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Rising global levels of intergenerational co-residence among young adults

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Abstract

Using census and survey microdata from 69 countries worldwide, in this paper we document levels of intergenerational co-residence over the life course and examine changes in recent decades. We present evidence of a generalized pattern of increase in intergenerational co-residence during the initial decade of this century. This is most evident among people 20-30 years of age and, at least in regions such as Europe and North America and in Latin America and the Caribbean, affects women as much or more than it does men. Rates of increase are fastest in Asia (especially among men), robust in Europe and Latin America, and relatively slow in Africa. This shift is occurring in a variety of demographic, economic, and cultural contexts and appears to run counter to expectations that intergenerational co-residence would gradually decline with modernization and cultural change. We discuss the extent to which these results challenge existing interpretations of the role of the family in contemporary society.

1. Introduction

Radical transformations in the family are occurring across the globe. Decades of demographic, economic and cultural change have profoundly altered family life and household composition though vast differences continue to be visible. Fertility has declined all over the world. Transitions to first union and to first child are being postponed in many regions, including the Western world, Asia and some parts of Latin America (Lesthaeghe 2010, 2014; Van de Kaa 1987). Cohabitation is booming at the expense of marriage (Esteve and Lesthaeghe 2016). Union dissolution has been on the rise in many countries (Amato 2010; Kalmijn 2007) and household size is declining nearly everywhere due to persistently low fertility in some regions and on-going fertility reductions in others (Fokkema and Liefbroer 2008; Eurostat 2020; OECD 2019)¹. More people are living alone, especially in later life (Esteve et al 2020; Reher and Requena 2018; United Nations 2005). This paper addresses another crucial, although unanticipated, facet of change related to family life: a rise of intergenerational co-residence of young adults with their parents.

This shift is occurring in a variety of demographic, economic, and cultural contexts and appears to run counter to expectations that intergenerational co-residence would gradually decline with modernization and cultural change (Le Play 1871; Goode 1963; Parsons 1949; Ruggles 2007; Ruggles and Heggeness 2008). Some authors have maintained that the relative stability of family norms and values would ensure, at the very least, the basic geography of family systems (Laslett 1970; Reher 1998, 2019). Recent theories have predicted a weakening of family ties and greater diversification and complexity of family forms as a result of the

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OECD, Family Database, Marriage and divorce rates. https://www.oecd.org/els/family/SF_3_1_Marriage_and_divorce_rates.pdf. Eurostat, Statistics Explained. Marriage and Divorce, https://ec.europa.eu/eurostat/statistics-explained/index.php/Marriage_and_divorce_statistics.

increasing individualization of present-day societies (Lesthaeghe 2010; Van de Kaa 1987), changes in gender roles (Esping-Andersen and Billari 2015; Goldscheider et al. 2015), and economic uncertainty (Blossfeld et al. 2006; Perelli-Harris 2011). Yet none of these theories anticipated a rise in intergenerational co-residence, especially on a global scale.

Using census and survey microdata from 69 countries worldwide, in this paper we document levels of intergenerational co-residence over the life-course and examine changes in recent decades. Our specific focus will be on young adults (25-29) living in their parental households, though reference to other age groups will also be used in order to provide context. By focusing on this age group, we are able to control for the influence of changes in union formation and childbearing on cross-national differences in intergenerational co-residence, at an age when most young adults continue to have living parents. This paper will be the first of its kind to assess the incidence of intergenerational co-residence and its change over during the first decade of this century. In the next section, we present a working framework for understanding intergenerational co-residence, including changes in recent years. The following section includes an empirical analysis of the existing disparities in intergenerational co-residence among young adults. Then we address changes in intergenerational co-residence between the two most recent population counts separated, generally, by a period of about 10 years. The final section contains a general discussion of the results and an attempt to interpret the extent to which they challenge existing interpretations of the role of the family in contemporary society.

2. A brief framework for understanding intergenerational co-residence

Patterns of intergenerational co-residence involving young adults contextualize a period of life in which young people go from being, basically, the children of their parents living in the parental household, to being adults on their own, often the founders of new families. The basic parameters of this transitional period are the result of negotiations between parents and their young adult offspring. The parental generation tends to provide the resources needed by young adults to get started in adult life. The outcome takes the form of more or less prolonged co-residence normally ending with residential independence either in the form of a new family unit or family members living on their own or with others in different households. These decisions reflect the importance of demographic, cultural and economic background factors.

Recent demographic shifts have clear implications for intergenerational co-residence because of the way they constrain the demand for co-residence among young adults and the supply of relatively older adults available for this type of co-residence. This is because of the importance marriage and childbearing among the young and survival of the older parents has for co-residence. In many world regions, recent demographic changes have limited access to marriage and delayed the onset of childbearing among young adults and have led to increasing availability of older adults thanks to improving health (Bongaarts 2001; Bongaarts and Zimmer 2002; Smits et al 2010; Stone et al. 2011). The rise of diverse family forms and delays in partnership formation and childbearing (Goldscheider et al. 2015; Lesthaeghe 2010; Therborn 2004) have additional implications for intergenerational co-residence. The impact of these shifts may differ decisively by levels of development and the timing of demographic change. The overall decline of fertility around the world coupled with important improvements in adult life expectancy are likely to explain a substantial part of any increases in intergenerational co-

residence in recent years. The relative strength of this effect, however, is not known and constitutes an important goal of this study.

Key cultural and economic background factors including family systems and levels of development also come into play. Both show vast differences around the world. Family systems themselves range from highly individualistic societies where families and family loyalties tend to be relatively weak, to areas where the influence of the family is widespread and often tends to prevail over specific needs of individuals. Despite important changes in these systems in recent decades, the basic geography of the family remains intact, though the actual ways families function have undergone important changes (Reher 1998). Existing family systems are a key source of values around the world –values learned in childhood and passed on from one generation to the next- that define in many ways the boundaries of relationships existing between young adults and their parents. Family systems have important implications for the way societies function (Reher 2019; Esteve and Lesthaeghe 2016; Jones 2005; Lesthaeghe 1989; Furstenberg 2019).

Individuals in some societies may have higher propensities to co-reside with their parents than in others and this is subject to change over time (e.g. Bonvalet 2003; Furstenberg 2013, 2019; Furstenberg et al 2004; Furstenberg and Kennedy 2016; Goody 1961; Klapisch-Zuber et al. 1996; Reher 1998, 2019; Todd 1985). This body of research has documented the variety of norms that shape the structure of co-residence and obligations of sons and daughters to their parents. Over recent decades, parental control over the future of their children has waned in many societies in favor of more open relationships (Cherlin 2014; Therborn 2004; Arnett 2000, 2012). Economic and ideological changes have reinforced the decline of the patriarchal family (Cherlin 2012; Furstenberg 2010, Reher 2019; Ruggles 2007) mainly in the West, but also in

many other regions of the world as well (Therborn 2004; Jones 2007; Esteve et al. 2012). From a slightly different perspective, at least in more developed societies, more modern, open values can contribute to higher levels of intergenerational co-residence, as intergenerational links become less authoritarian, and the young adults do not necessarily see their own independence and self-realization curtailed by staying at home. All of these forces contextualize intergenerational co-residence, both at a societal and at an individual level, and are consistent with findings that normative change making early autonomy less of a priority among young adults is taking place (Arnett 2012; Furstenberg and Kennedy 2016).

The other great background factor is economic and it too has both macro and micro implications. Existing levels of development refer to where countries are positioned in terms of wealth and the overall process of economic modernization. It also refers to the economic shifts within any given society that can condition the short- and medium-term expectations of different groups without necessarily having implications for overall levels of development. Despite important disparities, since the second half of the twentieth century, development has been intense in many world regions and may eventually spread to parts of the world that continue to be relatively untouched. Development is at the core of all modernization processes and leads eventually to widespread increases in income and living standards. Often considered antithetical to strong family systems (Cherlin 2012), its growth has unquestionably come at the expense of the influence of the family in society (Goode 1963). Important byproducts of development include a more developed public sector, greater importance of public policy in shaping people's lives, a revolution in health and eventually dramatic changes in education for both sexes. All of these have important implications for how society views intergenerational co-residence and for the ability of families to maintain their offspring at home longer and, conversely, for young

adults to generate the income necessary to have families of their own. The family/development tradeoffs continue to be a central aspect of social change in both the developed and, at the very least, in the rapidly developing world as well (Ruggles and Heggeness 2019 2008).

Material constraints such as working conditions, personal income, public transfers, and housing prices also affect co-residence (Costa 1999; Liu and Easthope 2016; McGarry and Schoeni 2000;). These changes condition employment, care/welfare and housing market conditions at a macro level and education and employment status at a micro level. Economic constraints (i.e., wages, unemployment, house prices) and public transfers and policies affecting the likelihood of living alone (e.g., unemployment benefits or pensions) may potentially influence patterns and trends in intergenerational co-residence (Costa 1999; Liu and Easthope 2016; Ruggles and Heggerness 2008) 2008; McGarry and Schoeni 2000; Chen et al. 2018; United Nations 2005). Deindustrialization, the decline of the working-class family, the scarcity of rewarding jobs, and cuts in the welfare state may have favored a rise in co-residence in some developed societies (Beck 2009; Cherlin 2004; Cherlin and Seltzer 2014; Furstenberg 2010). By contrast, in the booming economies of the developing world, the fact that economic growth has not been accompanied by an expanded welfare state in terms of education, health, pensions, social policy and workers' rights (Cherlin 2012) may have paved the way for increasing coresidence. In all of these contexts, co-residence can act as a mechanism of protection and intergenerational solidarity in times of rapid economic change.

At an individual level, intergenerational co-residence is the result of individual decisions of two generations of the same family and of people's willingness and ability to opt for co-residence instead of residential autonomy. These decisions take place during a period of people's lives marked by important life-course transitions: to independent living for the young and into

old age for the parents (Aassve et al. 2002; National Research Council 2005). These decisions are complex ones, involving preferences, values and material realities, as well as job opportunities, on-going education and the importance people attribute to co-residence with relatively older parents. Underlying all of this, of course, the value placed on independent living (or on family-based co-residence) is a central part of people's decisions. Seen in economic terms, decision making for the young is about the opportunity costs associated with residential options in early life. These opportunity costs are economic, cultural and personal. All of them affect people's decisions to leave their parental households.

Gender differences existing in any given society, especially when they are large, can influence the nature of intergenerational co-residence substantially. Whenever access to the labor market of young adults differs by sex or where norms governing behavior vary, the incidence of co-residence could be much higher for one sex than it is for the other. Where this does not happen, generally intergenerational co-residence will tend to be slightly lower among women, mostly because access into married life comes earlier among women than does access to the economic ability needed to support a family among men.

An important limitation of many of these explanations for changing intergenerational coresidence is that they are based on the recent experience of the developed world that may or may not be a bellwether of change for a majority of the world's population where development remains a promise for the future. The extent to which development leads to a recognizable set of changes that ultimately take place in much of the world constitutes an open issue that, at present, has no clear answer (Thornton 2005). The validity of many of these explanations when applied to less-developed parts of the world requires verification.

The overall goal of this study is to chart the incidence of intergenerational co-residence among men and women around the world and to track the pace of change during the first decade of this century. In so doing, we will be able to address specifically the importance of both demographic and non-demographic factors for changing intergenerational co-residence during the initial years of the twentieth century. We will also be in a position to explore the importance of development, existing family systems and large regions of the world for any explanation of observed patterns of change.

3. Data

Our analysis is based on census and survey microdata from 69 countries (see the online Appendix Table A1) mainly coming from IPUMS-International with additional information taken from Eurostat's Labor Force Survey. We used all available IPUMS samples for which individual level microdata organized into households existed post- 2000. In 52 cases, data were published after 2006, mostly corresponding to the 2010 census round. To examine change over time, we also rely on census microdata from IPUMS-International (Minnesota Population Center, 2020). We used data from two consecutive censuses, normally ten years apart. When available observations were separated by more or less than 10 years, results were adjusted to a decade of change by dividing the difference by the number of years and multiplying by 10. In order to compensate for the low coverage of IPUMS in some European countries, we relied on data from Eurostat Labour Force Surveys for countries like Austria, Belgium, Croatia, Czech Republic, France, Germany, Greece, Italy, Latvia, Netherlands, Poland, Spain and the United Kingdom. Because of smaller sample size, LFS surveys offer less reliable estimates of corresidence patterns, in particular when dealing with populations outside working age.

To measure intergenerational co-residence we used the child – parent location variables available both in IPUMS and LFS samples. These pointer variables identify the presence of ego's father and mother in the same household. Intergenerational co-residence refers to a person whose father or mother was present in the household. The definition is restricted to parent-offspring relationships, therefore excluding co-residence with in-laws. The reasons for not considering in-laws are twofold: (1) in-laws cannot be systematically identified in all countries and (2) gender differences in co-residence are best observed when this distinction is made because it enables us to capture societies with patri- or matrilocal residence.

Differences across countries and between men and women in intergenerational coresidence may potentially reflect disparities in union formation and childbearing across countries and by sex. To minimize these effects and also to decompose change over time, in this paper we follow two approaches. First, we compare observed and standardized values. We use direct standardization. As a standard, we have chosen the average distribution of all men and women in different family statuses by age across countries (see Appendix Table A2). The following population subgroups are identified: not in union, no children; not in union with children; in union, no children; and in union with children. Family status categories are based on observed patterns of co-residence and do not take into account children or partners living outside the household. Second, we use decomposition (Kitagawa, 1995) to explain how much of the change in intergenerational co-residence over time is attributable to changes in family status composition and how much to changes in rate schedules.

4. Results

Intergenerational co-residence around the world

The importance of intergenerational co-residence varies widely by age, sex and society. Figure 1 summarizes the observed (left panel) and standardized (right panel) age patterns of female and male co-residence with at least one parent, using data from 69 countries, showing the median and interquartile range: longer colored bars indicate greater variation across countries. Here co-residence is tracked by age from infancy until 50-54 for both men and women. Observed values indicate overall levels of intergenerational co-residence, while standardized values show co-residence independent of the effect of childbearing and partner status of adults. At very young ages, living with parents is the norm, and before 15, differences between boys and girls or between observed and standardized values are limited. After 40, co-residence among mature adults and their parents is much lower, though this shift does not, of course, preclude downward intergenerational co-residence of these mature adults with their own children. Between 15 and 30-40 years of age, men and women go from nearly complete co-residence with the parental generation to a situation in which co-residence with parents is replaced by people living in different forms of nuclear household or on their own. It is a life-course trajectory whereby the parental generation goes from being an overwhelming part of young people's lives to eventually disappearing, at least in terms of co-residence, often –but not always- because of death.

Figure 1 about here

With respect to gender differences, the key results from Figure 1 are: (1) Men invariably show higher rates of intergenerational co-residence than do women. These differences are greatest between 20-25 and 45 years of age, when levels of observed intergenerational co-residence among men are much higher than among women. (2) When using standardized values,

differences by sex are somewhat lower. Some of these results, especially those between 20 and 30 years of age, respond in general terms to the different ages at which men become active economically and women marry, enter partnerships, and begin to have children of their own. Beyond that age, however, differences between men and women, as estimated with both observed and standardized values, challenge simple and straightforward explanations. At older ages, we observe lower levels of intergenerational co-residence, going from 80 percent at 15-9 years of age to below 10 percent at 45-9, yet relative differences between men and women increase as people age. Past 35, these differences are highest when using standardized estimates, suggesting that they are unrelated, for the most part, to the family status of young adults.

Figure 2 deals specifically with young adults (25-29) and contains data for countries organized by macro region, with 16 countries from Africa, 12 from Asia, 22 from Europe and North America, and finally 19 from Latin America and the Caribbean. It shows the relationship between men (y-axis) and women (x-axis) for observed values (left panel) and for standardized values (right panel). Each panel contains vertical and horizontal lines representing the global median for each sex, plus a diagonal line representing equal values for both men and women.

Data points above the diagonal line indicate higher values among men and below it among women, with the distance from the diagonal line indicating the relative importance of that difference. The quadrants of the figure represent different combinations of men and women, with most countries falling into the quadrants on the upper right (relatively high levels of both estimates), upper left (high levels for men and low levels for women) and on the lower left (low levels for both men and women). Grouping results by region (here, coded by color) helps illustrate the overall differences and similarities holding in different regions.

Figure 2 about here

Nearly all data points are situated above the diagonal line, indicating values for men are almost invariably higher than for women. When using values standardized by family status, the differences between men and women tend to be smaller than they are with observed values, but they continue to exist. The only difference here lies in Asian countries, where differences by sex are enormous independent of whether observed or standardized values are used. When levels of co-residence are relatively high, everywhere observed values are often much higher than standardized ones, suggesting importance of factors that go beyond the specific family status of young adults.

In this array of co-residence, extremely high observed values (>50 percent) among men are in Armenia, India, Fiji, India and the Kyrgyz Republic (Asia); Morocco (Africa); and Croatia, Greece, Italy. Latvia, Poland, Portugal, Romania, Slovakia and Spain (Europe) stand out. In Latin America and the Caribbean, values tend to cluster towards the center and differences between men and women are small. The region with the greatest variability is unquestionably Europe and North America, with both very high values and very low values among both men and women. These results suggest that the relative importance of family status is by far the highest in Europe. It also shows that differences by sex, by country, or by region do not disappear when using standardized values, suggesting that the observed differences are the product of more than the specific family status of young adults.

A relevant conclusion from this figure is the often enormous difference between men and women. Of the 69 countries included here, in only one instance (Botswana) is observed coresidence among women higher than it is among men (by 0.9 percentage points). The greatest

differences are found in a number of Asian nations where levels of observed intergenerational co-residence among men are often far above what they are for women (Armenia by 50 percentage points, Bangladesh by 32.5, China by 35.9, India by 52.6, Fiji by 30.6, the Kyrgyz Republic by 41.3, and Vietnam by 31.8). The disparities in India, where 60.7 percent of men 25-29 co-reside in their parental households, as opposed to only 8.2 percent of women the same age, are striking and are likely largely the result of very early and universal marriage among Indian women together with normative behavior whereby married men live with their parents.

The data presented for the Europe and North America do not stand out because of the extreme differences between men and women, but rather because of the wide disparities in the regions. A number of countries display extremely high levels of intergenerational co-residence for both sexes, often in excess of 70-80 percent among men and 50-60 percent among women; while in many others, levels are quite low (near 20 percent for men and 10-12 percent for women). Exceptionally high levels of observed values hold, for example, in Croatia (86.2 males, 68.7 females), Italy (74.2, 58.1), Greece (73.0, 54.9), Slovakia (70.3, 50.5), and Spain (67.8, 49.6). The opposite holds in countries such as the Netherlands (21.8, 10.6), France (24.4, 12.5), and Germany (23.2, 13.1).

Trends in intergenerational co-residence around the world

Key results for this entire paper are summed up in Figure 3 where change over time in intergenerational co-residence is shown for a large number of countries around the world, with observed (left panel) and standardized data (right panel) for populations 0-54 years of age.

Change in co-residence is measured as the decadal percentage point change between one census

and the next, controlling for the number of years between population counts. There are fewer countries in this this figure than in Figures 1-2 (44 instead of 69) because the necessary adjacent population counts were not always available (see online Appendix). The box plots contain the sample median and the first and third quartiles for men (dark grey) and women (light grey). Whiskers indicate variability outside the upper and lower quartiles. These data provide ample evidence that, around the world, there have been widespread increases in the incidence of intergenerational co-residence among adults aged 15-50. Growth in co-residence appears to be considerably higher when estimated with observed than with standardized data, affects all age groups above 20, and tends to be higher for men than for women above 30 (with observed data) and above 25 (with standardized data).

Figure 3 about here

This perspective changes, at least in part, if we look at relative values for age. The pace of growth tends to be highest for both sexes among people 20-29, though among males the peak ages also include 30-34. After those ages, growth in co-residence continues, but at a slower pace. For males, growth as estimated with observed data is greatest between 20 and 40 years of age, at which median levels of co-residence increase by just under two percentage points, and reach their high point of 3 percentage points among men 25-29. With women, a similar pattern holds, though the maximum increase comes earlier, at 20-24 years of age (an increase of almost 4 percentage points). After 30 years of age, percentage point differences between men and women (males minus females), based on observed data, range between 0.4 and 0.5, with positive values

indicating higher growth rates among males and negative values higher rates among females. For both sexes, growth as estimated with standardized data is also positive, but levels are lower than the ones shown with observed data.

Figure 4 portrays overall patterns of change in intergenerational co-residence, with specific reference to young adults (25-29), the rates of change among men plotted on the y-axis and among women on the x-axis, using both observed and standardized values. The diagonal line represents equal rates of change, with values above it indicating that change among men is greater, and below where that among women is higher. The distance from that diagonal line indicates the degree to which behavior among men and women differs. The vertical and horizontal dotted lines indicate no change in co-residence. Countries below the horizontal line show negative rates of change among men, and those to the left of the vertical line show negative rates of change among both men and women, and points in the upper right-hand quadrant indicate growth for both sexes. As earlier, values for the four macro-regions are color-coded. The left panel contains results based on observed data and the right panel on standardized data.

Figure 4 about here

Despite some outliers, where differences are enormous, for the most part both observed and standardized values hover near the diagonal line and are highly correlated. Observed values tend to be higher than standardized ones for both men and women. The overall result of this figure confirms that, during the initial part of the twenty-first century, there was a generalized

move towards greater intergenerational co-residence among young adults aged 25-29. This change took place on every continent, affected both men and women, and is visible with observed and with standardized data.

If we compare men directly with women using observed data, a similar picture emerges. Only six of the 44 countries included here show declines in intergenerational co-residence among both men and women (Botswana, South Africa, Austria, the Czech Republic, Romania and Poland). In another four countries there are declines for men coupled with increases for women, and in another two, the opposite takes place. Invariably declines, when negative, are relatively small, with the exception of the Czech Republic and Poland. The rest of the countries show increase in intergenerational co-residence among both men and women, totaling more than 70 percent of global sample. In many cases, increases are quite high for both men and women (Belarus, Croatia, Hungary, the USA and Costa Rica). In a few select Asian nations increase in co-residence among men far outstrips that of women (Bangladesh, Fiji and the Kyrgyz Republic). The only true outliers in the graph, at least with respect to differences between men and women, are these three countries together with Croatia (where increase among women far outstrips that of men).

Dimensions of change

This article presents ample evidence in support of the global nature of increasing coresidence, yet relatively little has been said about its background factors. In the introduction, several factors are mentioned including the rising availability of parents relative to young adults, changes in family status among young adults, the importance of development and family systems and finally other factors that could affect the expectations and realities of young adults and their

families. In this section, many of these explanations are tested and a full-scale decomposition is undertaken.

The importance of changes in population age structure is explored in detail in Figure 5. We have used a ratio of the elderly (70-79 years of age) to young adults (30-39) as a proxy for the relative availability of both the elderly and of young adults. This indicator is an imperfect approximation of the actual number of persons with living parents, but has the advantage of being easy to estimate. It represents the fundamental supply of parents and of young adults for co-residence, independent of the specific situation of each age group. Greater availability of the elderly should lead to higher levels of intergenerational co-residence and lower availability of the elderly will tend to depress co-residence due to relatively fewer elderly and relative more young adults potentially available for co-residence. Reductions in the mortality of the elderly coupled with reductions in the actual number of young adults due to decreasing fertility will tend to lead to higher values. We have tested other age groups with similar results. In the end, this variable is about age structure; about the supply of both age groups and how this conditions potential intergenerational co-residence. In Figure 5, we plot change in this indicator on the y-axis and change in observed intergenerational co-residence on the x-axis, with men portrayed on the left and women on the right. As before, large geographic regions are color-coded. As expected, in most countries increases in this variable are visible over the period, though these increases are relatively modest and are most visible in many nations of Europe and North America, precisely where demographic modernization is most advanced. Most countries are situated in the upper right hand quadrant of the figures corresponding to increases in the relative supply of adults together with increases in the incidence of co-residence, with large intra-regional disparities found in Europe and North America and rather small ones elsewhere. The figure also suggests,

however, that the specific link between both patterns of change for both sexes is rather weak (a coefficient of -0.21). When organizing these data by levels of development (not shown here), results are similar and resist any straightforward interpretation. In sum, increases in the relative availability of parents appear to be correlated only weakly with increases in intergenerational corresidence.

Figure 5 around here

As expected, these links are more visible when organizing the data according to changes in the proportions of young adults (25-29) by their specific family status. These results are shown in Figure 6, with the upper panel showing changes in union status and the lower panel showing changes in the proportions currently with offspring. In both cases, it is clear that in most cases, these proportions declined substantially during the first decade of this century, a time when the incidence of intergenerational co-residence was on the rise. This negative relationship yields a stronger negative correlation coefficient for both sexes than before (-0.45 and -0.36). The negative link is by far the strongest in Europe and North America and in Latin America, and practically inexistent elsewhere, except among Asian women, though at a lower level. When we organize these data by levels of development (not included here), the same basic pattern persists, with the poorest regions showing few, if any, links between family status and co-residence, and the more developed ones often very strong ones.

Figure 6 around here

To conclude our analysis, we undertake a formal analysis to decompose the change in coresidence into two components. One is the contribution of the change in family status (compositional change) and the other is the contribution of other factors to rate schedule changes (rate change). Figure 7 contains the basic results of this decomposition with changes in the rates

component shown on the y-axis and changes in the composition component on the x-axis. All data points above the horizontal dotted line are examples of positive inputs from the rates component, while data points to the right of the vertical dotted line are cases in which compositional change is positive. In other words, data points in, say, the upper right-hand sector of the figure reflect positive inputs towards change from both components, while data points in, say, the lower right-hand quadrant refer to situations where the composition component is positive while the rate component is negative. The solid diagonal line (from top left to bottom right) represents no change in intergenerational co-residence. The distance from this diagonal line shows the intensity of change, with points to the right indicating growth in co-residence and to the left decline. Since growth is the result of the rates component + the composition component, it is relatively easy to approximate the global rate of change directly from this figure. Finally, the other solid diagonal line (from upper right towards the lower left) indicates equal importance for both components of change, with cases to the left indicating countries where the rates component of change is more important than composition component, and cases towards the right indicating greater importance of the composition component of change. As before, data points are color coded by continent.

Figure 7

The majority of countries show high levels of the composition component of change, though in a few this is not the case. This component is relatively low in Africa and in some Asian and European countries. It is especially high in most of Europe and North America and, to a lesser extent, in Latin America and in a couple of Asian societies. With the rates component, this is quite different. In an important minority of countries the rates component of growth is actually negative, though in many other countries it is positive, especially among males in Asia, Africa

and in some European countries. As happened before, we find the greatest disparities in countries of Europe and North America, with both strongly positive and strongly negative rates components. Among men, the fastest rates of overall change in intergenerational co-residence are found in some European, Asian and Latin American countries, while among women it is found in some European and Latin American societies. Generally, the importance of the composition component of change is greater than that of the rates component (especially in in Europe and North America, together with a smattering of countries in Latin America and in Asia), but in many others the opposite holds, even in Europe and North America. Among men, the rates component of growth is more important than the composition component in 12 countries, while for women this is true in 16 countries. Otherwise, the composition component prevails, though often by slim margins. An important result of this decomposition is the fact that it points to the important role of both the composition and the rates components of change in most countries.

If we organize our results in a more general way using median values for macro regions, among men the composition component prevails over the rates component in Europe and North America and in Latin America as opposed to Africa and Asia where the rates component is more important. Among women, the composition component prevails in Europe and North America, Latin America and, to a lesser extent, in Asia, while the rates component is much more important in Africa. We have undertaken a similar analysis (not shown here) for countries organized by differences in HDI (in quartiles) with similar results except that Europe tends to be divided into two different quartiles, with more homogenous behavior within each group.

5. Summary and discussion

Summary of results

In this paper, abundant evidence has been presented regarding patterns of intergenerational co-residence and how these have increased during the initial decade of the twenty-first century. Higher levels of intergenerational co-residence among men and women have emerged as a relevant part of our analysis together with the enormous differences existing around the globe among young adults (25-29) ranging between and 83 and 13 percent for men, and 68 and 6 percent for women. We interpret these patterns in terms of the way family systems work around the globe together with the impact of development that has led, among other things, to improvements in the health and material well-being of the parental generation. Levels of coresidence are relatively low in Africa with the exception of Northern Africa where behavior is not altogether different from that shown by Southern Europe. The most enduring characteristic of family systems in Asia is the radical separation of life paths for men and women, with high coresidence among men and low co-residence among women. In Europe and North America, the most notable characteristic is the enormous disparity in the region, related to prevailing family systems in the developed world (Reher 1998, 2019; Therborn 2004), coupled with relatively small differences by sex. Finally, Latin America and the Caribbean is the region with the least heterogeneity, relatively limited differences by sex and moderately low levels of intergenerational co-residence.

We have also presented evidence of a generalized pattern of increase in intergenerational co-residence in recent times. This pattern affects all world regions and between 70 and 80 percent of the 44 countries included in the analysis. Increase is most evident among people 20-30 years of age and, at least in regions such as Europe and North America and in Latin America and

the Caribbean, it often affects women as much or more than it does men. Rates of growth are fastest in Asia (especially among men), robust in Europe and Latin America, and relatively slow in Africa. These findings build on similar evidence found recently among married Indian men (Esteve and Liu 2018), single mothers in Latin America (Esteve et al 2012), young people with jobs in wealthy nations (Fukuda 2009; Koksel 2017) and in some societies with historically low levels of intergenerational co-residence (Mitchell 2017; Mykyta et al 2012; Smits et al. 2010; Stone et al, 2011; United Nations 2019; Fry and Passel 2014). Taken together, this body of research makes a convincing case for the existence of a worldwide trend towards greater intergenerational co-residence during the initial years of the twenty-first century. It is a trend that appears to run contrary to the idea that the modernization and individualization of society leads inevitably to a decline in the importance of the family for people's lives, or at least suggests that this long-term process may experience different phases. Judging from the very recent past, the impression from the results presented here is that the family is back and its predicted demise has been overstated.

Changes in co-residence appear to be influenced only indirectly by shifts in the availability of relatively older parents, likely due, at least in part, to the relatively short interval where change is measured, together with the fact that the indicator used to measure it is not ideal. The rate of change is far more sensitive to shifts in the family status of young adults than it is to changing age structures. In both cases, when countries are organized by levels of development results are not significantly different from when they are organized by macro region, due largely to the fact that continents tend to mirror, in a very approximate way, differences in development.

A decomposition exercise was undertaken in order to assess the extent to which the resulting growth is due to composition effects (based on in the family status of young adults) or

to rates effects (shifts in the propensity to live with the parental generation, independent of family composition). While these exercises do not provide conclusive answers, they open up new lines of potentially rewarding research. The results indicate that the compositional effects are overwhelmingly important in Europe and North America, to a lesser extent in Latin America and the Caribbean, and among Asian men. Elsewhere change is mainly due to a generalized increase in co-residence affecting people independent of their specific family status. In sum, using the terminology of decomposition, growth in intergenerational co-residence includes both a composition and a rates component.

Any explanation of these results must start with the enormous importance of recent demographic trends in much of the world that have led to significant reductions in fertility and to shifts in patterns of childbearing and union formation together with longer and healthier lives among parents. These changes, often associated with more advanced stages of the second demographic transition, are characteristic of the West and, more recently, have made important inroads into other societies with more recent transitions (Lesthaeghe 2010). By implication, this process places ever-greater numbers of young adults into a category "not in union and childless" that has always been the most important component of intergenerational co-residence among people aged 25-29 (see Appendix Figure 1 for further details). It constitutes the classic compositional effect. A limitation inherent to this type of approach is that it identifies the mechanisms of change but not the underlying causes. Its usefulness is also limited in areas of the world where demographic changes such as these are relatively recent or even inexistent. Africa is an important case in point. The relative importance of the composition component is strongly determined by development and by its links to the timing and intensity of demographic and

social modernization processes in any given country. Hence, its overwhelming importance in Europe and North America.

Equally important is that, during the initial years of this century, rates of intergenerational co-residence also increased for a wide variety of population subgroups and societies, and this effect exists independent of the demographic factors determining the size and structure of different population subgroups. Observable trends, then, are the consequence of both sets of variables. Any reasonable explanation of the rates effect is necessarily more speculative and goes beyond the straightforward demographic makeup of society. Indeed, many of the factors influencing shifts in the rates of intergenerational co-residence are probably at work constraining, at least in part, the basic demographic behavior existing in any given society. In other words, the components of growth are not independent of each other.

An important result of this study has been the relevant differences by gender appearing in our results. Some of these, such as the systematically higher levels of intergenerational coresidence among men, are not surprising, mostly because they conform to expectations. Other results are more surprising, though they can be explained within what is known about how family systems function on a global scale. The most noteworthy of these are the enormous differences by sex appearing in Asia, and to a lesser extent in Africa, as opposed to much more modest differences by sex in Europe and North America and in Latin America and the Caribbean. In many Asian countries, family systems dictate very different life paths for men and women, with men marrying relatively late and co-residing for long periods of their adult lives in their parental households and women marrying young and living in the households of their husbands' kin. This dynamic has deep historical roots (Jones 2005), has shown little change in recent years, and has an evident effect on intergenerational co-residence. In other parts of the

world, different genders are treated on more equal grounds, thanks in part to high educational levels for both sexes and to an inherently greater similarity in gender roles in society. Another result worth highlighting here is that growth in intergenerational co-residence among men is much faster in Africa, and especially in Asia, than it is for women, while in Europe and Latin America it is similar for both sexes and often higher among women. Men are the main drivers of increasing co-residence in Asia and Africa, but both sexes are in Europe and North America.

Discussion

The findings presented here provide fitting testimony of the resilience of the family around the world that, far from continuing its often-predicted decline in relevance, has proven itself able to respond to the perceived needs of young adults. This has happened everywhere, seemingly independent of levels of development, though the specific mechanisms involved may differ substantially. Families have been able to accept increasing numbers of young adult offspring as co-residents, possibly at higher ages than ever before, because their health and the material conditions of their lives had improved, because they were willing to share their homes and lives with their offspring and because these offspring needed this type of support. From the perspective of the family, this situation should come as no surprise because the notion of intergenerational solidarity is ubiquitous to family systems the world over, though specific characteristics may differ. Beyond this, however, the underlying reasons for the observed changes in intergenerational co-residence can be found in the particular way in which the demographic opportunities, material constraints and socio-cultural factors outlined earlier changed and how they affect societies and regions around the world.

Any discussion of the demand for intergenerational co-residence necessarily varies by levels of development as well as by the concrete and often changing material constraints affecting the ability of young adults to fulfill their life expectations without the active intervention of their families. Our ability to assess these specific constraints within individual countries around the globe is, of course, very limited. Yet the overall results presented here suggest that the economic realities of young adults is making this ideal situation increasingly problematic in much of the world. Economic modernization accompanied by job insecurity for young adults is one example of this. The specific way societies address challenges like these is likely to be constrained as well by the traditional importance attached to co-residence or to individual autonomy among young adults, itself a largely cultural factor.

In wealthy societies in the West and in parts of Asia, prolonged education, delays in childbearing, growing concerns about labor markets (quantity and quality of employment) and an economic crisis starting in 2007-8 have teamed with uncertain transitions related to partnership, family formation and gender relations to create an undercurrent of hesitance and insecurity when setting out on adult life. This appears to have happened within a context of high levels of material wellbeing, relatively fluid and conflict-free intergenerational relations with increasingly tolerant parents and the perceived acceptability of relatively prolonged dependence on them. While independence continues to be a goal, it is no longer the independence at all costs that it once was. From the perspective of parents, retirement is near, often in enviable economic circumstances, relatively good health and with little debt. This scenario holds everywhere in the developed world, in both individualistic and familistic societies (though prevailing levels of intergenerational co-residence may differ substantially), and makes decisions to remain at home relatively easy to make for both parents and their offspring. Its implications for reproduction, for

family life and for the long-term stability of societies based on intergenerational transfers of goods and services, are enormous. Whether or not this corresponds to a moment of relatively low self-confidence among young adults and constitutes a significant challenge to the idea of life that they once had is an open issue (Reher 2019).

In the less-developed world, the role of the individual and the family in society is much different from the developed world. Here too there has also been growth in intergenerational coresidence, though at a slower pace than in the wealthy West and in the Asian superpowers. Improving health and living standards among the parental generation, as modest as they may have been, likely contribute to this trend. The possibilities offered by local labor markets, deluged by an enormous supply of labor feeding on decades of runaway population growth, were likely far from bright, as well. In these countries, however, the response to a bleak economic future could have been, at least in part, a process of international out-migration selective for the brightest and the most prepared of young people, the dynamic risk takers (Hatton and Williamson 2006; Lindstrom and López Ramírez 2010; Massey 1999; Massey et al. 1987; Massey et al. 1993; Piore 1979). When this out-migration is widespread and increasing, as it has been in Africa, Latin America and in parts of Asia and Eastern Europe during the first decade of the twenty-first century, by definition out-migrants cannot be living with their parents or counted on a national census. Besides, if there is negative selectivity in terms of human capital and ambition among those left behind, the likelihood of their living with their parents at home will correspondingly be higher. This situation is facilitated by remittances from emigrant family members enabling parental households to take on additional co-resident offspring. All of these effects will have an impact on census-based estimates of intergenerational co-residence. The extent to which growth in co-residence in the certain parts of the developing world is the result,

at least in part, of international migration is unknown, but it cannot be discarded as a component of any overarching explanation of increasing intergenerational co-residence. From a conceptual perspective, out-migration may constitute an alternative to intergenerational co-residence or, perhaps better, a road taken when family-based solutions are either not available or not desirable.

With respect to the developed West, these results are yet another sign of the changing contexts of social change that have developed in recent decades. The initial thrust of modernization after the 1960s was intense and often quite disruptive of existing values, many related to the family and family life. All came under attack during the great cultural revolution in the West, as the process of social and cultural change limited their scope and led to the idea of an inevitable decline in the relevance of the family and a concomitant rise of the individual and individual autonomy as cornerstones of public and private life. By the century's end, however, much of this had changed and continued to do so in the early years of the present century. Examples of this include a recent decline in the incidence of divorce in many OECD countries (OECD Family Database), the emergence of gender relations based more on collaboration than on conflict; e.g., the importance of "fathering" (Goldscheider et al. 2015), a recent reduction in living alone in later life (Esteve et al 2020; Keilman and Christiansen 2010; Padyab et al. 2019; Reher and Requena 2019) and an incipient reversal of the traditional educational gradient in matters referring to certain dimensions of family life (Kalmijn 2013). To date, many of these shifts are only visible in a small subset of the most developed countries, though these may be trendsetters of the future. They suggest, at least in theory, that there may be a major cultural shift underway involving greater stability and possibly more conservative attitudes towards the family. The results presented in this paper provide an example of this shift. Gauging properly the relevance of this trend and the extent to which it will spread to the rest of the West and perhaps

the world is impossible at this point. The issue is potentially relevant because it may indicate the direction of social changes in family life in the years to come, with implications for the structure of intergenerational transfers existing between parents and their children.

Another open question is just how long this trend will last. The results here refer to a period of rapidly accelerating international migration and ends with one of the most severe economic crises in recent memory, at least in the most developed world. The extent to which the increase in intergenerational co-residence is the product of factors rooted in this decade or responds to underlying forces that may continue to stimulate on-going increases in co-residence now and in the near future is unknown. Monitoring these trends closely is important because of their importance for society.

Rising levels of intergenerational co-residence among young adults imply longer periods of co-residence with parents and, by definition, an increase in the social relevance of the family for its members. From one perspective, it may be yet another example of the adaptability of families to the needs of family members and, with the need met, the family will return to a more traditional role of providing background support for its members. If it is more than a temporary adaptive mechanism, it is difficult not to imagine that its implications will transcend the specific mechanisms involved and lead to an increase in the relevance of the family within society. It will also have negative economic implications for the families involved, though at present we cannot know if this surge of downward transfers from the parental generation towards young adults will meet eventually with similar upwards transfers from adults to their elderly parents. At present, this question has no answer, though it is unquestionable that increasing co-residence of young adults in their parental households will have implications for the type of intergenerational negotiations, tacit or not, that exist within all families.

The results presented in this study open an array of important research issues. Some of them are related to the long-term implications for families and societies. Addressing these issues successfully will often require a larger time perspective than the one used here, with extensions towards both the past and the future. Others are related to the underlying explanations of the observed patterns, many of which were only outlined here in a very preliminary way. Of particular interest, for example, is the way changing patterns of educational attainment for both sexes, especially among women, have contributed to shaping patterns of co-residence. The growth of education during the period is well-documented, but the way it interacts with rising intergenerational co-residence is not. Approaching these and other subjects successfully will entail analytical approaches that are different from the rather straightforward one used here. Yet the data exist, as co-residence and education (and occupation, migratory status, urban/rural residence and many other variables) can be identified on existing census records for countries around the world.

References

Amato, Paul R. 2010. "Research on divorce: Continuing trends and new developments." *Journal of Marriage and Family* 72 (3): 650-666.

Arnett, Jeffrey J. 2000. "Emerging adulthood: A theory of development from the late teens through the twenties." *American Psychologist* 55 (5): 469-480.

Arnett, Jeffrey J. and Joseph Schwab. 2012. *The Clark University poll of emerging adults: Thriving, struggling, and hopeful.* Worcester, MA: Clark University. http://www.clarku.edu/clarkpoll/.

Aassve, Arnstein, Billari, Francesco C., Mazzuco, Stefano, and Fausto Ongaro. 2002. "Leaving home: A comparative analysis of ECHP data." *Journal of European Social Policy* 12 (4): 259-275.

Beck, Ulrich. 2009. World at Risk. Polity.

Blossfeld, H. Peter, Klijzing, Erik, Mills, Melinda, and Karin Kurz, eds. 2006. *Globalization, uncertainty and youth in society: The losers in a globalizing world.* Routledge.

Bongaarts, John. 2001. "Household size and composition in the developing world in the 1990s." *Population Studies* 55 (3): 263-279.

Bongaarts, John and Zachary Zimmer. 2002. "Living Arrangements of Older Adults in the Developing World an Analysis of Demographic and Health Survey Household Surveys." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 57 (3): 145-157.

Bonvalet, Catherine. 2003. "La famille-entourage locale." Population 58 (1): 9-42.

Chen, Xi, Eggleston, Karen and Sun Ang. 2018. "The impact of social pensions on intergenerational relationships: Comparative evidence from China." *The Journal of the Economics of Ageing* 12: 225-235.

Cherlin, Andrew J. 2004. "The deinstitutionalization of American marriage." *Journal of Marriage and Family* 66 (4): 848-861.

Cherlin, Andrew J. 2012. "Goode's world revolution and family patterns: A reconsideration at fifty years." *Population and Development Review* 38 (4): 577-607.

Cherlin, Andrew J. and Judith A. Seltzer. 2014. "Family complexity, the family safety net, and public policy." *The ANNALS of the American Academy of Political and Social Science* 654 (1): 231-239.

Costa, Dora L. 1999. "A house of her own: old age assistance and the living arrangements of older nonmarried women." *Journal of Public Economics* 72: 39-59.

Esping-Andersen, Gosta, and Francesco C. Billari. 2015. "Re-theorizing family demographics." *Population and Development Review* 41 (1): 1-31.

Esteve, Albert, García-Román, Joan, and Ron J. Lesthaeghe. 2012. "The family context of cohabitation and single motherhood in Latin America." *Population and Development Review*, 38 (4): 707-727.

Esteve, Albert, and Ron J. Lesthaeghe, eds. 2016. *Cohabitation and Marriage in the Americas: Geo-historical Legacies and New Trends*. New York, NY: Springer.

Esteve, Albert, and Chia Liu. 2018. "Family and Household Composition in Asia." In *Routledge Handbook of Asian Demography*, edited by Adrian C. Hayes and Zhongwei Zhao. Routledge.

Esteve, Albert, Reher, David Suvillan, Treviño, Rocío, Zueras, Pilar and Anna Turu. 2020. "Crossnational variations in living alone over the life-course: Comparative perspectives on an emerging issue." *Population and Development Review* 46 (1): 169-189.

Eurostat. "Statistics Explained. Marriage and Divorce Statistics." Accessed, 2020 https://ec.europa.eu/eurostat/statistics explained/index.php/Marriage_and_divorce_statistics.

Fokkema, Tineke, and Aart C. Liefbroer. 2008. "Trends in living arrangements in Europe: Convergence or divergence?" *Demographic Research* 19: 1351-1418.

Fukuda, Setsuya. 2009. "Leaving the parental home in post-war Japan: Demographic changes, stem-family norms and the transition to adulthood." *Demographic Research* 20: 731-816.

Furstenberg Jr, Frank F. 2010. "On a new schedule: Transitions to adulthood and family change." *Future Child* 20 (1): 67-87.

Furstenberg, Frank F. 2013. "Transitions to adulthood: What we can learn from the West." *Annals of the American Academy of Political and Social Science* 646: 28–41.

Furstenberg, Frank F. 2019. "Family change in global perspective: How and why family systems change, Family Relations." *University of Pennsylvania Population Center Working Paper (PSC/PARC)* 2019-22.

Furstenberg Jr. Frank F., and Sheela Kennedy, "Growing up is harder to do. 2: after the great recession." *Contexts blog*, November 4, 2016. http://ctx.sagepub.com/content/3/3/33.short.

Furstenberg, Frank F, Kennedy, Sheela, McLoyd, Vonnie C., Rumbaut, Ruben G. and Richard A. Settersten Jr. 2004. "Growing up is harder to do." *Contexts* 3: 33-41.

Fry, Richard, and Jeffrey S. Passel. 2014. "In Post-Recession Era, Young Adults Drive Continuing Rise" in *Multi-Generational Living*. Washington, D.C.: Pew Research Center's Social and Demographic Trends project, July.

Goldscheider, Frances, Bernhardt, Eva and Trude Lappegård. 2015. "The Gender Revolution: A Framework for Understanding Changing Family and Demographic Behavior." *Population and Development Review* 41 (2): 207-239.

Goode, William J. 1963. World Revolution and Family Patterns. New York: Free of Glencoe.

Goody, William J. 1961. "The classification of double descent systems." *Current Anthropology* 2 (1): 3-25.

Hatton, Timothy J., and Jeffrey G. Williamson. 2006. *Global Migration and the World Economy Two Centuries of Policy and Performance*. MIT Press.

Kalmijn, Matthijs. 2007. "Explaining cross-national differences in marriage, cohabitation, and divorce in Europe, 1990–2000." *Population Studies* 61 (3): 243-263.

Kalmijn, Matthijs. 2013. "The Educational Gradient in Marriage: A Comparison of 25 European Countries." *Demography* 50: 1499–1520.

Keilman, Nico, and Solveig Christiansen. 2010. "Norwegian elderly less likely to live alone in the future." *European Journal of Population* 26: 47-72.

Kitagawa, Evelyn M. 1955. "Components of a Difference between Two Rates." *Journal of the American Statistical Association* 50 (272): 1168-94.

Klapisch-Zuber, Christine, Segalen, Martine, and Francoise Zonabend. 1996. A History of the Family. Polity Press.

Koksel, Pinar. 2017 "Living Arrangements of the Unemployed Across Europe: How Households Protect Us from Vulnerability?" PhD diss., Universitat Autònoma de Barcelona.

Jones, Gavin W. 2005 "The "flight from marriage" in South-East and East Asia." *Journal of Comparative Family Studies* 36 (1): 93-119.

Jones, Gavin W. 2007. "Delayed marriage and very low fertility in Pacific Asia." *Population and Development Review* 33 (3): 453-478.

Laslett, Peter. 1970. "The comparative history of household and family." *Journal of Social History* 4 (1): 75-87.

Le Play, Frederic. 1871. L'Organisation de la Famille. Kessinger Publishing.

Lesthaeghe, Ron J., ed. 1989. *Reproduction and social organization in sub-Saharan Africa*. California: University of California Press.

Lesthaeghe, Ron J. 2010. "The unfolding story of the second demographic transition." *Population and Development Review* 36 (2): 211-251.

Lesthaeghe, Ron J. 2014. "The second demographic transition: A concise overview of its development" *Proceedings of the National Academy of Sciences* 111 (51): 18112-18115.

Lindstrom, David P., and Adriana López-Ramírez. 2010. "Pioneers and Followers: Migrant Selectivity and the Development of U.S. Migration Streams in Latin America." *Ann Am Acad Pol Soc Sci* 630 (1): 53–77.

Liu, Edgar and Hazel Easthope, eds. 2016. *Multigenerational Family Living: Evidence and Policy Implications from Australia*. Taylor and Francis.

Massey, Douglas S., Alarcón, Rafael, Durand, Jorge and Humberto González. 1987. Return to Aztlan. The Social Process of International Migration from Western Mexico. University of California Press.

Massey, Douglas S., Arango, Joaquín, Hugo, Graeme, Kouaouci, Ali, Pellegrino, Adela and John E. Taylor. 1993. "Theories of International Migration: A Review and Appraisal." *Population and Development Review* 19 (3): 431-466.

Massey Douglas S. 1999. "Why Does Immigration Occur? A Theoretical Synthesis." In *The Handbook of International Migration: The American Experience*, edited by Charles Hirschman, Philip Kasinitz and Josh DeWind, 34-52. New York: Russell Sage Foundation.

McGarry, Kathleen and Robert F. Schoeni. 2000. "Social security, economic growth, and the rise in elderly widows' independence in the twentieth century." *Demography* 37 (2): 221-236.

Minnesota Population Center. "Integrated Public Use Microdata Series, International: Version 7.2 [dataset]". Minneapolis, MN: IPUMS, 2019. https://doi.org/10.18128/D020.V7.2 Accessed March 20-31, 2020.

Mitchell, Barbara. 2017. The Boomerang Age: Transitions to Adulthood in Families. Routledge.

Mykyta, Laryssa and Suzanne Macartney. 2012. Sharing a Household: Household Composition and Economic Well-Being: 2007-2010. Current Population Report. Consumer Income. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.

National Research Council, Committee on Population (2005). "Growing up global: The Changing Transitions to Adulthood in Developing Countries." The National Academies Press.

OECD. 2019. "Family Database". http://www.oecd.org/els/family/database.htm.

Padyab, Mojgan, Reher, D. Sullivan, Requena, Miguel, and Glenn Sandström. 2019. "Going it alone in later life: a comparative analysis of elderly women in Sweden and Spain." *Journal of Family Issues* 40 (8): 1038–1064.

Parsons, Talcott. 1949. "The social structure of the family." In *The family: its function and destiny* edited by Ruth Nanda Anshen, 173-201. England: Harper.

Perelli-Harris, Brienna; Theodore p. Gerber. 2011. "Nonmarital Childbearing in Russia: Second Demographic Transition or Pattern of Disadvantage?" *Demography* 48 (1): 317-342.

Piore Michael J. 1979. *Birds of passage: Migrant Labor and Industrial Societies*. New York: Cambridge University Press.

Reher, D. Sullivan. 1998. "Family ties in Western Europe: Persistent contrasts." *Population and Development Review* 24: 203–234.

Reher, D. Sullivan. (2019). "The aftermath of the demographic transition in the developed world: Interpreting enduring disparities in reproductive behavior." *Population and Development Review*. Published online. doi: 10.1111/padr.12266.

Reher, D. Sullivan and Miguel Requena. 2018. "Living alone in later life. A global perspective." *Population and Development Review* 44 (3): 427–454.

Reher, D. Sullivan and Miguel Requena. 2019. "Long-term trends in living alone in later life in the United States, 1850-2015." *The History of the Family*, Published online DOI: 10.1080/1081602X.2019.1696217.

Ruggles, Steven. 2007. "The decline of intergenerational coresidence in the United States, 1850-2000." *American Sociological Review* 72: 962-989.

Ruggles, S. and Misty Heggeness. 2008. "Intergenerational coresidence in developing countries." *Population and Development Review* 34 (2): 253-281.

Smits, Annika; Van Gaalen, Ruben, I. and Clara H. Mulder. 2010. "Parent-child coresidence: who moves in with whom and for whose needs?" *Journal of Marriage and Family* 72 (4): 1022-1033.

Stone, Juliet; Berrington, Ann and Jane Falkingham. 2011. "The changing determinants of UK young adults' living arrangements." *Demographic Research* 25: 629-666.

Therborn, Göram. 2004. Between Sex and Power: Family in the World, 1900-2000. London: Routledge.

Thornton, Arland. 2005. Reading History Sideways: The Fallacy and Enduring Impact of the Developmental Paradigm on Family Life. Chicago: University of Chicago Press.

Todd, Emmanuel. 1985. The explanation of ideology: Family structures and social systems. Oxford: Blackwell.

United Nations. 2005. *Living arrangements of older persons around the world*. New York: United Nations, Department of Economic and Social Affairs, Population Division.

United Nations. 2019. "Database on the Living Arrangements of Older Persons 2017," New York: United Nations, Department of Economic and Social Affairs/Population Division. https://population.un.org/LivingArrangements/index.html#!/

Van de Kaa, D. J. 1987. Europe's second demographic transition. *Population Bulletin* 42 (1): 1-59.

Figure 1. Observed and standardized (by family status) age patterns of female and male coresidence with at least one parent. Most recent available data from 69 countries since year 2000

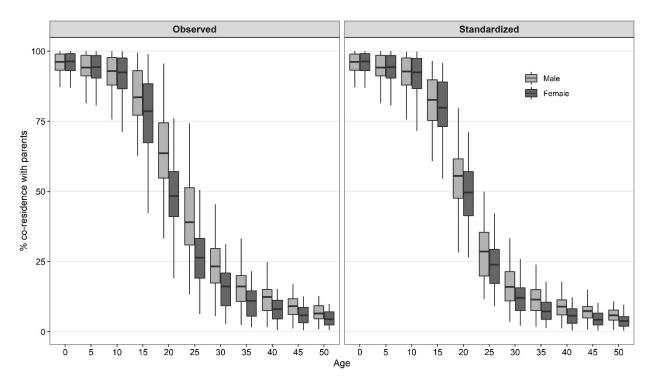


Figure 2. Observed and standardized (by family status) levels of co-residence with parents among young male and female adults (25-29). Most recent available data from 69 countries since year 2000

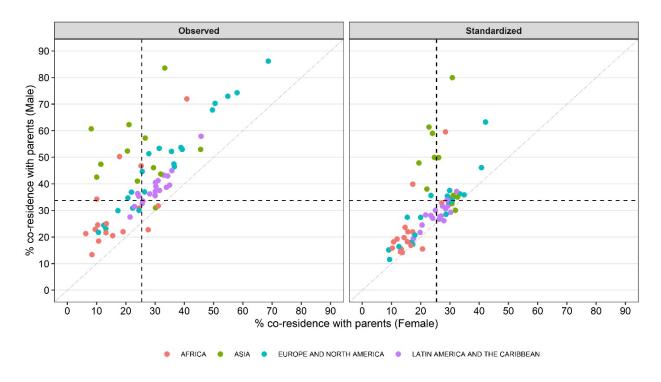


Figure 3. Observed and standardized (by family status) decadal change in co-residence with parents for males and females. Based on the two most recent observations since year 2000 for 44 countries

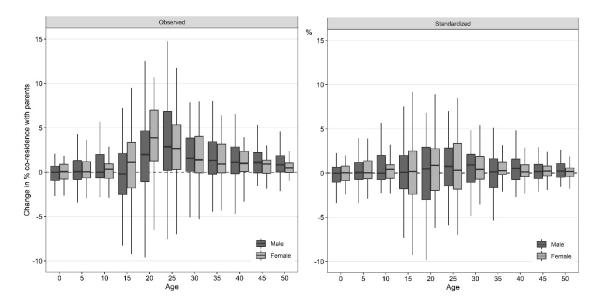


Figure 4. Observed and standardized (by family status) decadal change in co-residence with parents among young male and female adults (25-29). Based on the two most recent observations since year 2000 for 44 countries

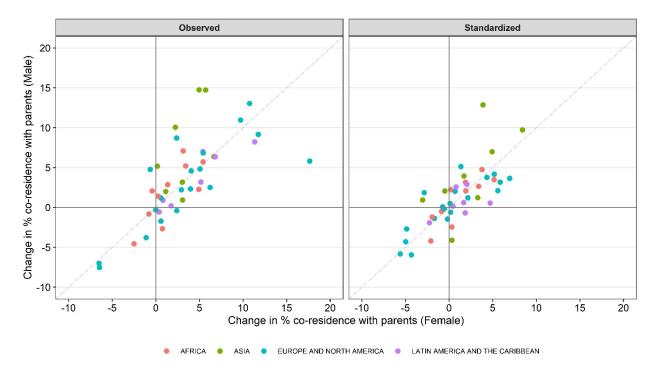


Figure 5. Relationship between decadal change in co-residence with parents among young male and female adults (25-29) and decadal change in the ratio between elderly (70-79) and young adults (30-39). Based on the two most recent observations since year 2000 for 44 countries

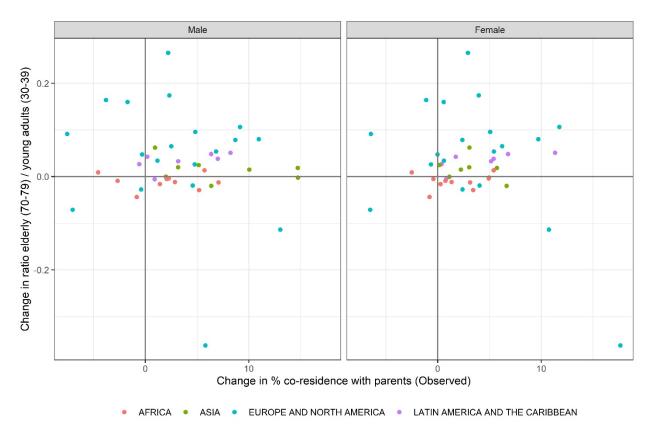


Figure 6. Relationship between decadal change in co-residence with parents and decadal change in the proportion in union and with children among young male and female adults (25-29). Based on two most recent observations since year 2000 for 44 countries

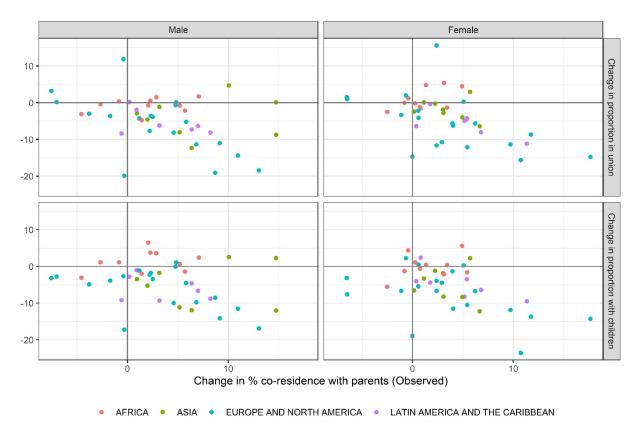
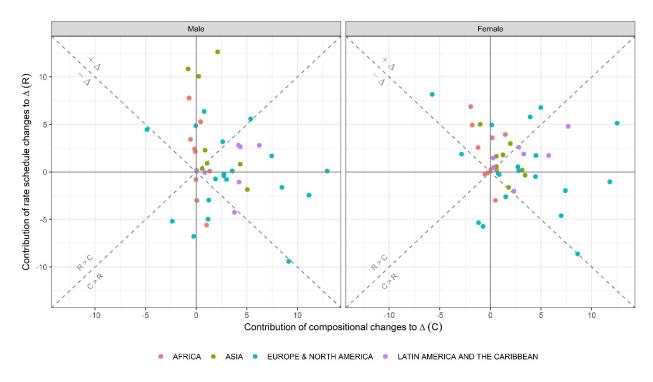


Figure 7. Contribution of compositional (C) and rate schedules (R) changes to overall change in change in co-residence with parents (Δ) among young male and female adults (25-29). Based on the two most recent observations since year 2000 for 44 countries



Appendix: Supplemental Materials

Table A1. Observed and standardized percentages of young (25-29) males and females co-residing with at least one parent by country, year and data source

	Year		Observed		Standardized	
Country		Source	Males	Females	Males	Females
AFRICA						
Benin	2002	IPUMS	17.2	5.8	10.7	8.5
Bellill	2013	IPUMS	22.9	9.5	14.2	13.7
Botswana	2001	IPUMS	23.6	28.4	16.0	14.1
Botowalla	2011	IPUMS	22.7	27.6	15.5	13.3
Burkina Faso	2006	IPUMS	21.3	6.3	18.2	10.7
Egypt	2006	IPUMS	50.3	17.8	32.8	27.2
Ethiopia	2007	IPUMS	24.5	10.4	21.9	17.3
Ghana	2000	IPUMS	25.1	19.1	18.8	13.7
	2010	IPUMS	30.9	24.5	22.0	15.6
Kenya	1999	IPUMS	22.1	12.0	17.2	10.0
-	2009	IPUMS	25.0	13.3	19.2	11.9
Lesotho	2006	IPUMS	46.8	25.2	39.9	17.3
Malawi	1998	IPUMS	11.3	8.8	12.2	12.9
	2008	IPUMS	13.4	8.4	14.4	13.1
Mali	1998	IPUMS	37.2	9.2	26.1	14.3
	2009	IPUMS	34.2	10.0	23.6	14.6
Morocco	2004	IPUMS	71.9	40.9	59.6	28.5
Mozambique	2007	IPUMS	18.5	10.7	19.8	14.3
Rwanda	2002	IPUMS	14.9	15.9	10.8	16.8
	2012	IPUMS	22.0	19.0	15.5	20.6
South Africa	2001	IPUMS	36.2	33.6	22.4	17.5
	2011	IPUMS	31.7	31.1	18.2	15.4
Tanzania	2002	IPUMS	20.2	12.9	17.1	12.2
	2012	IPUMS	21.6	13.2	15.9	10.3
Zambia	2000	IPUMS	18.3	10.6	14.2	13.2
	2010	IPUMS	20.5	15.5	16.9	16.6
ASIA						
Armenia	2001	IPUMS	82.7	30.2	77.9	31.3
	2011	IPUMS	83.6	33.3	80.0	30.8
Bangladesh	2001	IPUMS	32.5	7.8	28.3	13.7
	2011	IPUMS	42.6	10.0	38.1	22.1
Cambodia	2008	IPUMS	31.0	30.1	30.1	31.9
China	2000	IPUMS	47.4	11.4	47.9	19.4
Cyprus	2016	IPUMS	52.9	45.6	35.0	32.6
Fiji	2007	IPUMS	46.9	22.6	42.9	21.2
	2014	IPUMS	57.2	26.6	49.9	26.1
India	1999	IPUMS	58.7	7.0	57.8	20.7
	2009	IPUMS	60.7	8.2	59.0	24.0
Indonesia	2010	IPUMS	41.0	23.9	34.7	30.7
Iran	2006	IPUMS	42.9	26.1	36.7	30.3
	2011	IPUMS	46.1	29.4	32.6	30.7
Kyrgyz Republic	1999	IPUMS	47.6	16.1	48.5	18.9
	2009	IPUMS	62.3	21.0	61.4	22.8

Table A1. (continuation) Percentage young (25-29) males and females co-residing with at least one parent by country, year and data source

Country	Year	Source	Observed		Standardized	
			Males	Females	Males	Females
Philippines	2000	IPUMS	40.5	28.9	31.7	29.4
	2010	IPUMS	43.7	31.9	35.6	31.1
Vietnam	1999	IPUMS	47.2	20.4	49.0	27.7
	2009	IPUMS	52.3	20.5	49.9	24.7
EUROPE AND NORT	ΓH AMERICA					
Austria	2006	LFS	38.5	21.8	25.6	18.2
	2016	LFS	34.7	20.7	27.4	15.4
Belarus	1999	IPUMS	37.3	24.8	33.1	27.5
	2009	IPUMS	46.5	36.6	36.2	33.4
Belgium	2006	LFS	37.3	19.5	17.3	11.9
	2016	LFS	36.9	21.9	19.4	17.4
Canada	2011	IPUMS	30.9	22.3	17.9	16.8
Croatia	2006	LFS	80.4	51.1	59.6	35.2
	2016	LFS	86.2	68.7	63.3	42.2
Czech Republic	2006	LFS	52.2	32.1	30.7	28.4
	2016	LFS	44.7	25.6	28.0	23.5
France	2006	LFS	23.3	11.8	16.6	13.1
_	2016	LFS	24.4	12.4	16.4	12.6
Germany	2006	LFS	24.9	12.5	12.1	9.5
	2016	LFS	23.2	13.1	10.7	9.3
Greece	2006	LFS	70.4	48.7	31.0	27.7
	2016	LFS	73.0	54.9	32.2	29.9
Hungary	2001	IPUMS	40.3	20.6	23.3	20.7
T. 1. 1	2011	IPUMS	53.4	31.4	23.3	20.0
Ireland	2011	IPUMS	37.0	26.3	17.6	17.0
Italy	2006 2016	LFS LFS	72.0 74.3	54.1 58.1	32.7 34.7	30.2 30.9
Latria	2016	LFS	43.5	33.2	34.7 36.4	33.8
Latvia	2016	LFS	52.2	35.2 35.6	30.4	29.5
Netherlands	2006	LFS	19.5	7.7	15.7	8.9
	2016	LFS	21.8	10.6	15.1	9.1
Poland	2006	LFS	60.7	45.3	40.2	39.8
r Oland	2016	LFS	53.7	38.8	35.9	34.9
Portugal	2001	IPUMS	46.1	33.8	29.9	30.3
1 ortugur	2011	IPUMS	53.0	39.2	28.5	28.7
Romania	2002	IPUMS	51.6	27.9	41.5	29.1
	2011	IPUMS	51.4	27.9	35.6	23.5
Russia	2002	IPUMS	43.8	33.2	34.9	29.0
Lubbiu	2010	IPUMS	47.5	36.4	35.4	29.1
Slovakia	2006	IPUMS	70.3	50.5	46.1	40.8
Spain	2001	IPUMS	60.7	50.6	28.4	29.4
1	2016	LFS	67.8	49.6	33.5	30.7
United Kingdom	2006	LFS	25.1	12.2	16.6	12.8
S	2016	LFS	29.9	17.3	20.7	18.0

Table A1. (continuation) Percentage young (25-29) males and females co-residing with at least one parent by country, year and data source

Country	Year	Source	Observed		Standardized	
			Males	Females	Males	Females
United States	2005	IPUMS	19.1	14.7	13.5	12.9
	2015	IPUMS	30.0	24.5	17.3	17.3
LATIN AMERICA ANI	THE CAR					
Argentina	2001	IPUMS	43.3	33.0	31.7	29.3
Bolivia	2001	IPUMS	27.5	21.5	21.7	19.8
Brazil	2000	IPUMS	35.8	25.1	31.3	26.7
	2010	IPUMS	39.0	30.3	30.6	28.5
Chile	2002	IPUMS	38.7	33.9	26.1	27.9
Colombia	2005	IPUMS	40.5	30.1	30.0	25.0
Costa Rica	2000	IPUMS	35.9	23.2	28.8	25.5
	2011	IPUMS	44.9	35.7	29.3	30.3
Dominican Republic	2002	IPUMS	35.8	24.1	26.4	22.7
	2010	IPUMS	35.4	24.4	24.5	20.4
Ecuador	2001	IPUMS	32.7	25.1	26.9	23.7
	2010	IPUMS	33.6	25.8	27.0	24.1
El Salvador	2007	IPUMS	39.5	34.9	32.3	29.8
Haiti	2003	IPUMS	32.6	25.6	19.5	17.6
Honduras	2001	IPUMS	31.5	22.9	28.3	21.7
Mexico	2000	IPUMS	36.0	28.9	34.2	30.2
	2010	IPUMS	43.0	34.3	37.1	32.3
Nicaragua	2005	IPUMS	37.1	30.0	34.0	29.3
Panama	2000	IPUMS	35.3	28.2	27.3	25.3
	2010	IPUMS	35.5	30.0	27.9	26.9
Paraguay	2002	IPUMS	36.4	24.0	28.1	23.5
Peru	2007	IPUMS	37.5	31.5	27.7	26.6
Trinidad and Tobago	2000	IPUMS	50.9	38.3	31.4	28.2
	2011	IPUMS	57.9	45.7	34.0	29.0
Uruguay	2011	IPUMS	36.2	28.2	26.7	26.3
Venezuela	2001	IPUMS	41.2	31.0	31.6	27.4

Table A2. Family status distribution by age assumed to standardize the effects of union and childbearing co-residence status when comparing levels of co-residence with parents across countries and between males and females

Age	Not in union, no children	Not in union with children	In union, no children	In union with children
0-4	100	0	0	0
5-9	100	0	0	0
10-14	99.9	0	0.1	0
20-24	94.7	0.6	2.7	2
25-29	64.4	3.2	11.2	21.2
30-34	30.2	5.3	11.8	52.7
35-39	15	6.2	7.3	71.5
40-44	10.3	7	5.3	77.3
45-49	9.4	7.7	7.3	75.6
50-54	9.3	8.5	12.1	70.1

Note: Standard values correspond to the average distribution of all men and women in different family statuses by age across countries based on most recent available data from 69 countries since year 2000.