Trends in Intergenerational Coresidence in Developing Countries: 1970-2010[1]

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Abstract

Despite widespread predictions of a decline in intergenerational co-residence in developing countries, the existing evidence for such a decline is mixed at best. Using data from IPUMS-International, [2] we evaluate trends in living arrangements in over 40 low and middle-income countries. We also examine the contribution of larger macroeconomic and demographic context changes on intergenerational living arrangements. From the perspective of the older generation, we find that that only South America is beginning to show signs of a systematic decline in intergenerational coresidence. Most other regions contain a substantial number of countries with increases in intergenerational co-residence. In contrast, the younger generation increasingly resides with parents across all regions, except Sub-Saharan Africa, due in part because of increased survival of the older generation. This is increase is driven primarily by unmarried adults, rather than young adults forming their own families.

Background

This paper builds on previous research examining trends in intergenerational co-residence. The predominant theoretical literature, based on the experiences of European countries, emphasized economic development and industrialization as the primary determinants of trends in

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intergenerational living arrangements. With the shift from agricultural to industrial wage labor, adult children no longer remained on farms to assist older parents, resulting in decreasing intergenerational living arrangements (Goode 1963; Ruggles 2009). More of the elderly should live without adult children, and more adult children should live in nuclear families.

Modernization theory receives mixed empirical support in both historical European and studies of low and middle income countries. Ruggles (2009) using a historical data from the US and Europe as well as more contemporary data from low and middle -income countries finds that percent of the population engaged in agricultural employment strongly predicts intergenerational living arrangements. Economic development has been accompanied by decreased intergenerational coresidence in East Asia (DeVos and Lee 1993; Hirosima 1997; Martin 1990; Raymo and Kaneda 2003). Adult child coresidence with older aging parents is also declining rapidly in Thailand (Knodel, Chayovan, and Prachuabmoh 2013). Finally, among young married and cohabiting couples in low and middle-income countries, that increased GDP is associated with increased nuclear family living arrangements (Spijker and Esteve 2011).

Other studies, however, suggest a more complex story. Confirming earlier research on Latin America (DeVos and Lee 1993), Palloni (2001) found a small decrease in elder co-residence with children in several Asian countries, but little change in Latin America and the Caribbean . Ruggles and Heggeness (2008) looking at adults ages 30-39 and those ages 65 and older, find considerable variation in trends across 15 developing countries in living arrangements; some countries show the expected decline in intergenerational co-residence, other countries show no trend, while still others show an increase intergenerational coresidence. Finally, despite the overall trend in declining intergenerational coresidence, Spijker and Esteve (2011) find that that the transition process is slow and that it did not occur in all countries.

Demographic factors may be important for understanding these inconsistent results. As mortality rates fall among the elderly, there are more opportunities for intergenerational families to form (Raymo and Kaneda 2003; Ruggles 2009; Schoeni 1998). Further, young adults are delaying entry into marriage in most parts of the developing world (Mensch et al. 2006). Young people who put off forming their own families, may remain in the family home for a longer period of time, increasing the prevalence of intergenerational living coresidence (Raymo and Kaneda 2003). Finally, because many single mothers reside in extended families (Heggeness 2009), increases in union dissolution or unmarried motherhood could also increase extended family living arrangements. This demographic shifts may not only weaken the relationship between economic development and trends in intergenerational living arrangements may be weaker than proposed by modernization theory, but also suggest that trends may vary substantially by the living arrangements of the younger generation.

Young adults are also delaying the transition to work, while increasing educational investments (Nugent 2006). Ruggles and Heggeness (2008) find a shift from child-headed households to

household headed by the elderly parent, a trend that is strongly correlated with increased economic development.

Finally, if extended families living arrangements are preferred over nuclear families, growing economic wealth may make it easier for families to fulfill their desire for extended family living arrangements (Ruggles and Heggeness 2008). Thus, economic development may be positively correlated with increased co-residence, at least initially.

Data and Measures

We use data from about 40 countries from Africa, Asia, and Latin America and the Caribbean. Many studies of elder living arrangements are drawn from surveys, such as the DHS, that typically have small very samples of older adults and limited historical coverage. In contrast, censuses provide full coverage of the age spectrum, large sample sizes, and have been regularly collected in most developing countries since the 1970s. IPUMS-International now provides data for 74 countries and 238 censuses (Minnesota Population Center 2013). Thus, the IPUMS data set is an extremely valuable resource for studying the living arrangements of older adults in the developing world (Ruggles and Heggeness 2008). Our analysis will be limited to countries with at least two censuses between 1970 and 2010.

We will use the measures of intergenerational coresidence implemented in Ruggles and Heggeness (2008): adults ages 65 and above residing with at least one child over age 17, and adults ages 30-39 residing with parents. The advantage of these measures is that they definitively measure coresidence between adult children and elderly parents, and exclude intergenerational co-residence occurring as a result of fertility at older ages. But others are excluded, ones which maybe growing in importance due to declining age at last birth and the delayed transition to adulthood. So, we will examine alternative age cut-off, such as ages 50 and above and living with a child ages 22 and older. Likewise, we will look at adult children ages 22 and older living with a parent.

Family structure and living arrangements will be identified using the using the IPUMS pointers. These identify the likely parents and spouses of individuals in the household (Sobek and Kennedy 2009). In addition to determining whether elder-child co-residence, we will determine whether the young generation is married/cohabiting and has a child of their own or not.

Analysis

Our paper will expand upon the existing literature in several ways. First, we will examine trends in living arrangements from 1970-2010 in over 40 countries. Most studies, use a much smaller number of countries (for exceptions see: Ruggles and Heggeness 2008; Spijker and Esteve 2011). The IPUMS database has roughly doubled in size since the Ruggles and Heggeness article, and now provides substantially better coverage of Africa and Asia. Consequently, we will be able to assess trends separately in Latin America, Asia, and Africa. Our preliminary analyses include 100 samples from 38 countries. Our final paper will also include Bangladesh, Cameroon,

Burkina Faso, Fiji, Haiti, as well the 2010 round of censuses of countries already included in our preliminary analysis. Because the decline in intergenerational living arrangements can occur quite rapidly, the extension of our analyses to 2010 is a significant contribution.

We will also include an analysis in trends by gender to see whether the increase in elderly parent headship experience by both male and female parents and by male and female children. Ruggles and Heggeness (2008) control for individual gender, but do not examine whether trends vary by gender and whether the changing configurations of parent and child gender are important for understanding trends in living arrangements.

Our final contribution is to consider the family structure of adult children. To what extent do trends in living arrangements vary by the marital and parenthood status of the children and to what extent does changes in the family structure of adult children explain trends in elder child coresidence. Here we build upon Spijker and Esteve's (2011) study of nuclear and extended family residence for young married and cohabiting couples. Consistent with this study, we expect to find that married and cohabiting couples are less likely to reside with parents. Based on prior research, we expect considerable cross-country variation in the percent and trends in extended family living arrangements for single mothers (Heggeness 2011). We expect that increased single parenthood in many countries combined with delayed transition to adulthood should work to counteract increased nuclear family residence among young couples. Finally, we expect that single childless children will continue to reside with parents for as long or longer than previously, and that the growing prevalence of these young people contribute to increased levels of intergenerational coresidence.

In addition to descriptive analyses, we use multivariate techniques to examine the factors contributing to trends in living arrangements. Our preliminary analyses control for age, gender, educational attainment, GDP (WHO data) and GDP-squared, life expectancy (WHO data), and the percent of the population that is 65 and older (calculated within the IPUMS sample), and census design. [3] In addition to these indicators, our final analyses will add in contextual measures of the percent of the population employed in agricultural level (measured at the lowest geographic level), as well as the mean marriage ages for men and women, all important predictors of intergenerational living arrangements (Ruggles 2009, 2010).

Preliminary results

Descriptive trends

Figure 1 presents the percent of the elderly ages 65+ living with adult children by regions. The color red is used to indicate an increase, black a decrease, and grey no discernible change.

[3] Specifically, was the census a de facto or de jure census (or both), and whether the sample had a specific relationship category for parent of the household head.

There is considerable variation across countries in the trends since 1970. In Sub-Saharan Africa, about half of the countries experienced an increased in intergenerational living arrangements, while the remainder experienced a decline or no change. In the Middle East and North Africa, the picture is mixed as well, with a large increase in Morocco and declines in Turkey and Egypt. In Central America and the Caribbean, there are primarily increases or no changes in the percent of elderly living with adult children. In contrast, in South America, we see strong evidence for stagnation and declines in intergenerational living arrangements. Finally, in Asia, a large number of countries show signs of initial increases followed by declines (inverted-U shapes) appear to stagnate, neither increasing nor decreasing in their levels of intergenerational living arrangements. This is inconsistent with the existing literature, but this likely reflects the composition of countries in the IPUMS-I database.

Figure 2 examines trends in co-residence from the perspective of the younger generation. Among persons age 30-39, we find strong evidence in most counties and regions of an increase in co-residence with parents. SSA is perhaps the most notable exception, here, likely reflecting persistently low levels of life expectancy.

Multivariate results

Table 1 presents results from OLS regressions predicting elder coresidence with a child ages 18+. In Model 1, with just controls for individual level and census characteristics, the probability increased between 1970 and 1990 by 1 percentage point, and this was significant. The difference as of 2000 was slightly smaller, 0.6 percentage points. The next two models include GDP and the demographic context. GDP is not significantly associated with coresidence, but demographic factors matter. As the proportion age 65 and older increases, fewer live with their children. As life expectancy increases, so does intergenerational coresidence.

Table 2 presents results predicting trends in coresidence with parents among men and women ages 30-39. Between 1970 and 2000, the percent of the younger generation living with parents increased by about 4 percent. Increases in GDP were positively associated with increased coresidence (although the squared term is negative indicating a slow-down or turn around at higher levels of GDP.) Adding in controls for life expectancy and percent of the population that is elderly completely explains the increased extended family living.

In Table 3 we examine differences by coresidence with parents by the younger adult family structure, controlling for all individual and contextual variables. Despite the overall trend of increased coresidence with parents, for persons 30-39 who were married without children, there is decrease between 1970 and 2000 in coresidence with parents. For married parents, the trend is unclear, with a decrease only in 1990. For single non-parents, the percent living with parents increases dramatically with each decade, up to 11 percentage points by 2000. For single parents, there percent living with parents increased by 2 percentage points between 1970 and 1980 and has persisted.

Preliminary conclusions

The period 1970-2000 has not been one of widespread declines in intergenerational living arrangements. Rather, we find increases in the persons ages 65 plus living with adult children for a substantial number of countries in most regions of the world. The exceptions are South America, where we see evidence of a decline in intergenerational living arrangements, and Asia, where there is considerable stagnation.

In contrast, from the perspective of the younger generation, we find large increases in intergenerational coresidence in all regions except Sub-Saharan Africa. This is due in large part to the increased life expectancy and the greater proportion of the population that is elderly. Quite simply, more children live with parents because more children have surviving parents. The overall increase in intergenerational coresidence is driven, however, by children who have not married, and in particular, those who are not parents. Thus, future trends in intergenerational living arrangements may depend as much on whether children form families at all as on the desire of those who do live in nuclear families.

Our final paper will include additional countries and addition years, bringing our analysis through to 2010. We will consider additional measure of development, including urbanization and agricultural labor. Further, we will consider gender differences in these trends. Finally, we will add in additional analyses from the parent's perspective to examine trends in in the percent living with married children and with unmarried children.

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Figure 1. Percent of the older generation (ages 65+) living with a child ages 18+

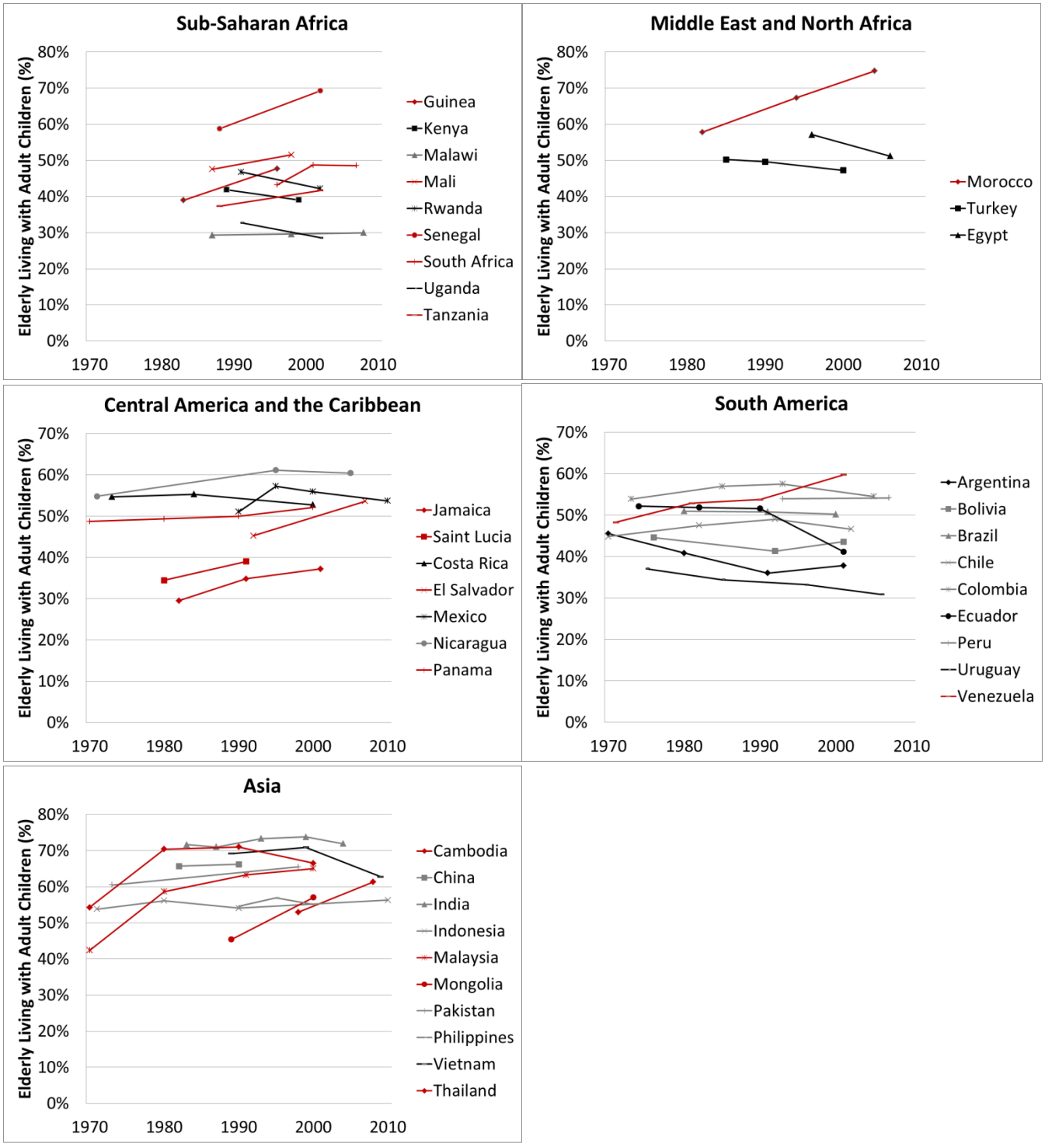

Figure 2. Percent of the younger generation (ages 30-39+) living with a parent

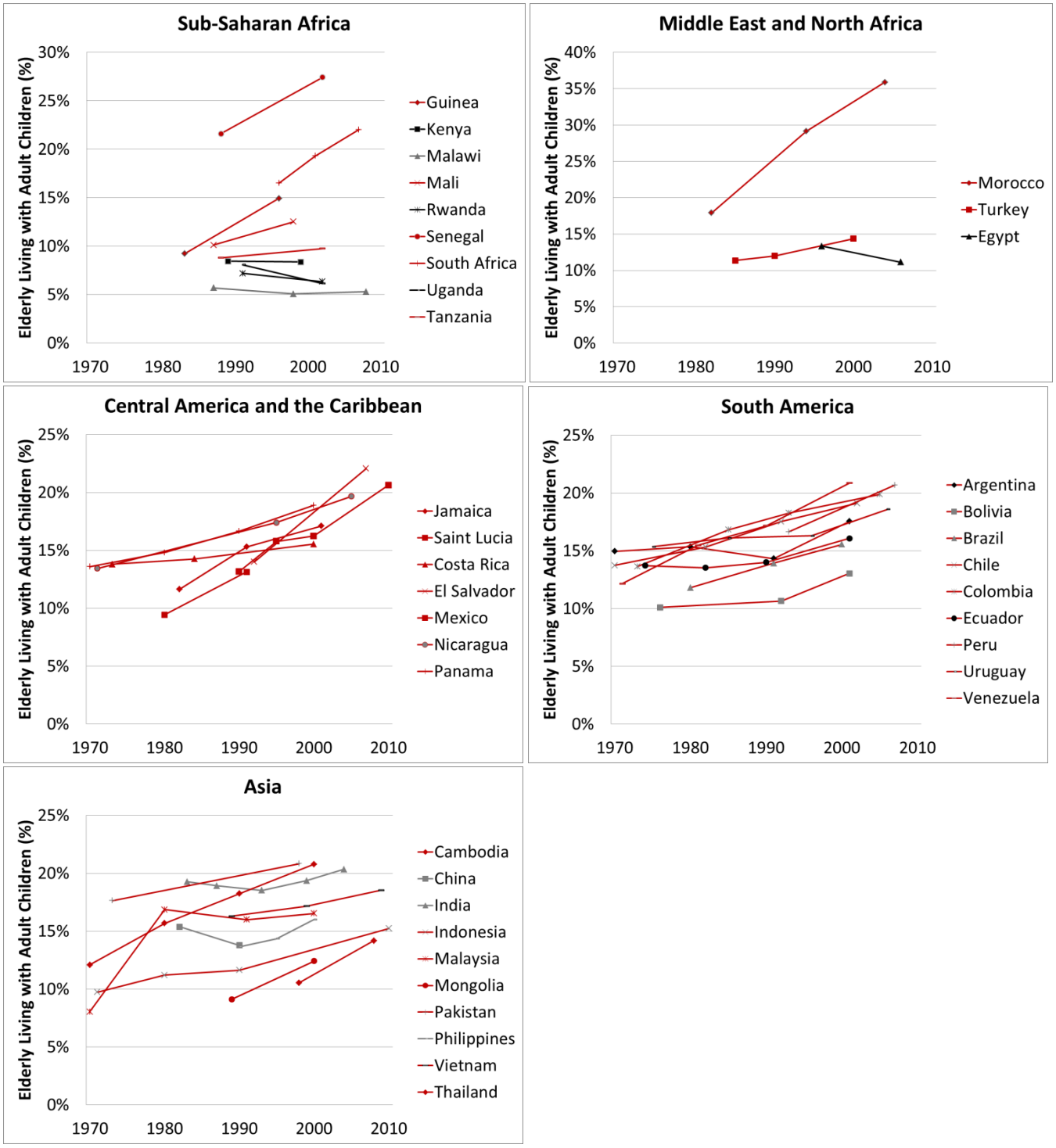

Table 1. Regression of intergenerational coresidence on selected characteristics (probabilities): Persons age 65 or older (older generation)

	1. Individual Level		2. GDP		3. Demographic context	
VARIABLES	B	p	B	p	B	p
Decade						
1970 [reference]	---	---	---	---	---	---
1980	-0.005		-0.000		-0.000	
1990	0.012	***	0.017	***	0.018	***
2000	0.006	*	0.013	**	0.014	
GDP (1000s $)			-0.002		0.001	
GDP-squared			-0.000		0.000	
Percent 65+					-0.016	***
Life Expectancy					0.002	***
Observations	3,217,371		3,217,371		3,217,371	
All models include controls for age, marital status, education, employment status, sample design, and whether sample has parent category.						

Table 2. Regression of intergenerational coresidence on selected characteristics (probabilities): Persons age 30-39 (younger generation)

	1. Individual Level		2. GDP		3. Demographic context	
VARIABLES	B	p	B	p	B	p
Decade						
1970 [reference]	---	---	---	---	---	---
1980	0.021	***	0.015	***	0.004	**
1990	0.018	***	0.012	***	-0.006	***
2000	0.036	***	0.025	***	0.002	
GDP (1000s)			0.005	***	-0.001	
GDP-squared			-0.000	**	0.000	***
Percent 65+					0.001	
Life Expectancy					0.002	***
Observations	8,506,309		8,506,309		8,506,309	
All models include controls for age, marital status, education, employment status, sample design, and whether sample has parent category.						

Table 3. Regression of intergenerational coresidence on selected characteristics (probabilities): Persons age 30-39 (younger generation) by family structure

	1. Married parent		2. Married non-parent		3. Single parent		4. Single nonparent	
Decade								
1970	---	---	---	---	---	---	---	---
1980	0.004	**	-0.030	***	0.029	***	0.031	***
1990	-0.012	***	-0.025	***	0.028	**	0.082	***
2000	-0.000		-0.045	***	0.021		0.113	***

All models include controls for age, marital status, education, employment status, development indicators, sample design, and whether sample has parent category.