37.4 57 5										60.7
80+   7.6   0.3   56.1   51.8   9.6   0.1   19.8   4										54
0-4 0.1 96.7 0 0 0.1 96.8 0 5-9 0 96.9 0 0 0 0 96.7 0 10-14 0.1 96.7 0 0 0.1 96.5 0 15-19 0.5 91.8 2.4 1.2 0.6 83.1 8.4 4 20-24 1.6 75.6 25.2 17.8 1.8 41.1 46.9 3 25-29 1.7 52 61.4 52.9 1.2 19.7 72.9 7 30-34 1.3 30.7 83.6 80.2 0.8 10.4 82.6 35-39 1.2 20.9 89.9 88.7 0.9 7.2 83.7 9 Vietnam 2009 40-44 1.4 14.7 92.3 90.7 1.5 5.5 82.5 8 45-49 1.5 10.9 93.4 87.6 3 4.4 79 50-54 1.9 8.1 92.9 81.3 4.2 3.6 75 7 55-59 2.1 5.8 92.4 76.8 5.5 2.6 68.6 7 60-64 2.3 4.2 90.5 71.7 8.5 1.4 58.9 65-69 3 1.9 87.8 67.1 10.8 0.6 50.7 6 70-74 3.5 0.8 83.4 60.6 12.8 0.2 41.8 67 75-79 5.6 0.3 76.4 58.1 15.1 0.1 32.3 67 80+ 8.5 0 59.2 60.6 16.9 0 15.2 67 0-4 0 92.1 0 0 0 91.2 0 0 5-9 0 90.8 0 0 0 91.4 0 0 10-14 0.1 91.5 0.2 0.1 0.1 91.4 0.2 15-19 0.7 86.6 2.3 0.9 0.6 82.2 7.5 5.5 20.2 25-29 3.9 45.5 45.6 36.9 2.6 37.4 57 57 57 57 57 57 57 57 57 57 57 57 57										51.4
5-9										48.1
10-14										0
15-19										0
20-24										0
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Family Matters: Three Essays on Living Arrangements across Societies

# CHAPTER 2: FEMALE-HEADED HOUSEHOLDS AND LIVING CONDITIONS IN LATIN AMERICA

# **INTRODUCTION**

The number of households headed by women in Latin American has increased dramatically over the last four decades. Historically, these households consisted of lone women raising children without the support of their absent fathers due to high instability of unions, (De Vos, 1987; Lavrin, 1989; Osborne et al., 2007; Villarreal & Shin, 2008) and, as a result, were associated with the feminization of poverty (Arias & Palloni, 1999; Buvinic & Gupta, 1997; Chant 2007; Gimenez, 1999; Kimenyi & Mbaku, 1995; Marcoux, 1998; Pearce, 1978). In this essay we investigate, first, how family changes—including the rise in cohabitation, divorce and separation, non-marital childbearing, and lone motherhood—have affected recent trends in female headship and, second, whether the living conditions of female-headed households differ significantly from those of male-headed households, and the family circumstances in which female-headed households are more likely to experience worse or better living conditions than male-headed households.

Recent research has theoretically and empirically challenged the linkage between female headship and poverty as well as widening public debate on the subject by questioning both the concept of "feminization" (Chant, 2003; Medeiros & Costa, 2008) and measurement of poverty (Chant, 2003, 2007; Medeiros & Costa, 2008; Moser, 2010; Quisumbing et al., 2001). We aim to contribute to the literature by examining differences in material living conditions between male- and female-headed households. We have taken a large-scale, quantitative perspective and used census microdata samples from 14 Latin American countries, focusing on the family circumstances of the household head.

The essay is organized into four sections. First, we provide a summary overview of salient characteristics of Latin American family systems and general changes over the last four decades in order to provide a basis for our account of the relationship between female-headed households and the feminization of poverty in Latin America. Second, we present the data and methodology and, in particular, our measurement of living conditions. Third, we show the results divided into two

subsections: i) trends in female headship and changes in the union and motherhood status of women, and ii) the results of logistic regression models in which we examine the link between poor living conditions and female headship. We conclude the essay with a discussion of our findings.

# **BACKGROUND**

#### FEMALE HEADSHIP AND CHANGING PATTERNS IN UNION FORMATION

The presence of female-headed households is an increasingly significant feature of Latin American family systems (Chant, 2003; De Vos, 1987; Lavrin, 1989; Moser, 1993; Villarreal & Shin, 2008). In colonial societies, female headship appeared as a result of the gender power imbalance between male colonizers and female members of indigenous populations. The social norms prohibiting interracial and interethnic marriage and the existence of cohabiting and "visiting unions" contributed to the high levels of female headship (García & Rojas, 2002; Socolow, 2000). These levels varied from country to country due to socio-ethnic diversity and the processes of acculturation in each case. Historically speaking, female headship was predominantly a Caribbean and Central American phenomenon (Massiah, 1983; Robichaux, 2013) and was far less prevalent in countries with large inflows of European migration (Argentina, Chile and Uruguay) and in those where the Catholic marriage was more strongly institutionalized (Quilodrán, 1999).

Several researchers have suggested that the instability of unions, especially in the form of cohabitation, is one of the main historical causes for female headship in Latin America. Marriage and cohabitation have long coexisted in the history of Latin America (Castro, 2002, De Vos, 1995; Stromquist, 1998). Cohabitation was regarded as the "marriage" of the most disadvantaged social groups, whereas marriage was prevalent among the social elite (Castro, 2002; Socolow, 2000; Stromquist, 1998). Latin American societies have witnessed a dramatic expansion of cohabitation and rapid deinstitutionalization of marriage over the last three decades. Cohabitation has become the norm among young women in unions in such countries as Colombia, Brazil, Uruguay and Argentina, and has extended into all layers of society, including the most educated populations (Esteve, et al., 2012). Together with the expansion of cohabitation, the percentage of children born out of wedlock and the number of single mothers have increased in the three decades from 1970 to 2000 (Esteve et al., 2012; Laplante et al., 2015). Some authors have connected the overall family changes described here to the onset of the Second Demographic Transition in Latin America (Covre-Sussai et al., 2015; Esteve et

al., 2012; Lesthaeghe, 2014), which may have implications for changes in the context and nature of female headship, as we shall discuss in this essay.

Bearing in mind the above, and given the historical link between female headship, cohabitation and union instability in Latin America, we raise the question of whether there is a positive relationship between the rise in female headship and recent demographic changes with regard to union formation and dissolution, namely the rise in cohabitation, divorce and separation, non-marital childbearing, and lone motherhood. If cohabitating women are more likely to have children at young ages and more likely to abandon their unions than married women, the cohabitation boom may have laid the foundations for the increase of female headship.

It is important to note that not all female household heads in Latin America are single mothers in unstable unions, and neither do all single mothers necessarily become the household head. Research has shown that extended households provide shelter to lone mothers. The percentage of young single mothers living in extended households in the early 2000s ranged from 56.8 per cent in Bolivia in 2001 to 81.8 per cent in Chile in 2002 (Esteve et al., 2012), signaling that female headship is not exclusively the result of union instability. It may have transpired from other life events. For example, widowhood is one of the most important causes of female headship among older women. Since we are specifically interested in the effects on female headship of union formation, instability, and dissolution, we have limited the analysis to adult women aged between 35 and 44. At these ages, the percentage of female widows is small, typically below 5 per cent.

Female headship can also be the consequence of separation between wife and husband due to internal or international migration. This situation yielded a non-negligible number of married women heading their households in the absence of the spouse, a category which we identify as *married spouse absent*. In Mexico, for instance, the male-dominated migration to the United States has a direct impact on household structures in the sending communities, as seen by the large presence of married women with the spouse absent. Fortunately, our data allows us to distinguish between married women with and without an absent spouse and to test the importance of this category for the recent increase in female headship. The importance of remittances, family structure and ties between migrants and relatives living in their countries of origin will have direct consequences on the living conditions of such households (Sana & Massey, 2005).

Selective female internal migration from rural to urban zones in Latin America has also contributed to the increase of female headship in the region (Chant, 2015; Chant & McIlwaine, 2016). Female headship is higher in urban areas due to women's access to independent housing and higher salaries

compared to rural areas, where it even happens that women workers are often unpaid (ECLAC, 2014: 179). Moreover, women in urban areas may be less exposed to patriarchal control and live more anonymous lives, which allows them to manage their living arrangements with greater autonomy, although segmentation by sex in the informal economy and access to different urban spaces continue to complicate the relationship between urban prosperity and gender (Chant, 2013; Chant & McIlwaine, 2016). Our analysis therefore accounts for the urban-rural dimension of household headship.

To this point, the discussion pertaining to female headship mostly revolves around women who have lived in union but whose male partners are no longer in the household either due to death, migration or separation. Although this situation accounts for the majority of cases, we cannot ignore the fact that a growing number of partnered women may report that they head the household even in the presence of their male partner and that, increasingly, women who have never lived in union also head households. From the standpoint of female empowerment, women who are unsatisfied with their relationship may have actively sought household headship as a means of taking control over their lives (Chant, 2008; Chant, 2015). The presence of such trends might be a powerful indicator of a more equal gender outlook on family headship.

In this regard, recent family changes in Latin America, such as the delay of union formation, childbearing, the decline of marriage and the rise of solo living echo the demographic experience of western nations in the past few decades. These phenomena have been connected to the arrival of the Second Demographic Transition in Latin America, driven to a large extent by the process of female emancipation (Lesthaeghe, 2014). The increase of female headship may be seen as a trend that is interdependent with shifts in demographic changes and related with the propensity of a woman to marry, have children, divorce, or stay single. Hence the likelihood of a woman being the head of her household and the relationship of this with poverty cannot be discussed without further investigation into her relationship status.

### FEMALE HEADSHIP AND LIVING CONDITIONS

The literature on poverty in Latin America, particularly earlier work, stressed the relationship between female-headed households and the feminization of poverty (Buvinic & Gupta, 1997; Pearce, 1978). The paradigm of the feminization of poverty took hold in Latin America during the so-called "lost decade" following the financial crisis of the 1980s and 1990s. This decade, marked by significant social and economic downturns in the region, resulted in declining wages and lower female labor force participation which was a significant factor in heightened familial instability and a surge in

internal and external male migration (Loza Torres, et al., 2007; Sana & Massey, 2005). At that time, women had three main disadvantages compared to men: less education and fewer entitlements; lower return for a heavier work load; and more obstacles in socioeconomic mobility (Moghadam, 2005). Additionally, intergenerational transmission of poverty is of particular concern to researchers and policy makers (Alvarado Merino & Lara, 2016; Chant, 2008). Bearing in mind the above, female-headed households became a focal point for social intervention and research, but lack of precision and a paucity of empirical evidence in statements supporting the feminization of poverty gave rise to fervent debate (Alvarado Merino & Lara, 2016). Recent works have not only questioned the connection between female headship, household poverty, and social vulnerability (Chant, 2003; Damián, 2003; Klasen, et al., 2015) but have also provided a new perspective on the interpretation of female headship, which is seen as an indication of female empowerment rather than vulnerability (Arriagada, 2006; Datta & McIlwaine, 2000; Chant, 2015).

The critics of feminization of poverty have based their arguments on three main factors (Chant, 2015). First, female-headed households are not necessarily worse off than male-headed households. Second, poverty is a multidimensional concept which should not be confined to any one dimension such as income or expenditure costs. Third, the poverty gap between female- and male-headed households does not necessarily increase over time. Study of female-headed households must accordingly: (i) account for the multidimensional and dynamic nature of poverty, including the dimensions of power, agency, and vulnerability; (ii) investigate the heterogeneity of family contexts in which women head their households (Finley, 2007; Fuwa, 2000); and (iii) capture the heterogeneity of female-headed households (Chant, 2015).

To date, there are not many large, representative cross-national empirical studies on this topic based on dimensions of poverty other than income (Chant, 2005; Chant, 2015). Moreover, the measurement of poverty based on household income, consumption or expenditure using cross-sectional data has been criticized as being overly dependent on the particular circumstances of the family at the time of the survey (Moser & Felton, 2009). In societies largely reliant on the subsistence economy, the asset accumulation approach has proved to be more efficient than income or consumption when calibrating long-term household welfare (Carter & Barrett, 2006; Hohmann & Garenne, 2009) and a more reliable proxy for inequality measurement (McKenzie, 2004). The assets approach in poverty analysis has an additional advantage as it serves to overcome the stochastic shock of income (Moser & Felton, 2009). The asset accumulation approach is widely used by institutions such as the World Bank and many researchers (Arias & De Vos, 1996; Booysen, van der Berg et al., 2008; Chant, 2015; Deere et al., 2012; Harttgen & Klasen, 2012; Moser & Felton, 2009; Moser, 2010; Permanyer, 2013).

# **DATA AND METHODOLOGY**

This study utilizes harmonized census microdata published through the Integrated Public-Use Microdata Series International (IPUMS-i), which facilitates reliable cross-national comparisons (Minnesota Population Center, 2015). IPUMS-i holds the largest collection of individual census microdata samples from Latin America, both in terms of the number of countries included and the time span, which runs from 1960 to 2010. In our study, we analyze 14 countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. For each country, we have several census samples from different points in time. Our final analysis is based on a total of 50 data samples spanning the years from 1970 to 2011, chosen in accordance with the availability of comparable indicators. Given the cross-sectional nature of the data, we do not intend to establish causality with our study.

To decompose trends in female headship by union status, we focus on females aged from 35 to 44 and living in private dwellings. Individuals living in institutional group housing are excluded from the analysis. Restricting the study to women aged from 35 to 44 has several advantages. At these ages, most women and men have already been in union and had children. They have also had enough time to experience divorce and separation, while the incidence of coresidence with their children remains high. Widowhood is relatively low compared to older ages. Moreover, working with a tenyear age span with census data (often collected once per decade) circumvents the problem of cohort overlapping in two censuses.

The risk of our results being biased by changes over time in the percentage of 35 to 44-year-old women who have lived in union is negligible because age at first union and age at first childbearing have remained reasonably constant in Latin America over the past few decades (Esteve et al., 2013; Fussell & Palloni, 2004; Heaton et al., 2002; Rodríguez Vignoli, 2009). Male-headed households are included in the second part of the analysis in order to compare their living conditions to those of female-headed households. As with women, we focus on men aged from 35 to 44. Although the characteristics of the household head are used as independent variables, the outcome variable of living in poor conditions is constructed at the household level.

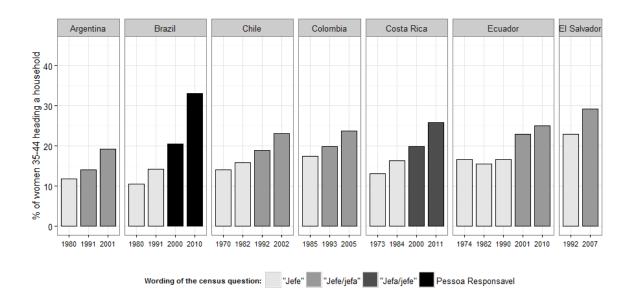
#### IDENTIFICATION OF HOUSEHOLD HEADS

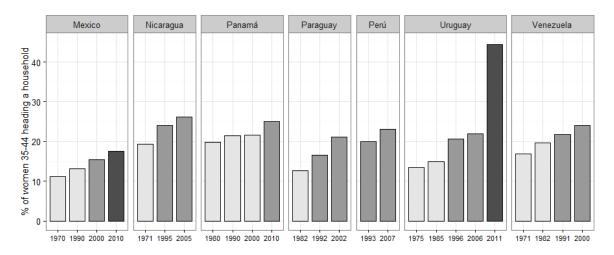
There is no standardized definition for household headship in Latin American censuses, and its nature of self-declaration often incorporates an embedded social context of who ought to be considered as being in charge of the household. Household headship is loosely defined as the status of person

recognized as such by other household members (IPUMS, 2016). The definition of headship has remained consistent over time, but earlier censuses tend to refer to the head of household as a male head, *jefe*, whereas more recent censuses, employ a gender-equal term, *jefe o jefa*, male or female household head, which may have affected the outcome by gender (Acosta-Díaz 2001; Ruíz Salguero & Rodríguez Vignoli, 2011). In Figure 2.1, the columns of the histogram have been coloured to indicate the evolution of the exact wording of the census reference to household head: *jefe* (male head), *jefe/jefa* (male head/female head), *jefa/jefe* (female head/male head), or *pessoa responsável* (reference person). Although the more gender-neutral classifications may have contributed to a higher percentage of women self-reporting as head of household, the extent of its effect is vague as the timing of the most dramatic increases of female headship does not coincide with the years of the wording change for most countries, with the exceptions of Ecuador, Panama and Uruguay, where the greatest increases in female headship coincided with the timing of changes in census wording. For these countries, one needs to consider the effect of changes in census wording when interpreting the increasing propensity for women to self-declare as household head.

#### **CATEGORIZATION OF UNION STATUSES**

We classified women and men into seven partnership or union statuses using the following variables in IPUMS: household type (*hhtype*), marital status (*marst*), consensual union status (*consens*), and children's (*nchild*) and spouse's (*sploc*) presence. The seven categories are: *married with spouse present in the household; married with spouse absent from the household; in consensual union; single with no children; single with children; separated or divorced; and widowed. We distinguished between married women with spouse present and married women with spouse absent because it may have household headship and economic implications. We considered creating the same distinction for women in consensual unions, but the number of cohabiting women whose partner is not present in the household is negligible, usually below 4 per cent out of all cohabiting women. The presence of children in the household was used to distinguish between single women with and without children. Previous research has shown that single women with children typically are women who have cohabited in the past (Esteve, et al., 2011).* 





**Fig 2.1** Percentage of women aged from 35 to 44 heading households in Latin American countries 1970 to 2010 (Source: Authors' elaboration based on census questionnaires and census data from IPUMS-i)

#### **MEASUREMENT OF LIVING CONDITIONS**

Our measurement of household living conditions is based on the building materials of dwelling, for example in roofing or flooring, and household amenities, such as the presence of a computer, refrigerator, or telephone. We constructed country-specific asset indices by dividing the number of assets present in the household by the total number of assets, which is similar to Hohmann and Garenne's approach (2009). Appendix 1 informs of the number of assets available to each country and reliability of each index. Appendix 2 provides details on the codification of each item. We did not use any particular weighting scheme to construct the indices. All assets had exactly the same

weight because we are mainly interested in comparing female- versus male-headed households rather than differences across countries and over time. In addition, the theoretical literature on household welfare has not been sufficiently developed to provide a weighting scheme for each of the assets which would guarantee an accurate measurement of living conditions (Filmer & Pritchett, 2001). The use of specific weights has been substantiated on statistical premises through the use of the principal components approach (Filmer & Pritchett, 2001; Kolenikov & Angeles, 2009). We have compared our results to those weighted by principal component analysis and found no significant differences between the two. A sensitivity analysis has been conducted to ensure the internal consistency of the variables for each index (results available from the authors).

We created a dummy variable to measure whether a household scores below (1), or above or equal (0) to the mean of the asset index of each sample. Households that score lower than the mean of all households are coded as "living in poor conditions", and those that score the mean or above are coded as "not living in poor conditions." Due to the lack of consistency of available variables in censuses, we do not compare samples of different time points and neither do we compare countries with one another. Only the most recent samples are explored for this part of the analysis and each country is evaluated separately. This dummy variable serves as the dependent variable of a series of logistic regression models that include as independent variables: sex of the household head, union status, urban or rural setting, ownership of dwelling, and presence of children. Age and educational attainment (less than primary, primary completed, secondary completed, university completed), are used as controls (not shown in the models).

## RESULTS

## EVOLUTION AND DECOMPOSITION OF FEMALE HEADSHIP BY UNION STATUS

Figure 2.1 shows trends in female headship rates for women aged from 35 to 44 in 14 Latin American countries over the past four decades. Trends are unambiguously increasing across all countries in the region. Female headship in Brazil more than tripled from 10.6 per cent in 1980 to 33.2 per cent in 2010 and, in Uruguay, rose from 14.9 in 1986 to 44.4 in 2011. In Chile, there were only 14.1 per cent of women-headed households in 1970 compared to 23.2 in 2002. Similarly, 16.9 per cent of Venezuelan women headed households in 1971 compared to 24.1 in 2002. Female headship grew in Costa Rica from 13.1 to 25.9 per cent between 1973 and 2011.

The distribution of women aged from 35 to 44 by union status for the first and most recent available census is shown on the left side of Table 2.1, while the headship rates of these women appear on the right side. Table 2.1 provides the background information for determining whether the overall increase in headship rates is due to compositional or rate change. In all countries except in El Salvador, there is a drop in the percentage of women who are married and living with a spouse, and a rise in the percentage of women in consensual unions. The number of cohabiting women has tripled in countries like Brazil, Chile, and Uruguay and almost doubled in Argentina, Colombia, Costa Rica and Peru. More modest but still positive are the figures for increased cohabitation in countries like Panama, Venezuela and Ecuador. The incidence of divorce and separation has tripled in Brazil, Costa Rica, Nicaragua and Venezuela. In 1971, only 2.1 per cent of women aged from 35 to 44 were divorced or separated in Venezuela, compared to 12.2 per cent in 2001. In Brazil, the figure has more than tripled from 5.3 per cent in 1980 to 16.5 per cent in 2010. As a result, we also find a rise in the numbers of single women with children at home. By contrast, the percentage of single women without children has shown negligible changes over recent decades and the percentage of widows has decreased everywhere.

Next, we examine how family changes—including the rise in cohabitation, divorce and separation, non-marital child-bearing and lone motherhood—affected trends in female headship. In Table 2.2, we decompose the rise in female headship into compositional change (due to shifts from union status of lower propensity of headship to union status of higher propensity of headship) and rate change (due to more women self-reporting as household head regardless of union status). Table 2.2 shows the observed percentage of women heading households at different points in time on the left side and the standardized percentage of women heading households with the headship rate held constant on the right side. The standardization of headship rate over time by union status (holding the rate constant resulting in only compositional changes) shows that changes in union status account for less than 50 per cent of the overall surge in female headship. In other words, if headship rates had remained constant over the period studied, the percentage of women heading households would have increased by a figure of less than half of the observed rise with the exception of Colombia, Nicaragua and Peru, where the percentage of increase attributable to changes in union status is around 50 per cent (Colombia and Nicaragua) and 71 per cent (Peru). Rate change within union status categories contributes to more than half of the rise in female headship among women aged from 35 to 44. In El Salvador, Paraguay and Uruguay in particular, the rise of female headship is due to a higher incidence of women self-reporting as household head, since compositional change only accounts for 19.8 per cent, 15 per cent, and 16 per cent of total headship increase, respectively.

**Table 2.1** Composition and headship rate by union status of women aged from 35 to 44 by union status, earlier and most recent census (Source: Authors' elaboration based on census data from IPUMS-i)

				sition of Wo		44 by Un	ion Status			Headshi	p Rate of W	omen 35	-44 by U1	nion Status	
Country	Year	Married, spouse present	Married, spouse absent	Consensual union	Single, no children	Single, children	Separated or divorced	Widowed	Married, spouse present	Married, spouse absent	Consensual union	Single, no children	Single, children	Separated or divorced	Widowed
Argentina	1980	69.1	4.1	9.4	8.4	2.2	4.1	2.8	1.1	60.7	8.9	19.5	59.0	63.5	77.4
	2001	59.4	4.0	16.0	7.6	5.2	6.3	1.6	4.1	71.1	14.5	28.1	65.9	77.1	83.1
Brazil	1980	72.0	0.0	8.8	7.5	2.0	5.3	4.3	0.2	0.0	2.3	16.4	74.7	73.5	84.8
	2010	46.9	0.2	24.5	7.6	2.5	16.5	1.8	18.4	41.7	31.6	23.9	52.6	73.5	81.4
Chile	1970	67.4	6.9	3.8	9.9	4.4	3.9	3.8	1.9	57.5	8.9	16.6	36.6	66.7	70.5
	2002	56.4	6.4	10.9	8.4	9.6	6.8	1.5	9.3	56.4	20.6	20.0	48.0	68.5	77.9
Colombia	1985	52.7	3.6	17.7	8.8	4.3	8.8	4.2	2.2	47.3	12.7	16.1	47.2	66.0	75.8
	2005	34.5	2.2	31.7	9.0	9.7	10.2	2.8	3.1	58.3	11.1	23.2	66.3	71.4	77.6
Costa Rica	1973	63.6	4.1	11.6	7.8	5.8	4.4	2.8	0.2	64.1	6.4	10.7	56.3	73.9	82.0
	2011	47.6	2.0	20.7	7.3	8.4	12.9	1.2	4.9	65.8	17.3	20.2	71.8	79.3	82.3
Ecuador	1974	53.8	6.7	19.5	6.1	5.3	4.9	3.8	0.2	75.6	8.5	16.8	50.5	65.2	78.3
	2010	41.6	6.7	24.4	7.4	6.0	11.9	2.0	3.4	62.7	15.3	20.1	65.4	73.5	80.0
El Salvador	1992	36.6	3.8	31.5	6.7	7.9	9.3	4.3	4.1	60.2	10.8	15.1	63.0	69.2	79.0
	2007	36.5	6.0	27.1	8.0	12.6	7.3	2.5	7.0	69.8	19.9	22.5	63.3	73.4	78.0
Mexico	1970	66.1	4.8	12.7	6.1	1.1	4.2	5.1	0.1	53.5	8.8	8.6	66.1	61.3	70.5
	2010	56.9	2.3	16.2	7.8	4.7	10.2	2.0	3.5	59.6	11.8	22.0	44.2	68.4	76.4
Nicaragua	1971	45.0	6.4	26.7	5.8	6.2	4.4	5.6	0.8	66.3	13.2	13.0	58.2	65.8	71.6
2 "	2005	36.5	3.8	29.9	5.9	6.5	14.8	2.5	5.7	53.2	19.6	10.0	59.2	66.6	75.7
Panama	1980	36.8	3.7	37.1	4.7	3.4	12.2	2.1	0.6	70.2	9.0	24.7	62.2	72.8	71.0
	2010	31.0	2.8	38.5	7.1	3.7	15.7	1.1	4.5	65.3	15.4	25.1	68.1	68.4	76.4

Table 2.1 Continued.

			Compos	sition of Wo	men 35-4	44 by Un	ion Status			Headshi	p Rate of W	omen 35	-44 by Uı	nion Status	,
Country	Year	Married, spouse present	Married, spouse absent	Consensual union	Single, no children	Single, children	Separated or divorced	Widowed	Married, spouse present	Married, spouse absent	Consensual union	Single, no children	Single, children	Separated or divorced	Widowed
Paraguay	1982	60.9	3.5	15.9	7.0	8.5	2.5	1.8	0.0	56.0	3.6	19.8	63.1	71.8	82.5
	2002	56.6	4.3	19.7	5.2	8.1	4.6	1.6	6.6	72.2	19.1	19.9	59.6	73.0	81.7
D	1993	52.3	9.2	19.0	6.9	4.5	4.8	3.3	0.8	72.0	14.9	18.1	59.3	72.7	81.0
Peru	2007	37.7	7.6	31.9	8.1	5.0	7.8	2.0	4.9	65.3	18.4	19.1	47.4	64.4	77.1
Uruguay	1975	68.6	4.8	6.2	9.6	1.8	6.1	2.9	0.3	73.9	8.9	20.9	49.9	65.6	80.4
- "6"",	2011	45.0	3.8	25.6	7.0	3.7	13.6	1.3	31.6	78.5	40.3	38.3	68.5	78.8	83.5
Venezuela	1971	47.1	5.0	22.9	7.8	11.7	2.1	3.4	0.2	64.2	4.9	16.0	60.7	69.5	77.3
· SIISEUGIU	2001	38.7	2.5	28.5	7.7	8.5	12.2	2.0	5.0	43.3	15.1	18.1	63.2	69.8	80.4

**Table 2.2** Percentage of women aged 35 to 44 heading households, observed and standardized by constant rate, and percentage of female headship increase attributable to change in union status, years rounded (Source: Authors' elaboration based on census data from IPUMS-i)

	Observe	ed Percentag	e of Women	Heading Ho	usehold	Standardi	zed percenta	e in union	Percentage of Increase Attributable		
	1970s	1980s	1990s	2000s	2010s	1970s	1980s	1990s	2000s	2010s	to Change in Union Status
Argentina		11.8	14.1	19.3			11.8	12.5	14.3		0.34
Brazil		10.6	14.3	20.6	33.2		10.6	13.4	16.0	17.4	0.30
Chile	14.1	15.7	18.9	23.2		14.1	14.3	15.0	16.2		0.23
Colombia		17.5	19.9	23.8			17.5	19.3	20.7		0.50
Costa Rica	13.1	16.4		19.9	25.9	13.1	15.2		16.1	18.7	0.44
Ecuador	16.7	15.5	16.6	23.0	25.1	16.7	15.3	15.5	18.8	20.8	0.49
El Salvador			22.9		29.2			22.9		24.2	0.20
Mexico	11.2		13.2	15.5	17.5	11.2		10.7	12.5	14.1	0.47
Nicaragua	19.4		24.0	26.2		19.4		23.1	22.9		0.51
Panama		19.8	21.5	21.7	25.1		19.8	21.1	21.3	21.9	0.40
Paraguay		12.6	16.6	21.1			12.6	12.7	13.9		0.15
Peru			20.0	23.1				20.0	22.2		0.71
Uruguay	13.5	14.9	20.6	22.0	44.4	13.5	14.3	15.5	16.2	18.4	0.16
Venezuela	16.9	19.6	21.8	24.1		16.9	17.9	19.0	19.5		0.36

#### LIVING CONDITIONS BY SEX OF THE HOUSEHOLD HEAD

Next, we evaluate the relationship between female headship and living conditions in 14 Latin American countries. In order to do so, we implement a series of logistic regression models to examine the probability of living in poor conditions (below the mean for living conditions in each country). We are mainly interested in seeing whether households headed by women are in worse living conditions than those headed by men. Independent variables are sex, union status, and the presence of children of the household head, urban or rural residence, and household ownership. Datasets are weighted with scaled weights to retain population characteristics without inflating the sample size. Married men living with a spouse are used as the reference category. We focus on the most recent available data for each country: Argentina 2001, Brazil 2010, Chile 2002, Colombia 2005, Costa Rica 2011, Ecuador 2010, El Salvador 2007, Mexico 2010, Nicaragua 2005, Panama 2010, Paraguay 2002, Peru 2007, Uruguay 2011, and Venezuela 2001. Argentina 2010 was dropped from the analysis because this particular dataset misses essential family relationship indicators.

Table 2.3 shows the results of three logistic regression models per country (M1, M2, and M3). Model 1 only accounts for the sex of the household head. Model 2 includes additional variables: sex, union status, presence of children of the household head, urban or rural setting, and ownership of dwelling. In Model 3, we added two interaction terms: one between the sex and union status of the household head and the other between sex of the household head and presence of children.

Model 1 shows that there is a statistically significant difference between the living conditions of female- and male-headed households in 10 of the 14 countries. In eight countries, namely Argentina, Brazil, Chile, Colombia, Costa Rica, Panama, Uruguay and Venezuela, female-headed households are shown to be disadvantaged. Male-headed households are shown as being in a poorer condition than female-headed households in El Salvador and Peru. The sex of the household head is not statistically significant in Ecuador, Mexico, Nicaragua, and Paraguay.

In Model 2, we control for union status, urban or rural setting, ownership of dwelling, and the presence of children. In all countries, urban households are less likely to have poor living conditions than rural ones. Ownership decreases the likelihood of poor conditions in all countries except Ecuador and Peru. Households with children are less materially poor, except in Argentina. The differences between male- and female-headed households diminished in Model 2, in the presence of the above-mentioned controls. The only exception is Brazil, where female-headed households are still less advantaged than male-headed households. The results for all other countries show that female-headed

**Table 2.3** Odds ratio of living in poor conditions by sex, union status, presence of children of household head, urban or rural residence, ownership of dwelling, of household heads aged 35 to 44 (Source: Authors' elaboration based on census data from IPUMS-i)

		Argentin	na		Brazi	l		Chile			Colomb	oia		Costa Ri	ca		Ecuado	r	]	El Salva	dor
Model	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3
Sex																					
Male (ref)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Female	1.41**	** 0.89**	1.80**	1.71**	* 1.23**	* 1.42**	1.31**	* 0.97	0.87	1.32**	** 0.92	0.97	1.65***	* 0.96	0.99	1.03	0.77**	₹ 0.83	0.81**	** 0.69**	* 0.58*
Union Status																					
Married, spouse pres (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Married, spouse absent		2.20**	* 3.53***		1.61	1.84		1.28**	* 1.65***		1.59**	* 2.19***		3.17***	* 4.79***		1.20**	1.48***		0.82*	1.12
Consen union		1.99**	* 2.03***		2.14**	* 2.21***		2.15**	* 2.24***		1.83**	* 1.79***		2.64**	* 2.70***		2.36***	* 2.40***		1.83**	* 1.90***
Single		3.30**	* 3.87***		2.56**	* 2.88***		2.08**	* 1.75***		2.75**	* 3.62***		3.51***	* 3.00***		2.48***	* 2.66***		1.94**	* 1.78***
Separated or divorced		1.59**	* 2.19***		3.15**	* 3.44***		1.90**	* 2.27***		2.15**	* 2.94***		2.57***	* 2.75***		2.45***	* 2.82***		1.63**	* 1.51*
Widowed		1.67**	* 1.70*		2.44**	* 3.18***		2.09**	* 1.76		2.30**	* 5.84***		2.16***	* 4.57***		2.35***	* 2.95***		1.96**	* 2.91**
Children																					
No (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Yes		1.12**	1.23***		0.69**	* 0.70***		0.78**	* 0.74***		0.67**	* 0.73***		0.80**	* 0.77***		0.83**	* 0.85**		0.99	0.89
Urban																					
No (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Yes		0.34**	* 0.35***		0.22**	* 0.22***		0.23**	* 0.24***		0.10**	* 0.10***		0.43**	* 0.42***		0.26**	* 0.23***		0.10**	* 0.10***
Ownership																					
No (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Yes		0.84**	* 0.83***		0.76**	* 0.77***		0.86**	* 0.86***		1.01	0.97		0.45**	* 0.44***		1.67***	* 1.67***		0.83**	* 0.79***
Interaction																					
Female x married, ab			0.34***			0.76			0.66**			0.37**			0.43**			0.52***			0.52**
Female x consens			0.66***			0.89*			0.81			0.93			0.71**			0.74**			0.70*
Female x single			0.54***			0.79**			1.32**			0.42***			1.00			0.63**			0.87
Female x sep div			0.44***			0.83**			0.75*			0.40***			0.72*			0.56***			0.85
Female x widow			0.63			0.69			1.16			0.22***			0.33**			0.53**			0.49
Female x child			0.98			1.00			1.24*			1.19			1.14			1.10			1.36*

p<0.05\*, p<0.01\*\*, p<0.001\*\*\*. Age and educational attainment controlled for all models.

Table 2.3 continued

		Mexico			Nicaragua			Panama			Paraguay			Peru			Uruguay			Venezuela		
Model	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	M 1	M 2	M 3	
Sex																						
Male (ref)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Female	0.96	0.75**	** 0.58*	0.99	0.83**	0.62	1.33**	* 0.80*	** 0.83	1.05	0.80**	* 0.91	0.80**	* 0.67**	* 0.59*	1.27**	** 1.06	1.09	1.17**	** 0.73**	** 0.46**	
Union Status																						
Married, spouse pres (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Married, spouse absent		1.12	1.30		0.85	1.01		2.07*	** 2.24***		1.46**	* 1.81***		1.42**	* 1.87***		3.33***	* 4.20***		2.16**	** 2.40***	
Consen union		1.76**	** 1.75***		1.63**	* 1.64***		2.53*	** 2.44***		1.83**	* 1.85***		1.64**	* 1.61***		2.31***	* 2.34***		2.40**	** 2.43***	
Single		1.71**	** 1.41**		1.66**	* 1.91**		4.40*	** 5.61***		2.22**	* 3.21***		1.60**	* 1.65***		4.16***	* 4.79***		3.28**	** 3.39***	
Separated or divorced		1.67**	** 2.16***		1.60**	* 2.15**		4.12*	** 5.56***		1.61**	* 2.42***		1.94**	* 1.82***		3.51***	* 4.24***		2.63**	** 3.49***	
Widowed		1.55**	* 2.00*		1.82**	3.07*		3.11*	** 3.62**		1.72**	* 2.68**		1.89**	* 2.14**		3.42***	* 7.84***		2.37**	** 2.47**	
Children																						
No (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Yes		0.78**	** 0.75***		0.90	0.85		0.88*	* 0.97		0.87*	0.97		0.64**	* 0.64***		0.80**	* 0.84**		0.82**	** 0.79**	
Urban																						
No (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Yes		0.18**	** 0.17***		0.12**	* 0.11***		0.20*	** 0.20***		0.11**	* 0.11***		0.02**	* 0.02***					0.19**	** 0.17***	
Ownership																						
No (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Yes		0.77**	** 0.76***		0.71**	* 0.70***		0.83*	** 0.80***		0.95	0.98		1.15**	* 1.17***		0.68**	* 0.65***		0.84**	** 0.81***	
Interaction																						
Female x married, ab			0.73			0.58			0.82			0.57**			0.64**			0.69*			0.59*	
Female x consens			0.92			0.79			1.20			0.83			1.01			0.97			0.72**	
Female x single			1.36			0.62			0.59*			0.44***			0.94			0.80			0.68**	
Female x sep div			0.63**			0.52*			0.62*			0.43***			1.06			0.74**			0.48***	
Female x widow			0.65			0.42			0.74			0.45*			0.84			0.36*			0.65	
Female x child			1.32*			1.69*			0.94			1.20			1.10			1.04			1.44**	

p<0.05\*, p<0.01\*\*, p<0.001\*\*\*. Age and educational attainment controlled for all models.

households are either better off than male-headed households (Argentina, Ecuador, El Salvador, Mexico, Nicaragua, Panama, Paraguay, Peru, and Venezuela) or that the effect of the sex of the household head is not significant. In other words, when union status, urban or rural setting, ownership, and the presence of children in the household head are accounted for, male-headed households are in poorer conditions than female-headed households. Union status explains most of the changes between Model 1 and Model 2. In general, married heads with the spouse present are better off than any other category. The worst living conditions are associated with single, separated, divorced or widowed heads of households but, as we see in Model 3, union status operates differently for women than for men, with women being more advantaged in most cases.

The interaction of sex and union status shows that, for almost all countries, female household heads tend to fare better than male heads in non-traditional relationship statuses (situations other than married with a present spouse) as shown in Model 3. When the interaction between sex and union status is significant, women are less likely (odds ratios below 1) than men to experience poor living conditions of the same union status, with single women in Chile as the exception. In 12 out of 14 countries, separated or divorced female heads are better off than separated or divorced male heads. The same applies when the household heads are married but the spouse is absent. The interaction between sex and presence of children is statistically significant in six countries. In five of these, the presence of children in households headed by women indicates worse living conditions than the presence of children in male-headed households.

## **CONCLUSIONS**

Female household headship has been on the rise over the past forty years in Latin America. In this essay, we have shown that the percentage of women aged from 35 to 44 heading their households has increased across the 14 Latin America countries examined. Up to the 1970s, female headship rates hovered between 10 to 15 per cent. By 2010, in countries such as Brazil and Uruguay, more than 30 per cent of women reported that they were the household heads. We used direct standardization to decompose trends in female headship over time between compositional and rate change. By compositional change, we refer to (and control for) the increasing number of women aged from 35 to 44 shifting from marriage to less "traditional" family situations such as cohabitation, singlehood, and separation or divorce. Since unmarried women have always been more likely to head households than married women, the compositional change of union status has had a positive impact on the observed rise in female headship, although it is not the main driver. Other than in Peru, where the overall increase is moderate in any case, compositional change accounted for at most half, although in most

countries, less than half, of the female headship increase. The main reason for the increase of female headship in Latin America, therefore, is rate change: the increasing tendency for women to self-report as household heads. Across all countries and union statuses, women in recent censuses were more likely to self-report as household heads compared to earlier ones. This especially applies to married women living with a spouse, who showed, in relative terms, the largest increases in female headship.

Although we assume that the change of the wording of questionnaires from a male-oriented to gender-neutral definition of headship may have had an impact on the increase of female headship, we cannot disregard the possibility that the evolution of attitudes regarding the independence of women or the prevalence of female headship may also have influenced such change in the wording. These trends can be contextualized within the recent changes in family life which some authors have linked with the preliminary traces of the second demographic transition theory (Covre-Sussai et al., 2015; Esteve et al., 2012; Lesthaeghe, 2014; Pellegrino et al., 2008). This transition, precipitated amongst other factors by female emancipation in the society, would favor an increase in female headship rates, not only in family circumstances historically associated with female headship, but for all women, regardless of the family situation.

Our evidence finds a mixed relationship between female headship and living conditions. In eight of the 14 countries examined in this essay (Argentina, Brazil, Chile, Colombia, Costa Rica, Panama, Uruguay, and Venezuela) female-headed households show, overall, poorer living conditions than male-headed households, even after controlling for age and educational attainment. Among the remaining six countries, four showed no significant differences between male-and female-headed households (Ecuador, Mexico, Nicaragua, and Paraguay) and, in two, male-headed households were in worse conditions than female-headed ones (El Salvador and Peru). The inclusion of controls in the models has proven extremely important in explaining the gender gap in living conditions. The gap has become insignificant in four countries (Chile, Colombia, Costa Rica and Uruguay) for which the baseline model indicated worse conditions among female heads than male heads. In three countries (Argentina, Panama and Venezuela), the gap reverses in favor of women, leaving male-headed households at a disadvantage. Only in Brazil, Peru and El Salvador, controls do not change the direction and significance of the parameters. To sum up, the gap in living conditions between femaleand male-headed households reverses or disappears when we control for the union and the parenthood status of the household heads. Once the presence of spouse and/or children are held to be equal for both female and male householders, female-headed households are not more likely to be in poorer living conditions than male-headed households, with the single exception of Brazil.

Our data shows that when households are not headed by coresiding married couples, their living conditions are systematically worse, but the interaction between sex of the household head and union status shows that, in all these cases (i.e. singlehood, cohabitation, separation/divorce, widowhood), households headed by women are less likely to be residing in poorer conditions than those with male heads in the same circumstances. These results suggest that the relationship between female headship and poor living conditions cannot be generalized to all countries in Latin America. It also implies that, in those countries where the relationship does exist, the link between female headship and poverty is mainly attributable to the family circumstances of female versus male household heads. Furthermore, we find that across all family situations except marriage with the spouse present, female-headed households are systematically better off than male-headed households.

Another important finding is that households headed by married persons with the spouse present are systematically better off than any other type of household. From an economic perspective, this is explained because the economies of scale allow minimization of household costs maintaining the same level of utility, something that is less likely to occur in other family arrangements, such as households with a single, divorced or widowed parent (Wakita et al., 2000). However, this argument does not explain why cohabiting couples are disadvantaged compared to married ones. This happens in a society in which cohabitation is more widespread than in any other developing regions in the world. It could be argued that the lower degree of institutionalization of consensual couples versus married couples may lead to a lower investment in household assets. Some authors would support this argument (Brown, 2004; Manning & Lichter, 1996). Since we are using a cross-sectional perspective, we cannot confirm whether there is a selective transition from cohabitation to marriage for individuals with greater economic power.

Overall, our results highlight the need to consider the complexity of family situations when drawing inferences regarding households headed by women (Alvarado Merino & Lara, 2016; Klasen et al., 2015). First, we have shown the evolution of diversifying conditions under which women self-report as household heads in 14 Latin American countries in the past few decades. Female headship has shifted from the historical pattern of single mothers to women who would represent a wider range of partnership statuses. Such heterogeneity may have also contributed towards eroding the link between female headship and poverty, which is far from universal, and where it does pertain, it is mainly driven by the fact that singlehood and lone parenthood is overwhelmingly more common among women than among men. We have shown that, regardless of sex, the living conditions of householders who are not married and who live with a spouse are worse than those in any other family situation, but there is no common pattern across countries as to which is the most disadvantaged family

situation. We have not attempted to explain why in some countries there is no gap in living conditions between females and males and why it disappears or reverses in others. Some studies suggest major gender differences in the ways in which men and women accumulate household assets, and that women are more inclined to amass these resources (Blau & Graham, 1990; Chant, 2003). Another explanation may relate to the unobserved heterogeneity among female householders, whereby only the women with enough income and those with more power to meet the challenges of heading a household would take on this role (Villarreal & Shin, 2008). This translates into a higher capacity for accumulating assets. But the differences across countries require understanding of the country-specific legislation regarding family and public protection. The regional differences in the marriage laws, in the norms surrounding access and transmission of the property of the dwelling and the land (Deere et al., 2012), welfare systems (Sunkel, 2007), limitations to consensual unions, and the rights to receive and provide social support, present a range of challenges and opportunities for one's capacity to accumulate assets on a household level. Further research on the differences in normative and legal systems is indispensable for identifying family situations that require social intervention.

These results challenge female headship or the lone mother *per se* as categories of concern in policies aimed at combatting poverty (Alvarado Merino & Lara, 2016; Moser, 1993). Instead of focusing on these, policy makers should develop strategies that directly address the difficulties faced by single-earner household heads in accumulating assets (Ozawa & Lee, 2006), while taking great care not to frame the issue as one of poor unmarried women. Whether or not families in Latin America are on the verge of breakdown should not be entirely determined by marital stability, but also by the strength of extended family ties and the social networks of individuals (Chant, 2002). The expansion of female headship may indicate a change of attitude favoring women's emancipatory process (Chant, 2015). However, the fact that when both spouses are present, women are still less likely than men to report as head serves as evidence that egalitarianism has yet to be achieved in the region, as women tend to underreport their *de facto* headship, especially when a male partner lives in the household (Chant, 2003; Moser, 1993).

The conclusions of our study are limited due to several constraints. First, a causal relationship between union status and living in poor conditions cannot be established due to the lack of comparable longitudinal data. Second, since we are using household materials and amenities to build asset indices as proxy indicators for poverty, our measurement of poverty differs from that in studies utilizing income or expenditure. Asset indices mostly provide information on the physical household, and women are known to invest more money in the household than men (Chant, 2003) but we do not have information on social capital. Third, the issue of vulnerability also extends beyond asset ownership.

The gender gap related with earning and labor force participation remains wide for most Latin American countries (ECLAC, 2014), and this deprives women of equal opportunities for fully realizing their economic potential. If the question is whether women are disadvantaged or not, women living in male-headed households may be at a higher risk of poverty than those who are able to form their own households (Alvarado Merino & Lara, 2016). Beyond income, equality encompasses self-determination, health, and basic rights (Chant, 2016) which, although beyond the scope of this essay, are pivotal for understanding family relationships and the well-being of women and children in Latin America. In order to enable a much needed and wider consideration of the structural causes of poverty (Alvarado Merino & Lara, 2016), we contribute to the discussion on the living conditions of female-headed households through a large empirical, quantitative approach from a cross-national comparative perspective, scrutinizing the diversity of family situations of women who head households over time.

**Appendix 2.1** The components of the asset indices, most recent censuses

	Argentina	Brazil	Chile	Colombia	Costa Rica	Ecuador	El Salvador	Mexico	Nicaragua	Paraguay	Panama	Peru	Uruguay	Venezuela
Components	2001	2010	2002	2005	2011	2010	2007	2010	2005	2002	2010	2007	2011	2001
sewage	X		X		X	X	X		X	X	X	X		X
cooking fuel	X			X	X	X	X	X	X	X	X	X		X
refrigerator	X	X	X	X			X	X	X	X	X	X	X	X
automobiles														
available		X	X	X	X		X	X	X	X	X		X	
computer	X	X	X	X	X	X	X	X	X	X	X	X	X	X
cellular phone														
available	X	X	X		X	X	X	X	X	X	X	X		
floor material	X		X	X	X	X	X	X	X	X	X	X		X
electricity		X	X	X	X	X	X	X	X	X	X	X		X
wall or building														
material				X	X			X		X				
telephone														
availability	X	X	X	X	X	X	X	X	X	X	X	X	X	X
water	X	X	X	X	X	X	X	X	X	X	X	X		X
roof material	X				X	X	X	X	X	X	X		X	X
toilet	X		X	X		X	X	X	X	X	X	X	X	X
tv set		X	X	X	X		X	X	X	X	X	X		X
internet	X	X			X	X	X	X	X	X	X	X	X	X
washer	X	X					X	X	X	X	X	X		X
radio		X		X	X			X	X		X	X		X

Source: Authors' elaboration based on census data from IPUMS-i

Appendix 2.2 Codification of Assets and Housing Materials

Assets	Coded 1	Coded 0
sewage	10 = "Connected to sewage system or septic tank" 11 = "Sewage system (public sewage disposal)" 12 = "Septic tank (private sewage disposal)"	20 = "Not connected to sewage disposal system"
fuel for cooking	20 = "Electricity"	10 = "None"
C	30 = "Petroleum gas, unspecified"	50 = "Wood, coal, and other solid fuels" 51 = "Wood and other plant
	31 = "Gas piped/utility"	fuels"
	32 = "Gas tanked or bottled"	52 = "Non-wood plant materials"
	33 = "Propane"	53 = "Coal or charcoal"
	35 = "Liquefied petroleum gas" 40 = "Petroleum liquid"	54 = "Charcoal" 55 = "Coal"
	41 = "Oil, kerosene, and other liquid fuels"	56 = "Wood or charcoal"
	42 = "Kerosene/paraffin"	70 = "Other"
	43 = "Kerosene or oil"	71 = "Alcohol"
	44 = "Kerosene or gasoline"	72 = "Biogas"
	45 = "Gasoline"	73 = "Discarded or waste material"
	46 = "Cocinol"	74 = "Dung/manure"
	60 = "Multiple fuels"	75 = "Dung or grass"
	61 = "Bottled gas and wood"	76 = "Solar energy"
	62 = "Propane and electricity"	
	63 = "Propane, kerosene, and	
	electricity"	
	64 = "Propane and kerosene"	
	65 = "Kerosene and electricity"	
	66 = "Other combinations"	
fuel for heating	02 = "Electricity"	01 = "None"
	03 = "Fuel oil, kerosene, other liquid fuels"	08 = "Solid fuel"
	04 = "Kerosene/paraffin"	09 = "Coal"
	05 = "Diesel"	10 = "Wood"
	06 = "Gas"	11 = "Wood or coal"
	07 = "Bottled gas, in tank, liquified"	12 = "Solar"
		13 = "Animal dung"
		15 = "Other"
		16 = "Multiple sources"
refrigerator	2 = "Yes"	1 = "No"
automobiles available	1 = "1 auto"	0 = "No autos"
automounes available	2 = "2 autos"	0 – TVO autos

		3 = "3 autos"	
		4 = "4 autos"	
		5 = "5 autos"	
		6 = "6+ autos"	
		7 = "Have auto, number	
		unspecified"	
computer		2 = "Yes"	1 = "No"
cellular available	phone	1 = "Yes"	2 = "No"
floor material		200 = "Finished"	100 = "None/unfinished (earth)"
11001 111001101		201 = "Cement, tile, or brick"	110 = "Sand"
		202 = "Cement"	120 = "Dung"
			120 - Dulig
		203 = "Concrete"	
		204 = "Cement screed"	
		205 = "Ceramic tile"	
		206 = "Paving stone, cement tile"	
		207 = "Stone"	
		208 = "Brick"	
		209 = "Brick or stone"	
		210 = "Brick or cement"	
		210 = Block of cement 211 = "Block"	
		212 = "Terrazzo"	
		213 = "Wood"	
		214 = "Palm, bamboo"	
		215 = "Parquet"	
		216 = "Parquet, tile, vinyl"	
		217 = "Parquet, tile, marble"	
		218 = "Ceramic, marble,	
		granite"	
		219 = "Ceramic, marble, tile, or	
		vinyl"	
		220 = "Marble"	
		221 = "Mosaic"	
		222 = "Tile"	
		223 = "Tile, linoleum, ceramic,	
		etc"	
		224 = "Tile, cement"	
		225 = "Tile, stone"	
		226 = "Tile, stone, brick"	
		227 = "Tile, stone, vinyl, brick"	
		· · · · · · · · · · · · · · · · · · ·	
		228 = "Tile, vinyl, brick"	
		229 = "Tile, vinyl"	
		230 = "Vinyl, linoleum, etc"	
		231 = "Asphalt sheet, vinyl, etc"	
		232 = "Synthetic, plastic"	

	233 = "Cane"	
electricity	1 = "Yes"	2 = "No"
wall or building material	500 = "Masonry, stone, cement, adobe, metal, glass, and other fabricated materials (sometimes mixed with wood)"	100 = "No walls"
	501 = "Brick, block, stone, or cement"	200 = "Cardboard, scrap, and miscellaneous materials" 201 = "Waste, scrap, or
	502 = "Brick, stone, concrete"	discarded material"
	503 = "Brick, stone, or substitutes (dividing panels made of reinforced concrete)"	202 = "Fabric or discarded material"
	504 = "Brick, stone, or substitutes (dividing panels made of wood)"	203 = "Zinc, fabric, cardboard, tins, and waste material"
	505 = "Brick or tile"	204 = "Cardboard sheet"
	506 = "Brick or stone"	205 = "Plastic sheeting, cardboard"
	507 = "Brick or cement block"	206 = "Makeshift, salvaged, or improvised materials"
	508 = "Brick with plaster exterior"	207 = "Reused materials"
	509 = "Brick without plaster exterior"	300 = "Wood"
	510 = "Burnt or stabilized brick" 511 = "Brick"	310 = "Rough wood" 320 = "Wood or fibercement"
	512 = "Unburnt brick"	330 = "Wood, formica, and other"
	513 = "Unburnt brick with cement"	340 = "Wood or bamboo"
	514 = "Unburnt brick with mud"	350 = "Wood or straw"
	515 = "Concrete"	400 = "Other plant-based materials"
	516 = "Landcrete"	401 = "Plantain leaves and similar material"
	517 = "Cement blocks"	402 = "Bamboo or cane"
	518 = "Cement blocks or brick"	403 = "Bamboo, sawali, cogon, nipa"
	519 = "Cement blocks or brick, unfinished"	404 = "Straw or bamboo"
	520 = "Cement and adobe bricks"	405 = "Grass, straw or reed"
	521 = "Cement and stone block"	406 = "Reed, bamboo, or palm"
	522 = "Reinforced concrete, pre- cast concrete panels, or steel skeleton framed concrete"	524 = "Adobe"

523 = "Concrete, reinforced concrete, blocks, panels"

525 = "Adobe walls with plaster exterior"

526 = "Adobe walls without plaster exterior"

527 = "Adobe with cement exterior"

528 = "Adobe (tabique, quinche)"

529 = "Wood and earth adobe"

530 = "Wood and cement

adobe"

531 = "Mud or adobe"

532 = "Pressed dirt (similar to adobe)"

533 = "Clay"

534 = "Coated clay/mud with sticks/cane"

535 = "Clay or clay-covered sticks"

536 = "Netted bamboo or cane with mud"

537 = "Bundle of mud, straw, other materials"

538 = "Mud with wood/wattle"

539 = "Pole and mud"

540 = "Mud with cement"

541 = "Unfinished lathe and plaster, stucco, etc."

542 = "Stone"

543 = "Hand-laid stone"

544 = "Quarried stone"

545 = "Cut stone and concrete"

546 = "Cemented stone"

547 = "Stone with clay"

548 = "Blocks of light material"

549 = "Prefabricated material"

550 = "Asbestos"

551 = "Metal or asbestos sheet"

552 = "Metal or iron sheet"

553 = "Metal or fibercement

sheeting"

554 = "Galvanized iron or aluminum"

555 = "Tin"

556 = "Glass"

557 = "Cloth"

558 = "Covintec panels"

559 = "Mixed material"

		560 = "Mixed material: part wood; part concrete, brick, or stone" 561 = "Wood plastered with clay, adobe, other materials; wood pressed panels; rolled mud bricks; etc." 570 = "Mainly permanent materials"
telephone availability	2 = "Yes"	1 = "No"
water	10 = "Yes, piped water" 11 = "Piped inside dwelling" 12 = "Piped, exclusively to this household" 13 = "Piped, shared with other households" 14 = "Piped outside the dwelling" 15 = "Piped outside dwelling, in building" 16 = "Piped within the building or plot of land" 17 = "Piped outside the building or lot" 18 = "Have access to public piped water"	20 = "No piped water"
roof material	10 = "Masonry, concrete, clay tile, or tiles of unspecified type"  11 = "Concrete or cement"  12 = "Reinforced concrete (slab)"  13 = "Cement or sheet metal"  14 = "Tile, unspecified"  15 = "Clay tile"  16 = "Tile or cement"  17 = "Modern tiles, industrial"  18 = "Traditional tiles, locally made"  19 = "Tile or flat stone"  20 = "Fibercement or plastic"  21 = "Asphalt or laminate cover"  22 = "Tile, cement, asphalt"  23 = "Asphalt tile"  24 = "Slate or tile"  25 = "Slate or asbestos"	40 = "Wood and other plant materials" 41 = "Wood" 42 = "Wood, including bamboo" 43 = "Bamboo" 44 = "Cogon, nipa, anahaw" 45 = "Thatch (straw, grass, leaves, palm, etc.)" 46 = "Cane, wood, straw" 47 = "Grass" 48 = "Papyrus" 49 = "Banana leaves or fiber" 50 = "Palm or makuti" 51 = "Plant material with clay" 52 = "Grass and mud" 53 = "Straw, bamboo, polythene" 60 = "Mud or earth" 61 = "Clay"

	26 = "Asbestos"  27 = "Adobe"  28 = "Tiles or wood planks"  30 = "Metal"  31 = "Sheet metal"  32 = "Zinc or tin"  33 = "Tin"  34 = "Sheet metal or other sheet material"  35 = "Sheet metal, tile, slate"	70 = "Cardboard, scrap, and miscellaneous materials" 71 = "Discarded or scrap material" 72 = "Cardboard" 73 = "Plastic" 80 = "Other, unspecified"
toilet	20 = "Have toilet, type not specified"	10 = "No toilet"
	21 = "Flush toilet"	11 = "No flush toilet" 22 = "Non-flush, latrine" 23 = "Non-flush, other and unspecified"
television set	20 = "Yes, color or black-and-white not specified" 21 = "1 television" 22 = "2 televisions" 23 = "3 televisions" 24 = "4 televisions" 25 = "5 televisions" 26 = "6 televisions" 27 = "7 televisions" 28 = "8 televisions" 30 = "Yes, color only" 31 = "1 color tv" 32 = "2 color tvs" 33 = "3+ color tvs" 40 = "Yes, black-and-white only" 41 = "1 black-white tv" 42 = "2 black-white tvs" 43 = "3+ black-white tvs" 50 = "Yes, both color and black-and-white" 52 = "2+ color and black-white tvs" 53 = "3+ color and black-white tvs" 54 = "4+ color and black-white tvs"	10 = "No"
central heating	2 = "Central heating, not specified"	1 = "No heating"

	3 = "Collective central heating"	6 = "No central heating/heating unknown"
	4 = "Individual central heating"	
	5 = "Other heating, not central"	
radio	2 = "Yes"	1 = "No"
washer	2 = "Yes"	1 = "No"
	3 = "Automatic of semi-	
	automatic"	
	4 = "Wringer or other non-	
	automatic"	
internet	2 = "Yes"	1 = "No"

Family Matters: Three Essays on Living Arrangements across Societies

# CHAPTER 3: LIVING ARRANGEMENTS OF MIGRANTS BY GENDER, GENERATION, AND TIME: THE CASE OF MOROCCANS IN SPAIN

## **INTRODUCTION**

This essay investigates the living arrangements of Moroccan migrants and their descendants in Spain and compares them with those of Moroccans in Morocco and Spaniards in Spain. Among the various migrant communities hosted by Europe, Moroccans have become one of the largest and most geographically dispersed (de Haas, 2014). Over three million people of Moroccan descent currently reside in Europe, a figure that rose ten-fold in the course of four decades (de Haas, 2014). Early Moroccan migrants gravitated toward France, Belgium and The Netherlands, but, since 2000, Spain has surpassed all other European countries as the destination of Moroccan migration (de Haas, 2014). The population of Moroccans in Spain has grown from around 173,158 in 2000 to 773,995 in 2011 according to the Spanish Statistical Office (INE). By 2011, Spain has become home to roughly 20% of all Moroccans residing in Europe (Aneas et al., 2012). The surge of Moroccan migration means that young migrants and the children of migrants are becoming a more significant population in European cities than ever before (Tasan-Kok et al., 2014), and Spain is no exception. Despite the importance of Moroccan migration in Spain, research on their assimilation and acculturation processes, especially for the second generation is scarce.

Most previous studies on Moroccan migrants and their descendants focus on those living in Belgium, France, and The Netherlands (Schoenmaeckers, et al., 1999; Crul & Doomernik, 2003; Crul & Vermeulen, 2003, Cebolla Boado & López Sala, 2015; De Valk & Liefbroer, 2007; Huschek et al., 2011). These three countries generated extensive studies because they have experienced mass migration from Morocco earlier, and as a result, are homes to far more second (even third) generation Moroccans. By contrast, the timing of migrant arrival has been largely overlooked in Spain. The 1.5 and second generations are often clumped together as one group (Aparicio, 2007; Crul & Vermeulen, 2003; Heelsum & Kooman, 2016; Vitali & Arpino, 2015), resulting in the loss of nuance between those who are born in the country of destination and those who are born outside of it but educated inside, and who may have developed "bicultural strategies of response and adjustment to that unique

position" (Rumbaut & Ima, 1988). The need to understand the social outcomes and integration process of 1.5 and second generations in its more recent destinations has become increasingly urgent and important (Portes et al., 2016).

Existing research on second generation Moroccans in Spain generally focuses on educational, economic, and marital outcomes (Alarcón et al., 2014; Bertran Tarrés et al., 2016; Bradatan & Sandu, 2012; Cortina Trilla et al., 2008; Esteve & Bueno, 2010; Esteve & Bueno, 2012; Esteve & Cortina, 2012; Esteve & Jiménez, 2010; González-Ferrer, 2006; Miguel-Luken & Solana-Solana, 2016; Serret et al., 2013). Few studies scrutinize the living arrangements and family situations of migrants in Spain (Vitali & Arpino, 2015), and even less its second generation. To fill this gap, we ask whether the living arrangements of Moroccans in Spain resemble those that of native Spaniards, or are more akin to Moroccan who stay in Morocco. Our aim is to see whether a pattern of assimilation to the host country emerges in terms of timing of leaving parental home, union formation and childbearing, from one generation to the next. At the same time, we also ask whether they are dissimilating, or moving away from traditional Moroccan family norms. We examine three specific aspects of living arrangements of Moroccans in Spain: spousal, parental and child coresidence, under the dimensions of generation, gender and time. The gender dimension enables us to distinguish between Moroccan men and women who have had different migratory experiences and have quite dissimilar patterns of union formation and coresidence in Morocco. The time dimension is critical for comparing Moroccans in Spain in 2001 and 2011, during which time the population has grown more than four times. The sex ratio, as a result of the feminization of migration, or the increase of women migrating independently in search for jobs instead of as spouses (Campani & Chiappelli, 2013), has also contributed to a more sex ratio balanced Moroccan community in the span of a decade.

Our study offers an original perspective, not only in terms of Spanish research but also to the comparable work done in other European countries. Overall, existing literature on Muslim migrants in Europe tends to link early marriage and high fertility to cultural differences between migrant population and the mainstream population in the receiving country, offering little evidence from comparative large-scale quantitative data from both the sending and the receiving country (de Valk & Billari, 2007; Zorlu & Mulder, 2011). Without consideration of population and space at comparable time points, one can only speculate on the current trends of living arrangements in Morocco. To overcome this gap, we utilize the most recent censuses from both Spain and Morocco. We focus our analysis on the first, 1.5, and second generations of Moroccans in Spain, using native Spaniards in Spain and native Moroccans in Morocco as comparison groups to better understand migrant adaptation and family change processes.

This approach is made possible due to the availability of both Moroccan and Spanish censuses of various time points in the IPUMS international database (Minnesota Population Center, 2015). The recent inclusion of parental birthplace in the Spanish 2011 census questionnaire facilitates the identification of second generation Moroccans in Spain for the first time. The combination of these two data sources offer the unique opportunity to embark on a new endeavor to enrich the debate on migrants' living arrangements in Spain.

## **BACKGROUND**

#### MOROCCAN MIGRATION IN SPAIN

Europe has undergone large-scale Muslim immigration for decades, with early starters such as The Netherlands experiencing its migration peak in the 1970s (Crul & Vermeulen, 2003), followed by Belgium in the 1990s (Lievens, 1999), then latecomers such as Italy and Spain in the 2000s (Fokkema & de Haas, 2015). The majority of Muslim immigrants are from North Africa and the Middle East, with Turks and Moroccans as the two largest groups (Ennaji, 2014). The geographical proximity and historical links between Spain and Morocco brought constant migratory movements between the two sides, but substantial migration flows from Morocco to Spain did not occur until recent decades (Gabrielli, 2015). Although the petroleum crisis of 1973 disrupted the general economic migration flow to Western Europe (Reher, et al., 2011), from the mid-1980s onward, Spain emerged as the new destination for Moroccan migrants due to demand for low skilled labors in agriculture, construction and services (de Haas, 2014; Ennaji, 2014). Moroccans at first settled mainly in areas in need of agricultural and service oriented labor, such as Catalonia, Madrid, and Andalusia, but recent Moroccan migration has shown an increase in geographic spread to include less traditional destinations such as La Rioja, Navarre, Aragon, etc. (Gabrielli, 2015). Within cities, evidence has shown that in cities with high concentrations of migrants, such as Barcelona, Moroccans tend to cluster in low income neighborhoods, leading to high residential segregation (Bayona-i-Carrasco & Achebak, 2016; Galeano & Sabater, 2016).

The demographics of Moroccans in Spain, influenced by periods of migratory ebb and flow, have been changing rapidly. Earlier settlements tended to be of temporary nature, yet tougher border restrictions and controls ironically pushed many migrants to illegally settle permanently in the 1990s (de Haas, 2014). The earlier settlers were mostly unmarried economic male migrants, whereas most earlier female migrants arrived as spouses (Cortina Trilla et al., 2008; Esteve & Bueno, 2010; Esteve & Bueno, 2012; Esteve & Cortina, 2012; Esteve & Jiménez, 2010) with an increase of female

economic migrants working in the domestic sectors in the more recent waves (Pham, 2013; Ennaji, 2014). Overall, evidence point to the fact that the sex ratio of Moroccan still skews towards male, although female migrants have increased significantly over the years due to family reunification, in combination with female economic migrants (Campani & Chiappelli, 2013). In major immigrant cities like Barcelona, Moroccan children now make up the largest foreign population in school (de Miguel-Luken & Solana-Solana, 2016). Combined with the issue of spatial dissimilation (Galeano & Sabater, 2016) which inevitably affects the demographic distribution of children by nativity and origin across school zones, the need to understand the integration process of Moroccans today is pivotal and pressing in constructing a tomorrow that is inclusive to all.

#### LIVING ARRANGEMENTS OF MOROCCAN MIGRANTS AS A PROXY OF FAMILY DYNAMICS

Muslim migration sparks particular interest in Europe, as transnational individuals of vastly different customs, norms, and cultural background become the agents of change and development (Dumitrescu & Tanase, 2016; Ennaji, 2014) across various migrant recipient countries. One of the most pressing concerns for policymakers is that poor migrant integration might lead to a new urban underclass, leading to issues that entail a social cost (Corkill, 2001) and compromise social cohesion. Hence, the study of assimilation, with its many types, paces, and manifestation, has been one of the major issues in the research agenda.

The literature on assimilation has been dominated by the United States, an immigrant country pioneering a long history of migration studies on topics such as segmented assimilation, transnationalism, etc. Classical assimilation theorists such as Milton Gordon (1964), Richard Alba, and Victor Nee (2009) argue that migrant generations tend to assimilate to the mainstream population following a straight-line convergence (Brown & Bean, 2006). Scholars such as Nathan Glazer and Daniel P. Moynihan (1975) and Alejandro Portes and Min Zhou (1993) support a model that includes racial and ethnic disadvantages which blocks assimilation, while Sociologists such as Herbert J. Gans describe the assimilation as more "bumpy" than "straight-lined" (Brown & Bean, 2006).

Research in Europe further built on the US-born theoretical frameworks, incorporating considerations of its own unique challenges. European societies are fundamentally different from North American societies demographically, politically and socially. Most importantly, migration flows to Europe are relatively recent and comparatively low. Despite the long history of mass immigration to France and other large-scale circular movements in Europe, migration studies did not take off in Europe until post World War II (Fitzgerald, 2015). The European migration scholarship, exemplified by the Netherlands, emphasizes integration in the form of education and employment of migrants and their

children as the key to achieve successful assimilation into the Dutch society. Evidence have shown that Turkish and Moroccan youth tend to underperform educationally compared to their Dutch counterparts, leading many second generation individuals to dead-end and low quality jobs (Crul & Doomernik, 2003). On the flip side, migrants who were well-educated prior to migration or accumulated migration experience at a young age are more likely to achieve higher level of sociocultural integration (Fokkema & Haas, 2011).

Of the many dimensions we can use to measure migrants' assimilation or behavior (e.g. work, education, health), we focus on family behavior, and explore living arrangements as an indirect approximation of such family decisions and outcomes in this essay. Most research on migrant generations highlight educational (Crul & Doomernik, 2003; de Miguel-Luken & Solana-Solana, 2016) or marital outcome (Esteve & Bueno, 2010; Esteve & Bueno, 2012; Esteve & Cortina, 2012; Esteve & Jiménez, 2010), or spatial assimilation (Andersen, 2016; Galeano & Sabater, 2016; Hardwick, 2015). Family structure, such as the fertility level and coresidential patterns have been more challenging to scrutinize due to data constraints in survey based demographic studies, which may not offer enough cases to study migrant groups individually, or distinguish between migrant generations. Despite the indispensable role it plays in social stability, family support in the form of coresidence with kin of migrants and the descendants of migrants is far less studied (Kulu & González-Ferrer, 2014). The study of living arrangements serves as a proxy for uncovering family life, as it provides an overall glimpse of household structures, and on an individual level, the propensity and timing one leaves parental home, enters union and have children. In particular, we focus on coresidence with parents, coresidence with spouses and coresidence with children. We are aware of the many interdependencies that exist between these three dimensions as the timing of leaving parental home often coincides with other life events such as marriage or finding a job (Billari & Liefbroer, 2007). However, examining the three dimensions of coresidence offers interesting insights to the patterns of family formation patterns of family life among Moroccan communities in Spain.

Existing literature on living arrangements of migrants tend to focus on young adulthood, a critical period of transition and emancipation (Arpino et al., 2015; Adamopoulou, 2016; Billari & Liefbroer, 2007; de Valk & Billari, 2007; Ferrari & Pailhé, 2017; Vitali & Arpino, 2015; Zorlu & van Gaalan, 2016;). Previous research has shown in the cases of France, Belgium, and the Netherlands, Moroccans are more likely to marry (Huschek, et al., 2011; Pailhé, 2015), leave parental home (Zorlu & Mulder, 2011; Zorlu & van Gaalan, 2016), and bear children (Garssen & Nicolaas, 2008) earlier

than their native European counterparts. This is due to not only structural differences between the migrants and the host population (Pailhé, 2015), but also due to cultural factors and the level of the migrants' social embeddedness (Huschek et al., 2011). For instance, Dutch values tend to emphasize individual accomplishment and autonomy, whereas migrants from countries such as Morocco show signs of observing more traditional family lifestyle, where interdependence among members is the norm (de Valk & Schans, 2008). In the case of Spain, where family life is also of great importance and highly valued, little is known in what ways Moroccans may differ from Spaniards in living arrangements among kin.

The analysis of Moroccan family behaviors will be based on three dimensions: gender, generation, and time. Regarding gender, existing literature on Moroccans in Europe suggests that men and women follow distinct trajectories in the timing or preference of family transition (de Valk & Liefbroer, 2007) which oftentimes results from earlier union formation (de Valk & Billari, 2007). The gender differences often emerge as the manifestation of divergent paths in men and women's family negotiation (Bertran Tarrés et al., 2016) and the integration (Fokkema & de Haas, 2015) processes. In the European context, Moroccan women adapt to changing gender relations, often in a transformative manner as they discover a new degree of freedom (Ennaji, 2014). However, Moroccan families are generally male-dominated and women are often seen as "conduits of family honor" (Pham, 2013). Findings in the Netherlands show that although Moroccan girls are generally more likely to enter union earlier, education is negatively associated with early union formation, hence highly educated girls are the exception (Huschek et al., 2011; Vitali & Arpino, 2015).

Other than gender, migrant generation also influences one's living arrangements. First generation migrants often live in non-nuclear family households (Van Hook & Glick, 2007). Those who do live with family members may also experience different timing and patterns of leaving home compared to the native population, due to factors beyond values and culture, such as the facilities of the welfare state and intergenerational tension (Zorlu & Mulder, 2011). Moreover, generational differences in family values and practices have also been found among first, 1.5, and second generations. Oftentimes, these differences are non-linear and multi-faceted, as some young Moroccans in Europe develop plural and interethnic identity, which significant differs from that of their parents' (Ennaji, 2014). Second generation, or the children of first generation migrants, may either show signs of departure from their parents' customs, resulting in intergenerational discrepancies (Bordone & de Valk, 2016; Merz et al., 2009; Phinney et al., 2000; Ruiz-Román & Rascón, 2016) or strictly adhere to the values of their parents' sending country through the expression of "reactive ethnicity" (Diehl & Schnell, 2006; Levitt, 2009; Rumbaut, 2008; van Heelsum & Koomen, 2016).

Finally, the time dimension refers to the historical context in which family decisions take place. In a more practical sense, the differences in living arrangements among migrant generations also stem from distinctive opportunities and constraints. Migration is a disruptive demographic event, which often separates previously coresidential kin when some members of the family migrated while others stayed behind. Many young male migrants ventured across the border alone without their parents (Empez Vidal, 2015) and young female migrants often arrived in Spain as dependent spouses under the family unification scheme (Ennaji, 2014; Esteve & Bueno, 2010; Esteve & Bueno, 2012; Esteve & Cortina, 2012; Esteve & Jiménez, 2010). Depending on the pool of available kin and potential partner in the country of destination, earlier migrants' timing and patterns of leaving parental home, forming union and bearing children may differ significantly from those of the more recent migrants. The timing of arrival is important in determining the coresidential pattern of Moroccans in Spain due to the relatively recent surge of this population, from around 59,000 in 1990 (de Haas, 2014) to over 650,000 by 2012 (Portes et al., 2016). Earlier migrants may have had fewer kin and connections in Spain in the 80s or 90s, while more recent migrants benefit from a more established Moroccan community in Spain at the present. The high level of endogamy (Reniers 2001; Rodríguez-García, 2006) and spousal "import" as a strategy for migration (Esteve and Jiménez, 2010; Lievens, 1999) make marriage a force of shaping migration and migration an event that influences marriage outcome. Referencing an earlier census, therefore, allow us to take the stock and flow of Moroccans in Spain in context when considering living arrangements of individuals.

One crucial factor that determines living arrangements of individuals is socioeconomic status (Adamopoulou, 2016; Ferrari & Pailhé, 2017). Moving away from one's parents requires economic resources which may either be provided by the state in the form of welfare or generous housing policy (Zorlu & Mulder, 2011) or earned income. Considering Spain's limited welfare and housing arrangements (Arpino et al., 2015) compared to countries such as the Netherlands (Zorlu & Mulder, 2011), one's employment status becomes particularly important in determining the propensity for one to leave parental home to start his or her own household. This essay controls for both educational outcome and employment status for men and women to gain a clearer picture on the propensity for one to coreside with parent(s), spouse and child(ren).

When drawing the comparison between migrants and the native, mainstream population, we also need to keep in mind that the Spanish family system is unique to that of other European countries, such as the Netherlands or Germany, where many migrant family research take place. Despite the fact that Spanish society generally accepts a high level of individualism (Dominguez-Folgueras & Castro-Martin, 2013), family values and social cohesion in Spain remain strong compared to other European

countries (Daatland & Lowenstein, 2005; Reher, 1998; Schwanitz & Mulder, 2015). Mediterranean youths also tend to leave parental home later than youths from countries such as France and Germany (Giuliano, 2007). We expect a large percentage of Spanish young adults to be living with parents prior to forming union, which may not show as stark of a contrast against Moroccan norm of strong family ties (Ruiz-Román & Rascón, 2016).

In summary, we hypothesize that the first generation Moroccan migrants are likely to be in union and live with children at younger ages, or in other words, behave more similarly as Moroccan stayers. Due to their migration experience, they are unlikely to live with their parents. We expect the living arrangements of both the 1.5 and second generation to fall between the levels of parental, spousal and child coresidence of native Spanish population and native Moroccan population, as a manifestation of their plural cultural identities (Ennaji, 2014) which are the product of exposure to both Moroccan and European cultural norms. If Moroccans in Spain reflect similar family trajectory as Moroccans in the Netherlands, we expect to see Moroccan females observing more "traditional" timing for transition to adulthood (de Valk & Liefbroer, 2007; de Valk & Billari 2007), which include leaving parental home, marrying, and having children at younger ages, as they are more perceptive to factors such as parental influence (Pailhé, 2015), with the exception of highly educated females (Huschek et al., 2011; Vitali & Arpino, 2015).

## **DATA AND METHODOLOGY**

Our analyses draw on Moroccan 1994, Moroccan 2004, and Spanish 2001 5% census samples provided by the Integrated Public-Use Microdata Series International (IPUMS-i) and the 10% 2011 Spanish Census published by the Spanish Statistical Office (INE). IPUMS-i provides harmonized person-level microdata organized into households and facilitates reliable cross-national comparisons. The inter-family relationships are identifiable with pointer variables, which specifically show mother-child, father-child, and spousal relationships among family members. The focus of this study is living arrangements of Moroccan-Spanish young adults from 20 to 34 years of age, a period of transition, which often entails leaving the parental home and entering into union or parenthood. Coresidence only implies the presence of one's father, mother, spouse, or child(ren) in the household, and does not directly signify whether one is married or not, or has children or not. Rather, it is an indirect measurement of leaving the parental home, union formation and fertility. Although census data are cross-sectional rather than longitudinal, they serve as a proxy for studying change over time, with the added benefit of accurately capturing household structures and family characteristics on a large-scale.

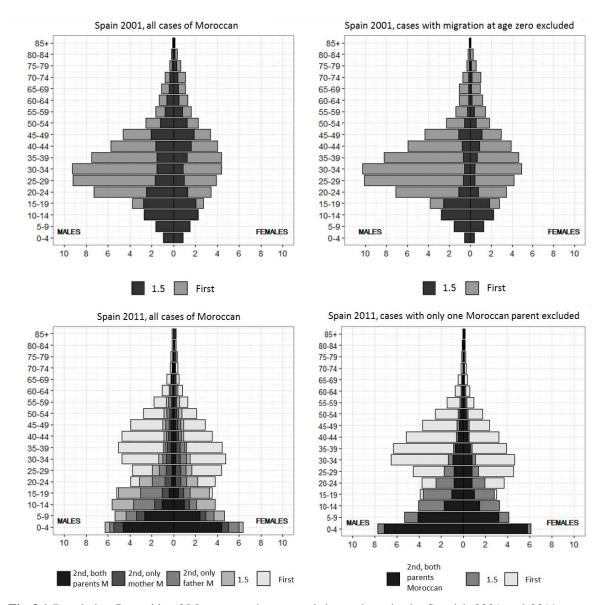
The data cover 316,511 unweighted cases from Morocco 1994, 374,973 cases from Morocco 2004, 465,047 cases from Spain 2001, and 611,493 from Spain 2011.

The four population pyramids in Figure 3.1 show the unweighted percentage of Moroccans in Spain by sex, age, migrant generation in the Spanish 2001 and 2011 censuses. The two top pyramids show the population distribution by sex and age for first and 1.5 generation Moroccans in Spain in 2001. Second generation Moroccans cannot be identified in the 2001 census due to the lack of information on the parental birth place. The bottom two pyramids show population distribution by sex and age for first, 1.5 and second generation Moroccans in Spain in 2011. The two left-hand pyramids are based on all cases, regardless of recording error or methodological considerations. The two right-hand pyramids reflect the final population that we study.

The generations of Moroccan migrants are separated into first, 1.5, and second generations. Native Spaniards, those born in Spain with two Spanish born parents, are not shown in Figure 3.1. The first generation migrants are those who were born in Morocco, and arrived in Spain at the age of 16 or older. The sample size for this group is 4,369 in 2001 and 6,178 in 2011. As shown in Figure 3.1, first generation migrants form the biggest group of the migrant generations. They tend to cluster around working ages in both the 2001 and 2011 census samples. There are more cases of men than women in both time points, particularly in 2001.

We define the 1.5 generation as those who were born in Morocco, but migrated to Spain as children under 16, which gave us a sample size of 1,360 in 2001, and 1,824 cases in 2011. In 2001, a strikingly large number of 762 (13.3% of all cases) individuals appear as having migrated in the year of birth. As many as 109 cases (1.9% of total cases) show that the year since migration exceeds the age of the individual, due to apparent data recording error. Previous studies using the 2001 Spanish census (Vitali & Arpino, 2015; Cortina Trilla et al., 2008) have also noted that the unusually high number of individuals recorded as having migrated at age 0 and suggested this figure should be eliminated from the analysis. In keeping with these studies, we excluded individuals who migrated at age 0 and -1, thus dropping 871 cases, and leaving 489 cases for 2001, as shown in the top right pyramid in Figure 3.1.

The second generation Moroccans are defined as those who are born in Spain but are children of Moroccan-born individuals. Due to the lack of information on the birthplace of parents in the 2001 census, we cannot identify the second generation in this particular census. The variables of birthplace of mother and father have since been added to the 2011 census, which enables us to identify individuals born in Spain of Moroccan parents. For the 2011 census, those born to one Moroccan



**Fig 3.1** Population Pyramids of Moroccan migrants and descendants in the Spanish 2001 and 2011 census microdata samples (unweighted) (Source: Authors' elaboration based on the census samples from IPUMS-i and INE)

parent and one non-Moroccan parent (2,675 cases) were excluded from the study after we concluded that many were likely to be descendants of Moroccan-born Spaniards who were civil servants in the Moroccan protectorates between the years 1912 and 1958, after having conducted a test which proved that the younger generations of this group are geographically distributed in different provinces than the older generations. Hence, our final selection of second generation is defined as those who are born in Spain with two Moroccan-born parents, yielding 475 cases, as reflected in the bottom right pyramid in Figure 3.1.

Figure 3.1 shows that mass migration of Moroccans to Spain is a rather recent phenomenon, since the 1.5 and second generation individuals are mostly children or young adults. Most of the first generation Moroccan migrants, comprised of slightly more men than women, cluster around the 30 to 50 age group, with a small proportion older than 60. The 1.5 generation encompasses mainly young adults, with very few people older than 25. Those born in Spain, second generation Moroccans are still young, forming a solid spread in the pyramid in the under-10 age group.

After defining our groups of analysis, we computed the percentages of young adults aged from 20 to 34 living with their parent(s), spouse<sup>4</sup>, and/or child(ren) by sex, country, year, and origin and migrant generation. Since a large percentage of first generation migrants tend not to live in traditional nuclear households, we created the group "living in other arrangements" to capture those who were not living with parents, children, nor spouse. They may have been living with other relatives, unrelated people, or alone, but our focus is on parental, child and spousal coresidence. We use the category merely to account for those who do not fall into the coresidential categories that render the transition to adulthood measurable. The category Moroccans in Morocco covers all men and women aged from 20 to 34 at the time of the 1994 and 2004 censuses.

Finally, we use logistic regression to show the trend of young adults living with parent(s), spouse, and/or child(ren) using odds ratios, controlling for age, origin and migrant generation, educational attainment, and work status. Whether one is living with a spouse or not is controlled in the model of living with child(ren), as coresidence with children for young adults is highly correlated with union formation. Educational attainment is categorized as having "less than primary", "primary completed", or "secondary completed and above". We combined those who have completed university with those who have completed secondary schooling, because the youngest age group of interest, 20 to 24, may not have completed university yet. To ensure data comparability, we harmonized Spain 2011 variable for educational attainment (ESREAL) with the IPUMS-i variable for education (EDATTAIN) in accordance with the standard of IPUMS-i. Work status is a binary variable that separates those who were working and those who were not working at the time of the census.

<sup>&</sup>lt;sup>4</sup> To enhance comparability, we consider live-in domestic partner in Spain as spouse-equivalent and do not differentiate between married and unmarried partners who live in the same household.

## **RESULTS**

#### **DESCRIPTIVE FINDINGS**

Table 3.1 shows the percentage of individuals aged from 20 to 34 living with parents, spouse, and children by sex, age, country, year, origin and migrant generation. With age, one's propensity of living with parents decreases while the likelihood of living with a spouse and/or children increases. This is universally true for all groups, regardless of year, sex, origin and generation. However, with regard to the level of parental, spousal, and child coresidence, the discrepancy among age groups is different for each migrant generation. For example, the percentages of native Spanish men in 2011 and of native Moroccan men in 2004 aged 20 to 24 who lived with parents were similar (91.2% and 85.7% respectively) but, as we compare these two groups at older ages, the difference between the two widen. At the ages of 30 to 34, parental coresidence among native Moroccan men in 2004 (54.4%) is significantly larger than among native Spanish men (35.5%).

The two time points in Morocco and Spain are telling of the recent changes of coresidential patterns. In Morocco, parental coresidence has remained stable for both men and women of all age groups between 1994 and 2004. However, spousal and child coresidence have decreased significantly for both sexes, especially for women. The native Spaniards depict similar trends. Gender differences among native Moroccans are larger than among native Spaniards. In 1994, 83.8% of Moroccan men aged 20 to 24 lived with their parents, compared to 55.3% Moroccan women of the same age group, yielding a 28.5 percentage point difference, whereas the same gender gap among native Spaniards show a mere 2.8 percentage point difference. The gender gap in both populations barely changed in the more recent censuses.

Moroccans residing in Spain show remarkable migrant generational differences in their living arrangements among the first, 1.5, and second generations. First generation Moroccans in Spain form a unique group that sets themselves apart from the other groups because migration acts as a disruptive force against family coresidence, especially among men. Up to 40.7 % of first generation men aged from 20 to 24 and 43.4 % of those aged from 25 to 29 in 2011 were living in households that did not include their parents, spouses, or children. The percentages living in other arrangements among Spanish native were only 6.2 % and 12.6 % for the 20 to 24 and 25 to 29 age groups respectively. Across generations of Moroccans in Spain, women are less likely to live in other arrangements than men. First generation Moroccans are least likely to coreside with parents, followed by 1.5 and second generations. Compared with whopping 87.8 % of native Spanish men aged from 20 to 34 and 88.3 %

native Spanish women of the same age group, only 47.4 % of the first generation Moroccan men and 17.2 % of the first generation Moroccan women of the same age group lived with parents in 2011.

In Spain, where multigenerational households are less common than in Morocco, coresidence with parents often decreases when one begins to live with a spouse. Compared to native Spanish men, the Moroccans in Spain reside with spouse in higher numbers, even at young ages. The stark contrast in spousal coresidence between Moroccan men and women, with 12.5 % of Moroccan first generation men ages 20 to 34 compared to 67.1 % of Moroccan women of the same age group living with their spouse, seems to confirm the fact that many Moroccan men arrived in Spain single while most Moroccan women arrived as a spouse. As a result, coresidence with children is also far higher for Moroccan women than Moroccan men. Both spousal and child coresidence decreases by migrant generation (from first to 1.5 to second). However, with the exception of second generation men, Moroccan migrants and descendants coreside with spouse and children at higher rates than native Spaniards.

When we compare the coresidential patterns of Moroccan in Spain in 2001 and 2011 censuses, earlier migrants were much likely to live in non-nuclear households. The percentage of first generation migrants living in other arrangements was roughly twice as high in 2001 compared to 2011 for both men and women. The percentage of first generation individuals as young as 20 to 24 living with parents was 11.4 for both sexes. Even 1.5 generations, those who migrated as children, were very unlikely to live with parents at young ages, with 23.4 % of men and 25 % of women aged 20 to 24 living with parents. Similarly, fewer first generation migrants lived with spouses and children compared to the same groups in 2011.

#### **LOGISTIC REGRESSION**

Next, we use binomial logistic regression to analyze the living arrangements of Moroccans in Spain aged 20 to 34 for both sexes separately as shown in Table 3.2. Level of coresidence with parent(s), spouse, and child(ren) are expressed in odds ratios, with native Spaniards as the reference group. Values above 1 signify higher levels of coresidence, and values below 1 show lower levels of coresidence, than the native Spaniards. We control for age in all models, as it has a positive effect on spousal and child coresidence, and a negative effect on parental coresidence for young adults. In our base model, Model 1, we only consider the independent variable of migrant generation, comparing the first, 1.5 and second generation Moroccans in Spain with native Spaniards and native Moroccans in their binary outcome of living or not living with parents(s), spouse, and child(ren). In Model 1, Moroccans in Spain are less likely to live with parents than both native Spaniards and native

**Table 3.1** Percentage of individuals ages 20-34 living with parent(s), spouse, child(ren), or other arrangements (Source: Authors' elaboration based on census data from IPUMS-i)

					M	ale									Fen	nale				
	Mor	оссо				Spa	in				Mor	оссо	Spain							
	1994	2004		200	)1			201	1		1994	2004		200	)1			20	11	
	NM	NM	1	1.5	2	NS	1	1.5	2	NS	NM	NM	1	1.5	2	NS	1	1.5	2	NS
Living with Parent(s)																				
20-24	83.8	85.7	11.4	23.4	-	87.8	47.4	77.0	85.6	91.2	55.3	58.4	11.4	25.0	-	82.9	17.2	59.4	72.1	88.3
25-29	69.2	72.2	4.1	21.5	-	65.0	17.5	51.9	56.3	69.3	35.8	40.9	3.5	21.6	-	53.8	6.1	20.1	35.9	57.6
30-34	49.5	54.4	1.7	12.7	-	34.8	7.8	39.9	30.7	35.5	21.1	29.2	2.6	14.1	-	25.0	3.3	12.8	21.7	25.1
Living with Spouse																				
20-24	8.93	6.8	4.5	6.3	-	4.2	12.5	7.7	2.2	3.1	33.0	32.1	50.6	27.0	-	10.0	67.1	31.0	22.1	6.7
25-29	31.59	28.1	12.8	13.5	-	22.9	39.2	33.6	17.2	18.8	52.5	49.2	60.0	46.0	-	36.3	76.1	65.3	37.2	31.5
30-34	59.72	53.5	29.3	39.4	-	52.6	58.0	57.8	47.7	48.8	67.0	60.1	64.2	60.7	-	64.6	78.0	73.7	59.4	60.6
Living with Child(ren)																				
20-24	5.9	3.9	1.5	4.2	-	2.0	4.1	3.4	1.1	1.0	30.4	27.3	28.4	19.0	-	5.9	47.9	22.2	10.5	3.9
25-29	25.4	21.2	6.5	7.3	-	9.5	21.5	23.1	10.9	6.4	54.5	49.4	42.6	34.5	-	20.1	64.6	58.2	24.4	15.5
30-34	53.6	46.4	20.5	31.8	-	35.7	41.0	45.3	31.8	27.9	72.3	63.9	48.4	52.6	-	55.1	70.5	66.9	49.3	45.2
Living in Other arrangements																				
20-24	12.8	11.9	84.0	69.6	-	8.3	40.7	15.6	12.2	6.2	9.7	8.2	38.6	45.5	-	7.3	13.8	10.5	7.0	5.3
25-29	14.0	13.5	82.1	64.2	-	12.6	43.4	19.3	29.7	12.6	8.0	7.2	32.9	28.4	-	9.8	13.4	10.0	23.1	10.7
30-34	10.4	11.0	67.4	47.5	-	13.1	34.5	18.0	23.9	15.8	6.3	6.6	23.0	23.0	-	8.7	14.1	8.3	14.5	11.7

Table 3.2 Logistic regression coefficients (odds ratios) of parental, spousal, and child coresidence by sex in Spain (2011) and Morocco (2004)

					M	l ale									Fen	nale				
		Parent(s)	1	Spo	use/Par	tner		Child	(ren)			Parent(s)		Sp	ouse/Part	ner	Child(ren)			
	M1	M2	M3	M1	M2	M3	M1	M2	М3	M4	M1	M2	М3	M1	M2	M3	M1	M2	М3	M4
Migrant Generation																				,
Native Moroccan	1.67***	* 1.87***	* 2.17***	* 1.21***	0.78**	** 0.67***	* 2.70**	* 1.48***	* 1.33***	* 2.66***	* 0.66**	* 1.23***	* 1.20**	* 1.58**	* 0.89**	* 0.86**	* 3.72***	1.63**	* 1.44**	* 2.14***
1st Gen	0.17***	* 0.18***	* 0.14**	* 1.19***	0.95	1.21***	1.66**	* 1.16***	* 1.39**	* 1.44***	* 0.07**	* 0.09**	* 0.09**	* 6.01**	* 4.35**	* 4.17**	* 6.60***	3.93**	* 3.30**	* 2.00***
1.5 Gen	0.73***	* 0.76**	* 0.64**	* 1.34***	1.09	1.37***	* 2.56**	* 1.79**	* 2.18**	* 2.52***	* 0.41**	* 0.53**	* 0.51**	* 2.73**	* 2.07**	* 2.02**	* 4.06***	2.48**	* 2.20**	* 1.85***
2nd Gen	0.80*	0.82	0.71**	0.69**	0.60**	** 0.70**	1.06	0.83	0.96	1.28	0.53**	* 0.61**	* 0.59**	* 1.61**	1.37**	1.34*	1.40**	0.98	0.86	0.72*
Native Spanish (ref)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Educational Attainment																				
Less than Primary (ref)		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Primary Completed		1.16***	* 1.05***	*	0.57**	** 0.63***	¢	0.56**	* 0.60**	0.69***	*	1.82***	* 1.82**	*	0.64**	* 0.64**	*	0.68***	* 0.69**	* 0.85***
Secondary Completed ar	nd above	1.25***	* 1.20***	*	0.43**	** 0.42***	<b>k</b>	0.29***	* 0.28**	* 0.30***	*	2.74***	* 2.80**	*	0.39**	* 0.40**	*	0.24***	* 0.27**	* 0.29***
Work Status																				
Working (ref)			1.00			1.00			1.00	1.00			1.00			1.00			1.00	1.00
Not working			2.62***	*		0.35***	¢		0.43***	* 0.95***	*		1.14**	*		1.15**	*		1.77**	* 1.79***
Living with spouse																				
Yes										1.00										1.00
No										0.01***	*									0.05***

p<0.05\*, p<0.01\*\*, p<0.001\*\*\*

(Source: Authors' elaboration based on the census data from IPUMS-i and INE)

Moroccans. First generation women are highly likely to live with spouse and children, although the gap between native Spanish women and Moroccan women in Spain narrow across generations. Moroccan men in Spain are slightly more likely to live with spouse and children than native Spaniards, except for the second generation.

In Model 2, we control for educational attainment, categorized as "less than primary" (reference group), "primary completed", and "secondary completed and above". Moroccans who have migrated to Spain on average are more educated than Moroccan stayers but remain less educated than native Spaniards (see Appendix 3). Table 3.2 shows that at higher levels of education, both men and women at the ages of 20 to 34 have lower odds of living in a domestic partnership and with children. On the other hand, individuals who are more educated are more likely to coreside with their parents. This is especially evident in the case of women.

In Model 3, work status, defined as working or not at the time of census, is added as an additional control variable. Moroccans in Spain were less likely to be working at the time of the censuses compared to the native Spaniards, especially first generation women (see Appendix 3.4). Not working is positively correlated to parental coresidence and negatively correlated with spousal and child coresidence for men or women, not working is slightly positively correlated with all three types of coresidence. It is important to bear in mind that the percentage of Moroccan men and women working in Spain is far lower than their native Spanish counterparts. For Moroccan women in Spain, generational differences in work status is more apparent than that of Moroccan men in Spain.

We run an additional model, Model 4, for child coresidence, to take into account the collinearity between the propensity of living with a spouse and living with a child. Considering the different levels of spousal coresidence between the groups, the variable serves as an important control. Those who are not living with a spouse are highly unlikely to be living with a child.

Over half of the native Spaniards aged 20-34 were not working at the time of the census in 2011. Moroccans in Spain, especially the more recent migrants, experienced an even higher rate of unemployment in 2011 (see Appendix 3). Although work status correlates with the likelihood for one to live with parents, spouse and children, the mechanism is distinct for men and women. While work status positively correlates with parental, spousal, and child coresidence for women, it only positively correlates with parental coresidence, and negatively correlates with spousal and child coresidence for men. This illustrates that when non-working men tend to live with parents as dependents, but not likely to depend on their spouse's income or have children, whereas partnered women are slightly more likely, and mothers are further more likely, to not be working.

Overall, Model 3 reveals that compared to native Spaniards, few first generation Moroccan men live with parents. Although by migrant generations, 1.5 and second generations are increasingly more likely to coreside with parents, climbing from the odds of 0.14 for the first generation, to 0.64 for the 1.5 generation, to 0.71 for the second generation, the level of parental coresidence falls behind native Spaniards, when educational attainment and work status are controlled. In comparison with native Moroccan stayers, who are more than twice as likely to coreside with parents, Moroccan men in Spain emerge as a distinct group in parental coresidence. Moroccan women in Spain, on the other hand, tend to have lower parental coresidence, consistent with our knowledge that a large number of first generation women arrived as spouse, while the 1.5 and second generations marry younger than native Spaniards, prompting them to leave parental home. Few first generation women live with their parents compared to native Spaniards.

First and 1.5 generation Moroccan men are 1.21 and 1.37 times more likely than native Spanish men to be living with their spouse, respectively, after controlling for educational attainment and work status. Second generation men, on the other hand, are less likely than native Spaniards to be living with a partner. Interestingly, Moroccan men in Morocco are also less likely to live with a partner once structural factors are controlled for. Moroccan women in Spain are more likely to live with their spouse across all migrant generations than native Spanish women. First generation women stand out as having a far higher propensity for spousal coresidence than other groups at 4.17 times, followed by 1.5 generation, at 2.02 times, then second generation, at 1.34 times compared to their native Spanish counterpart after controlling for educational attainment and work status in Model 3.

Since living with a spouse is highly correlated with living with a child for both sexes, we control for spousal coresidence in our model for child coresidence to compare only partnered individuals. The difference between Moroccan men in Spain and native Spanish men is more apparent in child coresidence than spousal coresidence, although Moroccan women in Spain show a smaller difference with native Spaniards in spousal coresidence than child coresidence. First generation Moroccan men are 1.44 times, and 1.5 generation men are 2.52 times, more likely to live with children compared to native Spanish men. The result for second generation men is insignificant. Similarly, first generation Moroccan women are twice, and 1.5 generation are 1.85 times more likely to live with children compared to native Spanish women of the same ages. Second generation women are less likely than native Spanish women to live with children, once educational attainment and work status are controlled.

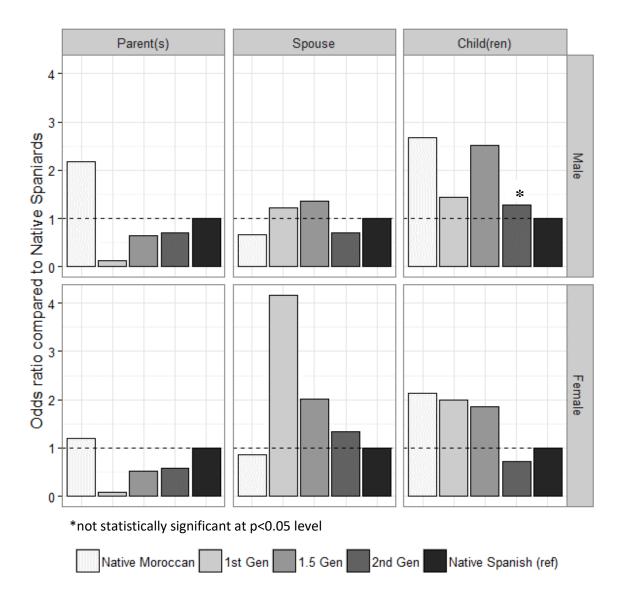
#### ORIGIN, MIGRANT GENERATION AND TIME DIMENSIONS

Figure 3.2 shows the odds ratio of coresidence with parent(s), spouse, child(ren) by sex and origin for individuals aged 20 to 34 from the Spain 2011 and Moroccan 2004 censuses, with educational attainment and work status controlled for parental and spousal coresidence, and added control of spousal coresidence for child coresidence. In other words, it summarizes Model 3 for parental and spousal coresidence and Model 4 for child coresidence from Table 3.2. The top three bar charts show the coresidential odds ratios for men aged 20 to 34 compared to the reference group, native Spanish men of the same age group. The bottom three bar charts depict the odds ratios for women, with native Spanish women as the reference category.

Both male and female Moroccans in Spain have lower parental coresidence than both native Spaniards and native Moroccans. In terms of spousal coresidence, first generation women are remarkably more than four times more likely, and the 1.5 generation women are twice as likely to be living with a spouse compared to native Spanish women, whereas their male counterparts barely differ from native Spanish men. All groups except second generation women have higher child coresidence compared to native Spaniards, when education and work status are controlled for. Next, we interpret the differences between Moroccans in Spain and native Spaniards focusing on the time dimension, as shown in Figure 3.3.

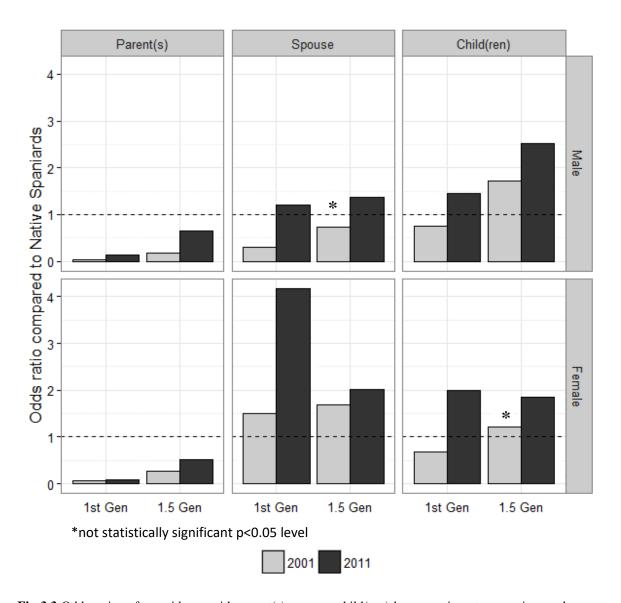
Figure 3.3 illustrates the differences in living arrangements of Moroccans in Spain in 2001 and 2011, compared to their native Spanish male and female counterparts in 2001 and 2011. Since second generation individuals are unidentifiable in the 2001 census, Figure 3.3 only shows the living arrangements of the first and 1.5 generations, compared to the reference line which represents the levels of coresidence of native Spaniards in 2001 and 2011 respective to their comparison groups. Once again, we analyze males, represented by the top three bar charts, and females, by the bottom three, separately.

Coresidence with kin, or parent(s), spouse, and child(ren), are comparatively higher across the board for both Moroccan men and women, first and 1.5 generations, in 2011 compared to 2001. The difference between the two censuses is particularly striking in spousal coresidence for the first generation women, where the propensity to live with a spouse was 1.5 times than that of native Spanish women in 2001 compared to four times higher than native Spanish women in 2011. On the other hand, parental coresidence remains far lower for all Moroccan migrant groups compared to native Spaniards in both years, although they have increased moderately for the 1.5 generation individuals of both genders



**Fig 3.2** Odds ratios of coresidence with parent(s), spouse, child(ren) by sex and migrant generation (with controls), Spain 2011 and Morocco 2004. (Source: Authors' elaboration based on census data from IPUMS-i and INE)

from 2001 to 2011. First generation of both genders had lower propensity to live with children than native Spaniards in 2001, but in 2011, both surpassed native Spaniards men and women in child coresidence. For the first generation men, they had far lower rate of spousal coresidence than native Spaniards in 2001, but slightly surpassed their native Spanish counterparts in 2011. This may be a sign that community growth has led to higher possibilities of living with kin for Moroccans in Spain in 2011, which may have an offsetting effect on the assimilation process, despite longer history of settlement for the migrant group.



**Fig 3.3** Odds ratios of coresidence with parent(s), spouse, child(ren) by sex, migrant generation, and census years (with controls) (Source: Authors' elaboration with census data from IPUMS-i and INE)

# **CONCLUSIONS**

Europe emerged as a new fertile ground for migration studies comparatively recent to the United States, which has dominated the debate over migration theories since the turn of the 20<sup>th</sup> century. Unlike the United States, a nation built on immigration, Europe faces a different set of demographic and social challenges and political debate when it comes to incorporating migrants into the mainstream society. Due to religious and cultural differences, Muslim and North African migrations have particularly ignited interest in the more seasoned European migrant recipient countries such as France, Belgium, and the Netherlands. The need to better inform policy makers and enlighten political

discourse inspired a range of studies on the educational and employment outcomes of migrants and their descendants. Far fewer studies have focused on living arrangements as an expression of marital and childbearing patterns of migrants. Even fewer studies have ventured into cross-border comparisons between the norms of the sending and receiving countries of migrants. Moreover, the mechanisms behind family lives of migrants in European countries that have only recently seen a migration boom such as Spain is little understood. In this essay, we have contributed to the literature on migrants in Europe by exploring the gender, migrant generation, time, and space gradients through the exploration of living arrangements of Moroccan migrants and migrant descendants in Spain. Our analysis led to several findings that expands the discussion of migrant family forms and assimilation process.

First, due to the interruption caused by the migration experience, first generation male migrants are far less likely to live with their parents as we hypothesized. They are not markedly different in spousal and child coresidence compared to native Spanish men in 2011. Among first generation female migrants, although they share the similarity of low parental coresidence with first generation men, they are far more likely to live with a spouse and children than native Spanish women. This is likely the result of the fact that many Moroccan women migrated under the family reunification scheme. Regarding the 1.5 and second generations, similar to findings in studies based in the Netherlands (de Valk & Liefbroer, 2007; de Valk & Billari 2007), Moroccan women in Spain observe more "traditional" timing for transition to adulthood in general, showing higher spousal and child coresidence at young ages than native Spanish women.

Second, once we take into account educational attainment and work status, the living arrangements of Moroccans in Spain are closer to the native Spaniards, though significant disparity between the genders persist. Signs of assimilation of living arrangements are clear for Moroccan women in Spain, from higher spousal and child coresidence for the first generation to similar spousal coresidence and lower child coresidence compared to native Spanish women, after controlling for educational attainment and work status, confirming that highly educated females tend to be the exception to the rule (Huschek et al., 2011; Vitali & Arpino, 2015). On the other hand, the migrant generational assimilation process appears to be mixed. The propensity for parental coresidence for Moroccan men in Spain increases across migrant generations, although it remains to be lower than that of native Spanish men. The likelihood of spousal and child coresidence is less linear, as the 1.5 generation men have higher spousal and child coresidence, and second generation have lower spousal coresidence, than first generation men.

Third, one of the most striking finding in our study is that the gap between the migrants' and the native population's living arrangements has widened in the past decade. In general, coresidence with kin has increased from a decade ago for Moroccans in Spain comparatively to the native Spaniards. Parental coresidence is low for both genders in both time points compared to the natives, but the migrant population and native population differences in spousal and child coresidence have become more apparent in 2011 than in 2001. Both first and 1.5 generation women are more likely to live with a spouse and children compared to native Spanish women in 2011 than the first and 1.5 generation women in 2001 compared to their contemporary native Spanish women. In the course of decade, the Moroccan first and 1.5 generation have gone from having lower spousal coresidence than native Spanish men to higher. As the community of Moroccans grow, demographic constraints of earlier migrants have diminished. Under higher availability of kin and potential mates, the living arrangements better reflect the preferences of Moroccans in Spain.

We also found that once educational attainment and work status are controlled for, Moroccans in Morocco are *less* likely to live with a spouse, and Moroccan women are *more* likely to live with their parents than their Spanish counterparts. This finding challenges previous depictions of "Moroccan culture" or "Muslim customs" by showing that under higher socioeconomic conditions, women do not necessarily leave their parents and marry at young ages in Morocco. However, regardless of educational level and work status, Moroccans in Morocco are more likely to live with children than native Spaniards for both genders.

In the interpretation of our results, we need to bear in mind that we held native Spaniards as a reference group, which means that their demographic and behavioral changes are not reflected in the analysis. Spain's exceptionally delayed fertility and union formation schedule in the recent years may have partially contributed to the growing gap between the living arrangements of Moroccans in Spain and the native Spaniards, particularly in spousal and child coresidence. The economic crisis in Spain may have also pushed many young adults to stay or return to their parental home.

Overall, our results show that the general picture of the living arrangements of Moroccans in Spain from 2001 to 2011 alone is insufficient for making conclusive remarks on the state of migrant assimilation in Spain. The young and dynamic community of Moroccan 1.5 and second generations has experienced sharp growth in the recent years while still facing a plethora of social constraints that hamper the full realization of their ideal family scenario. Patterns of living arrangements are deeply embedded in the availability of kin and potential mates. With the ebb and flow of Moroccan migration pre and post the economic crisis (Domingo & Sabater, 2013; González-Ferrer, 2013) in Spain, it is difficult to predict what the future holds for the family lives of the ones who choose to root themselves

in Spain. On the one hand, there are clear signs of assimilation across generations, particularly for women. On the other hand, the unpredictable change of the stock of Moroccan migrants in Spain may activate either coping or preference expressing mechanism in terms of living arrangements. Our work serves to expand the discussion of migrant life in Europe, bearing in mind the key ingredients of gender, generation, and time, in family formation and transition to adulthood.

**Appendix 3.1** Logistic regression coefficients (odds ratios) of individuals aged 20-34 living with parent(s), spouse, and child(ren) by sex in Spain (2001) and Morocco (1994)

					M	ale									Fem	ale				
	I	Parent(s)		Sp	ouse/Part	ner		Chile	d(ren)		]	Parent(s)		Spo	use/Partner			Child	Child(ren)	
	M1	M2	М3	M1	M2	М3	M 1	M2	М3	M4	M1	M2	М3	M1	M2	М3	M1	M2	М3	M4
Origin & Nativity																				
Native Moroccan	1.26***	1.50***	1.46***	1.52**	* 0.85**	* 0.86	2.51**	** 1.22**	* 1.23**	* 1.76***	* 0.44***	1.09***	1.12***	1.99***	0.93***	0.87***	* 3.82***	1.39**	* 1.25***	* 1.71***
1st Gen	0.02***	0.03***	0.03***	0.44**	* 0.29**	* 0.30**	* 0.52**	** 0.31**	* 0.31**	* 0.76***	* 0.04***	0.06***	0.06***	2.43***	1.56***	1.51***	* 1.79***	0.95	0.89	0.68***
1.5 Gen	0.16***	0.19***	0.18***	0.94	0.71*	0.73	1.38	0.97	1.01	1.72*	0.19***	0.28***	0.28***	2.50***	1.73***	1.69***	* 2.65***	1.62**	1.55**	1.22
2nd Gen	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Native Spanish (ref)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Educational Attainment																				
Less than Primary (ref)		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Primary Completed		1.06***	1.00		0.54**	* 0.56**	*	0.49**	* 0.50**	* 0.54***	*	2.05***	2.02***		0.64***	0.67***	k	0.54**	* 0.59**	* 0.63***
Secondary Completed at	nd above	1.57***	1.33***		0.32**	* 0.36**	*	0.22**	* 0.24**	* 0.25***	*	4.43***	4.34***		0.27***	0.29***	k	0.16***	* 0.18**	* 0.21***
Work Status																				
Working (ref)			1.00			1.00			1.00	1.00			1.00			1.00			1.00	1.00
Not working			2.23***			0.33**	*		0.36**	* 0.77***	k		0.87***			1.45***	ķ		1.92**	* 1.69***
Living with spouse																				
Yes										1.00										1.00
No										0.01***	k									0.04***

p<0.05\*, p<0.01\*\*, p<0.001\*\*\*

(Source: Authors' elaboration based on the census data from IPUMS-i and INE)

**Appendix 2** Logistic regression coefficients (odds ratios) of living in other arrangements (not living with parent, spouse, nor children) of individuals aged 20-34 by sex and origin in Spain (2001) and Morocco (1994)

			Ma	le					Fema	ale			
		Other			Other			Other		Other			
	M 1	M2	М3	M1	M2	M3	M1	M2	M3	M1	M2	М3	
Migrant Generation													
Native Spanish (ref)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
1st Gen	25.60**	26.44**	27.04**	4.39***	4.69***	5.22***	5.26***	5.40***	5.86***	1.03***	1.17***	1.51***	
1.5 Gen	7.30***	7.47***	7.56***	1.51***	1.62***	1.75***	2.77***	2.86***	2.99***	0.72***	0.82*	0.95	
2nd Gen	-	-	-	2.36***	2.46***	2.62***	-	-	-	1.36*	1.48*	1.73***	
Native Moroccan	1.13***	1.21***	1.24***	0.92***	1.00	0.95***	0.94***	0.91***	1.02	0.68***	0.76***	0.89***	
Educational Attainment													
Less than Primary (ref)		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Primary Completed		1.14***	1.18***		1.03	1.09***		0.82***	0.75***		0.87***	0.83***	
Secondary Completed and	d above	1.11***	1.21***		1.21***	1.27***		1.01	0.91***		1.23***	1.07***	
Work Status													
Working (ref)			1.00			1.00			1.00			1.00	
Not working			0.75***			0.66***			0.53***			0.49***	

p<0.05\*, p<0.01\*\*, p<0.001\*\*\*

(Source: Authors' elaboration based on the census data from IPUMS-i and INE)

Appendix 3.3 Distribution of educational attainment of individuals aged 20-34 by sex, age group, year, and origin

	Spain 2011 and Morocco 2004											Spain 2001 and Morocco 1994									
	Male						Female					Male					Female				
	NM	1st	1.5	2nd	NS	NM	1st	1.5	2nd	NS	NM	1st	1.5	2nd	NS	NM	1st	1.5	2nd	NS	
Aged 20-24																					
Less than primary completed	45.0	21.7	9.2	1.1	1.5	60.6	24.0	12.0	0.0	1.3	57.9	35.0	28.8	-	2.2	71.4	29.9	17.4	-	1.7	
Primary completed	36.0	58.8	72.5	51.1	39.8	23.0	55.5	55.7	33.7	24.7	25.1	52.8	58.3	-	44.6	17.0	50.3	60.2	-	32.4	
Secondary completed	19.0	19.5	18.3	47.8	58.7	16.5	20.5	32.3	66.3	74.0	17.0	12.2	12.9	-	53.2	11.6	19.8	22.5	-	65.9	
Aged 25-29																					
Less than primary completed	53.2	21.3	18.3	9.4	1.5	67.2	29.6	15.1	16.7	1.2	62.5	33.0	23.8	-	2.4	75.8	32.7	35.7	-	1.8	
Primary completed	29.6	52.6	63.4	50.0	41.6	18.9	45.8	58.6	44.9	26.9	18.2	52.0	58.8	-	42.7	12.0	43.1	41.1	-	32.9	
Secondary completed	17.2	26.1	18.3	40.6	56.9	13.9	24.6	26.4	38.5	71.9	19.3	15.0	17.5	-	54.9	12.2	24.3	23.2	-	65.3	
Aged 30-34																					
Less than primary completed	59.9	23.3	19.3	14.8	1.4	72.1	33.2	24.8	14.5	1.3	70.3	32.0	17.2	-	3.0	82.6	33.6	20.3	-	2.6	
Primary completed	22.4	51.0	57.8	52.3	39.0	15.6	41.7	47.4	43.5	26.3	12.0	48.7	50.0	-	47.0	7.5	44.8	39.0	-	41.4	
Secondary completed	17.8	25.7	23.0	33.0	59.6	12.3	25.1	27.8	42.0	72.4	17.7	19.3	32.8	-	50.0	9.9	21.6	40.7	-	56.0	

(Source: Authors' elaboration based on the census data from IPUMS-i and INE)

Appendix 3.4 Percentage of individuals working at the time of census by sex, age, year, and origin

		Spain 2011 and Morocco 2004											Spain 2001 and Morocco 1994										
		Male					Female						Male			Female							
	NM	1st	1.5	2nd	NS	NM	1st	1.5	2nd	NS	NM	1st	1.5	2nd	NS	NM	1st	1.5	2nd	NS			
Aged 20-24	60.7	23.3	26.6	25.6	31.1	19.8	9.8	21.7	22.1	28.5	58.7	68.7	67.4	-	49.3	15.6	30.9	36.7	-	34.3			
Aged 25-29	76.3	43.7	39.0	56.3	60.1	21.9	15.9	28.9	35.9	59.6	73.9	76.5	68.8	-	70.8	18.2	35.5	30.4	-	54.0			
Aged 30-34	83.5	48.3	47.8	54.6	73.7	21.2	22.8	31.6	36.2	67.5	85.5	77.4	76.6	-	79.9	19.6	36.2	44.1	-	53.4			

(Source: Authors' elaboration based on the census data from IPUMS-i and INE)

## FAMILY MATTERS: CONCLUSIONS

Living arrangements tell stories. They tell the stories of economic conditions, personal relationships, and cultural practices of an individual, a family, and a people. They reveal truths about how humans organize their social circle, allocate resources, and transition through life stages. This thesis contributed to the existing literature in several ways. First, we utilized the most up-to-date census microdata to uncover the evolution of living arrangements using quantitative methods across very different societies. Second, we took a cross-national perspective in all three chapters to put living arrangements in a comparative context. Third, we explored the extent of applicability of modernization theory, feminization of poverty, and assimilation or dissimilation theory in modern living arrangements. Each chapter engaged in the dialogue of changing family life in modern society, while posing new questions for further debate and research.

### **SUMMARY OF FINDINGS**

### CHAPTER 1: FAMILY AND HOUSEHOLD COMPOSITION IN ASIA

Overall, family life has been changing rapidly across Asia. Household size has been shrinking in most Asian countries, due to marriage delay and fertility decline. The simplification of household took place alongside economic development in countries such as Japan and South Korea, as William J. Goode had predicted back in 1963. However, several family characteristics, such as intergenerational coresidence and patrilocality (also known as patrivirilocality), remain evident in China and India, two of the most populated countries in the world.

Globally, women depart from parental home earlier than men due to earlier union formation. In Asia, this is particularly relevant, because marriage entails a shift in place for women, but not necessarily for men (Palriwala & Uberoi, 2005). Parents tend to coreside with married sons in countries with patrilocal family systems such as China, Nepal, South Korea, Japan, and Pakistan, whereas they are both as likely to live with their married daughter or married son in countries with bilateral family

systems such as Thailand, Indonesia and the Philippines. Living alone remains to be an unusual arrangement for the elderly across Asia.

Due to the lack of comparable data in some of the lower income Asian countries, such as Afghanistan, Maldives, Bhutan and Laos, we were not able to analyze countries that have not yet experienced the demographic transition from high mortality and fertility to low mortality and fertility. Intergenerational codependence also extends beyond living together. Governments such as Singapore have implemented policies that encourage living apart but close enough to provide intergenerational care, as a compromise between filial obligations and the desire for privacy. Countries with large internal cultural diversities such as China and India should be explored on a provincial or state level.

#### CHAPTER 2: FEMALE-HEADED HOUSEHOLDS AND LIVING CONDITIONS IN LATIN AMERICA

Women have been increasingly likely to self-report as head-of-the-household across Latin America. Although some increase is due to the fact that there are now more women living in arrangements with higher propensity of household headship (such as singlehood or divorce) than before, rate change, or the increase of the tendency for women to simply self-declare as household regardless of relationship status plays a major role. We found a mixed relationship between female headship and living conditions in Latin America. Despite the fact that male-headed households generally fare better than female-headed households, the gap in living conditions between the two types of household reverse or disappears once the union and parenthood status of the household head is controlled for. We found that family circumstances, more so than the gender of the household head, plays a major role in the living condition of households. Households headed by married couples are systematically better off than other types of households.

It is unclear why the households of married couples are in better conditions than the households of cohabitating couples. Future research should explore the causality of marital status of household head and living conditions, or the selection of couples who transition from cohabiting union to marital union. Our study focused on household amenities and materials which differ in nature from studies that use income and expenditure to measure living conditions. Vulnerability also extends beyond material living condition. Gender inequality in educational and professional opportunities still persists in some parts of Latin America (Deere & De Leal, 2014). Health, self-determination, and basic rights should be considered in policy-driven research to promote inclusive growth within the region.

# CHAPTER 3: LIVING ARRANGEMENTS OF MIGRANTS BY GENDER, GENERATION, AND TIME: THE CASE OF MOROCCANS IN SPAIN

Migrant households tend to display unique patterns in composition compared to both stayers in their homeland and natives in their destination. Similar to Van Hook and Glick's (2007) finding on Mexicans in the United States, we find that a high number of first generation Moroccan migrants live in non-nuclear households in Spain, especially men. First generation Moroccan women are particularly likely to live with her husband and/or children, most likely as a result of migration under the family reunification scheme. The 1.5 and second generation Moroccans in Spain continue to show gender disparity in living arrangements.

The coresidential patterns among first, 1.5 and second generation appears is non-linear, although Moroccan women, regardless of migrant generation, are more likely to live with a partner and children compared to native Spanish women. Interestingly, the 1.5 generation are living with spouse and children at higher rates than both the first and second generation. Second generation Moroccans, on the other hand, show signs of marrying and bearing children later, similar to the Spaniards, especially for men.

Evidence showed that living arrangements are often influenced by socioeconomic factors more so than cultural factors. What earlier studies understood as "Moroccan customs" or "Muslim practices" have changed leaps and bounds in the past few decades. In the most recent Moroccan 2004 census, women in Morocco were not more likely to be married than Spanish women once education and work status are controlled for. On the other hand, the Moroccans in Spain, in particular, the 1.5 and second generation women are more prone to marrying young than both native Spanish and native Moroccan women, even after education and work status are controlled for. This finding invites researchers to rethink the emergent family strategies of migrants in their destination country which may neither resemble the family forms of the destination nor sending countries.

### **DISCUSSION**

Family living arrangements and transitions through life-cycles hinge on a wide range of factors. Regardless of the emergence of ideologies supporting the expansion of personal choices under higher flexibility, such choices are seldom made in a vacuum, free from social regulations, pressures, and controls (Beck-Gernsheim, 2002; Hakim, 2004). The family life-cycle, or how a family should progress through its key stages, is largely confined to the frame of normative assumptions of each society (Muncie et al., 1995). I addressed three main topics of family living arrangements in this

dissertation. Chapter 1 revealed the persistence of intergenerational coresidence in Asia; Chapter 2 explored the amplification of situations under which women head households in Latin America; and Chapter 3 tackled the complex relationship among changing norms, coresidential preference and kin availability for Moroccan migrants in Spain. The analyses employed data that cover three to four decades and span across a wide range of geographies to unfold the stories of family life in different time and space.

1. With modernization and urbanization, intergenerational coresidence should decrease as living arrangements simplify.

In 1963, William J. Goode predicted that kinship ties among extended family members will weaken along with economic transition from agricultural to industrial societies, and conjugal nuclear family will prevail as the dominant family form. His prediction for Asia, particularly, is that family control over conjugal couples would decrease. While this thesis does not address issues such as child marriage, arranged marriage, or power structure within the extended household, we see evidencein the form of smaller household size that supports Goode's theory that economic development, alongside educational expansion and industrialization, led to later childbearing and fewer children per couple. However, the loss of parental power over children may be due to factors other than industrialization. In the case of China, for example, freedom to migrate to the city and lack of family property due to socialist state policy may have played a role (Cherlin, 2012). In fact, elderly parents continue to coreside with their adult children in large numbers, contrary to the prediction of a widespread romantic couple-centric family form that Goode expected.

Interestingly, evidence from South Korea point to an increase of a type of intergenerational coresidence that was not anticipated: unmarried adult women living with her own parents. This has also been found in Japan, China, and Taiwan (Raymo et al., 2015). In this intergenerational coresidential scheme, transition to adulthood in the most traditional sense is simply postponed. We can speculate that in a woman's late 20s or early 30s, she might still live with her parents as a dependent, but whether the reversal of roles would take place if she foregoes forming her own separate nuclear family altogether and stays in the parental household well into her 40s or 50s, is a question that remains.

Pushing the idea a little further, persistent son preference is caused by a multitude of factors, one of which is a daughter's traditionally limited role in her parents' old age support, causing her to be viewed as a resource drainage rather than an asset to her birth families (Das Gupta et al., 2003). If the traditional patrilocal family model in East and South Asia collapses due to the lack of will for

individuals to marry, and the burden of senior care falls on the shoulder of daughters, instead of daughters-in-law, will the idea of son preference cease to exist, or perhaps even evolve into daughter preference? Are changing demographic and social trends alone enough to reestablish gender hierarchy, or does it require an additional push from policymakers?

It is important to bear in mind that Asia is home to more than half of the world's population, and houses cultural practices, beliefs, and traditions of a wide range. The family values in Asia are guided by principles beyond Confucius values. Muslim culture permeates large parts of South and Southeast Asia, as do Hinduism, Taoism, and Buddhism, intersecting with customs of each country or region. The first chapter invites readers to consider Confucius ideologies on family values in East Asia as an example of how deeply ingrained social norms can influence living arrangements despite modernization manifested in the form of later nest-leaving, gender equality, or individual's wish for privacy. It intends to open a conversation and invite research on family patterns in Asia, through the lens of demographic changes.

2. Female-headed households tend to suffer poorer living conditions than male-headed households.

The notion of household head lacks standardized definition across countries. In the case of Latin America, the wording for household head in census questionnaires has been updated in the past few decades. It is unclear whether the census wording change led more women to self-report as the household head, or whether the fact that more women are heading households served as the catalyst for census wording change. Chapter 2, which focuses on women aged 35 to 44 (a life stage by which most women have already experienced romantic relationships, have had children, but are usually not yet widows), shows that female headship has surged all across Latin America.

The context under which women head a household has evolved in the past few decades. In 1978, the sociologist Diane Pearce developed the concept of "feminization of poverty" as a theoretical framework to explain the parallel increase in poverty and in female-headed families in the United States. The idea of the feminization of poverty took hold in Latin America during the economic downturn of the 1980s (the "lost decade"), but has been heavily challenged and contested by scholars in recent years (Chant, 2003; Damián, 2003; Klasen, Lechtenfeld, & Povel, 2015). The increase in female headship is partly due to the diversification of family situations (more women living in cohabitation, separation and singlehood than ever before), but also to the increasing number of married women who, despite living with their spouses, self-report as household heads.

With the increase in their sheer number, and the variation in the typologies of female-headed households, the state of public policies and legal codes may need to catch up with demographic reality. For example, the Civil Code of Chile, Article 1749, published in year 2000, still stipulates that a married woman shall have her properties and goods administered by her husband, the legal head of the household (Library of Congress of Chile, 2015). In reality, a non-negligible 10% of married Chilean women in our study consider themselves as the de facto household head. Whether or not this means that they control the household economy, or that they are the main decision maker in the household, these women's self-reported status clashes with the outdated legal system in Chile. The relevance of legal statutes should be reviewed in accordance to the current state of affairs.

In Chapter 2, we fine-tuned a trend that is neither new nor declining: women heading households. Although the traditional narrative tends to pin female-headed households as male-absent and disadvantaged, in reality, they exist under a plethora of circumstances. Female-headed households are not necessarily poorer once the partnership status of the household head is controlled for. Female householders tend to invest proportionally more on household goods compared to their male counterparts (Chant, 2003). Most importantly, women who head their own household are no longer just mothers who father. The historical view of women as wives and household members rather than individuals, whose success in life is calculated on her ability to marry and remarry (Moring, 2015: 1) regardless of well-documented evidence of women's economic input as early as the eighteenth and nineteenth century (Moring, 2015: 45), ought to be buried. An understanding of the current state of female headship in Latin America serves to better inform policy makers that single parent households or high dependency ratio households should be the target of social intervention, not female-headed households per se, to avoid the stigmatization and marginalization of male-absent households that may or may not be living in precarious conditions.

3. Per classical assimilation theory, the family life or living arrangement of migrant families should linearly evolve towards the likeness of the mainstream population across migrant generations.

In the Western European context, Spain and other Mediterranean countries are often considered family-centric, where young adults often only leave parental home when they are ready to enter marriage (Reher, 1998). This sharply contrasts with more individualistic societies, such as France, Germany, and the United Kingdom (Reher, 1998). Incidentally, the non-Mediterranean European countries have also been the hotbed of European migration studies in the recent years, where such stark contrast of western individualism against Turkish and Moroccan collectivism offer a better juxtaposition than a comparison between Moroccans and Spaniards. Despite the fact that both

Moroccan and Spanish cultures highly value strong family ties, it is evident that Moroccans in Spain continue to show higher fertility and earlier marriage compared to native Spaniards, particularly for women.

Transnational families often face challenges that are manifold and complex. Other than socioeconomic and structural barriers, migrants are met with values of a host society that may significantly differ from that of their sending country. Moroccan culture reflects many core Arabic values, such as that women and men are inherently different, and loyalty to one's family should take precedence over personal needs and westernization is seen as a corrupt force weakening Arabic values (Nydell, 2012). Patriarchal traditions are found to be sustained rather than contested by transnational families in some cases (Salazar Parreñas, 2005). This results in a struggle of value discrepancy which leads to varying degree of intergenerational transmission of values between migrant generations, although transmission does not entail full replication (Kwak, 2003; Merz et al., 2009; Phalet & Schönpflug, 2001, Phinney et al., 2000). Descendants of migrants who are born in the destination country may find themselves in positions of conflict and confusion as they are simultaneously acculturated in school and at home. The contradiction experienced by migrant descendants who experience an entirely emergent identity can incentivize some to leave their parental home earlier than their native peers (Zorlu & Mulder, 2011) or suppress the aspirations of some young adults (González Ferrer et al., 2015).

The family situation of migrants carries both individual and societal implications for their host community at large. On the individual level, the feminization of migration, or the increase of women migrating independently in search for jobs rather than as family dependents (Campani & Chiappelli, 2013; Ennaji, 2014), will inevitably reshuffle migrant women's negotiating power within their family. On the societal level, as migrants and children of migrants transform the demographic landscape of Europe, the fate of European cities will become tightly intertwined with the success or failure of migrants. Better educated young adults offer better family support and are better equipped for elderly care (Sabater & Graham, 2016), while social inclusion serves as the antithesis of crime and delinquency (Castles et al., 2013). Along with the growing population of descendants of migrants in Europe, demographic and sociological research should facilitate a smooth social transition via promoting social understanding and diversity-friendly policies as we usher in an era of increasing multiculturalism.

### **LIMITATIONS**

Family life extends beyond the household. Despite the fact that living arrangements tell stories, they do not tell the whole story. Living apart together (LAT) relationship is a relatively new topic in demography in the recent years, which prompted researchers to question whether coresidence is a prerequisite of a committed partnership (Levin, 2004; Liefbroer et al., 2015). Intergenerational relationship is also not limited to those children and parents who live together. Many studies show that although some family members do not technically live together, they live close enough for daily contact (Amin, 1998; Teo, 2006). Others show that many adult children who live far away from their parents continue to offer economic (Biddlecom, et al., 2002) and emotional support (Knodel & Chayovan, 2008b) as a form of elderly care.

On the other hand, many elderly parents offer childcare and other household support to their adult children (Isengard & Szydlik, 2012). Since the financial crisis of 2008, a number of studies highlighting the "boomerang generation," or adult children who return to parental home following economic hardship, emerged in western society-based research. This phenomenon shifts the talk of "old age care" to "adult childcare" which requires a completely different framework. Most of the research on the topic of adult children remaining, or returning as dependents to their parents' household focus on North America and Europe. The literature on the boomerang generation elsewhere in the world remains thin or almost non-existent to date.

IPUMS-i as of date offers survey and census microdata from 82 countries, totaling a whopping 277 samples. Minnesota Population Center, which leads the project, continues to seek cooperation from countries and work with statistical offices around the world to incorporate more census microdata. The expansion of geography and time points of the samples will undoubtedly enhance comparability and expand the horizon of cross national analyses.

Real lifecycles are longitudinal, and data samples used in this thesis are cross-sectional. We can assume that during periods of moderate socioeconomic changes, cross-sectional data provides an adequately close approximation of how one generation may compare to the next. In times of rapid changes and dramatic demographic shifts, the same age cohorts of interest can be dramatically different from one another in the span of a decade. Correlation can be drawn from large-scale census data of different time points, but cause and effect cannot be established.

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