A Sudden Transition: Declines in the Co-Residence of Older Women and their Children, 1880-2000

Emily R. Merchant
Inter-university Consortium for Political and Social Research
University of Michigan

Brian Gratton
Faculty of History
Arizona State University

Myron P. Gutmann
Department of History
Institute for Social Research
School of Information
University of Michigan
National Science Foundation

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At the turn of the twentieth century, nearly three-quarters of women aged fifty and over lived with one of their own children. Today, just over one quarter do. Scholars have sought demographic, economic, and cultural explanations for this shift, without arriving at any clear consensus about the factors responsible. They have paid less attention to the differing share of change within women's age groups and to the striking chronology of the transformation in living arrangements. This paper addresses these lacunae. We begin with the premise that the overall change was driven by women younger than 70, who increasingly experienced all of their children leaving home. For women in this age group, we demonstrate that – within the framework of long-term change – the 20-year period from 1940 to 1960 stands out as a time of exceptional decline in intergenerational co-residence. Using graphical and multivariate analytic techniques, we assess the factors responsible both for long-term changes in the living arrangements of women between the ages of 50 and 69 and for the sudden mid-century transition to separate households for mothers and their young adult children.

This paper relies on micro-level data from the U.S. Census between 1880 and 2000, and we confine ourselves to ever-married women, excluding African-American women. While the percentage of never-married women has risen across this period, that change does not contribute greatly to the overall transformation. African-American women have a historical experience so distinct (Goldscheider and Bures 2003) that we do not include them here, but intend to analyze their co-residential experience in separate research. We also confine ourselves to women aged 50-69, whose experiences we believe made the greatest contribution to the observed change. Figure 1 illustrates our contention that the decline in intergenerational co-residence was led by women in this age group by graphing, by birth cohort, the percentage of women living with a child of their own at ages 30, 40, 50, 60, 70, and 80. The 1860 birth cohort is aged 40 in 1900, and the 1910 birth cohort is aged 60 in 1970.[1] Within each cohort, intergenerational co-residence declines between the ages of 40 and 70, as children leave home. Between cohorts, gradual change can be observed at all ages, but the sharpest reductions in co-

residence occurred between ages 50 and 70. At age 60, co-residence rates for women in the two youngest cohorts (1900 and 1910) had fallen by over 30 percentage points from those in the oldest cohorts (1860 and 1870). After age 70, differences in co-residence rates between cohorts parallel the differences at age 70;[2] more women at the oldest ages live away from their children today because more of them experienced all of their children leaving home earlier in life.

The periodization of this change is also critical, as suggested by Figure 2. The target group, women aged 50-69, shows a long-term decline in co-residence with at least one child, with rates falling from about 75% in 1880 to less than 30% in 2000. Yet more than half of the total change occurred in the 20-year period between 1940 and 1960. Moreover, there has been only a slight decrease since that year in the propensity to co-reside. Returning to Figure 1 reveals the birth cohorts most affected by this short period of change. The changing shape of the age-cohort coresidence curves suggests a mid-century transformation for women at the critical ages. The largest inter-cohort differences in the propensity to co-reside all occurred in 1950.[3] In that year, women in the 1880 (age 70), 1890 (age 60) and 1900 (age 50) birth cohorts exhibit rates of co-residence more than ten percentage points lower than those of women of the same age in the previous cohort. These differences persist over time – women in the 1900 birth cohort at age 60 were still markedly less likely to live with their children than were women in the 1890 cohort at age 60 – but the transformation had already occurred for them at age 50; in no other period are differences between cohorts so dramatic. These figures suggest that an explanation for the decline in intergenerational co-residence must attend both to its timing within the lives of individual women and to its periodization over the long twentieth century.

After reviewing the literature that has treated changes in the propensity for older women to live with their children, we will examine graphically the critical factors suggested by that literature. We will then use individual-level data in multivariate logistic regression models to assess which variables, controlling for others, appear to have been most salient. We find that both demographic factors –

changes in fertility, mortality, and immigration – and economic factors – the decline of agriculture, increases in income, and the rise of female labor force participation – were closely associated with the increasing proportion of women who experienced all of their children leaving home between the ages of 50 and 69. However, we conclude that a complete explanation for the shift in intergenerational co-residence also requires further research on mid-century changes in the lives of young adults initiated by the Second World War, particularly the postwar marriage boom.

Background and Theory

Two separate but interlocking strains of scholarship have analyzed changes in intergenerational co-residence in the twentieth century, one attempting to explain high rates of co-residence in the late nineteenth and early twentieth century, and the other to explain low rates of co-residence in the postwar period. Here we endeavor to bring these two schools together, to assess factors that might consistently explain co-residence across the period, to examine the implications of these theories for the timing within the life course of shifts in living arrangements, and to explore the causes of the periodization in household change we and others have found.

Historians of old age prior to the twentieth century have attempted to explain why, in a family system that was otherwise emphatically nuclear (Laslett and Wall 1972), most elderly persons lived with their own children (Kertzer 1995). Demographic conditions go some way toward explaining the coexistence of overwhelming nuclearity and near-universal co-residence. High rates of fertility combined with largely neolocal marriage patterns meant that, even if all elderly persons lived with a child, most young families would not live with the parent of either spouse (Ruggles 1994). Moreover, high rates of mortality, along with high fertility rates and late marriage, reduced the likelihood that both parents would survive to the marriage of their last child; few parents therefore had the opportunity to live apart from a child (Glick 1977; Kobrin 1976). There is little debate about these demographic conditions, but they explain only the limits to co-residence for the younger generation and to independent living for the

older. Disagreement arises over the economic and cultural determinants of intergenerational co-residence and the preferences implied by them. On one side is the argument – based on the finding of a U-shaped relationship between age and co-residence and higher rates of co-residence among widows – that the generations preferred to live separately and did so regularly, but reunited when a parent's frailty or poverty required it (Smith 1979; Ruggles 1987; Elman 1996, 1998; Hareven 2000). On the other side, evidence that few parents ever experienced all their children leaving home and indications that the wealthy were more likely to co-reside have led to the argument that elderly parents preferred co-residence, and that at least one child typically stayed in the parental home, whether out of a sense of obligation (Ruggles 1994) or compulsion (Chudacoff and Hareven 1979), or to inherit the family property or business (Ruggles 2003, 2007; Smith 1986).

These two theories offer different models for the proximate causes of intergenerational co-residence: in the first, co-residence is the result of the merging of previously-separate parent and child households, and is a phenomenon of later old age; in the second, co-residence is a result of a child staying in the parental household, and is a phenomenon of early old age. The two models also predict very different outcomes for increasing overall affluence: if co-residence was a result of economic necessity, increased affluence would reduce rates of co-residence; if co-residence was instead the result of parental preference facilitated by economic resources, increased affluence would promote co-residence (Ruggles 1994).

This debate is mirrored in the literature on intergenerational co-residence in the post World War II era, where scholars have attempted to explain the abrupt increase after 1940 in independent living arrangements for both young and older adults. In the middle and later part of the twentieth century, scholars have found strong links between higher income and separate living arrangements for parents and children in a wide variety of settings (Michael, Fuchs, and Scott 1980; Pampel 1983; Costa 1999; Ruggles 2007; Bethencourt and Rios-Rull 2009). Studies of the process of young adult home-

leaving over the twentieth century have also identified the immediate postwar period as a critical moment, when more young adults left home and did so at a younger age, largely as a result of wartime mobilization and postwar prosperity (Gutmann, Pullum-Pinón, and Pullum 2002; Stanger-Ross, Collins, and Stern 2005). Works on living arrangements for older adults and home-leaving for younger adults indicate income-related declines in co-residence in both early old age – when increased income allows young adult children to establish their own households – and in later old age – when increased income allows the elderly to avoid moving back in with their children. Scholars disagree, however, over whether the positive relationship between income and separate housing reflects an enduring preference for privacy or whether it indicates a change in preferences at mid-century. Beresford and Rivlin (1966), for example, make the latter argument, pointing out that co-residence declined rapidly only after 1940, though affluence had been increasing over a longer period of time, and this view resonates in the cultural histories of old age in earlier eras in the United States (e.g., Achenbaum 1978).

The Census began to collect information on income in 1940 (and in a consistent way only in 1960), making it difficult to assess the effects of income on living arrangements before that year. Nonetheless, analysis of data on Union Army pensions (Costa 1997) and on assets and other sources of old-age support (Elman 1996, 1998) listed in the 1910 census suggest that, even at that point, elderly persons preferred to live away from their children when they could afford to do so, a contention also brought forward in revisionist histories of old age (Haber and Gratton 1994). Moreover, the establishment of Social Security provided an important new resource allowing the elderly to increasingly exercise their preference for privacy after 1940 (Costa 1999; McGarry and Schoeni 2000). Further explanation for the limited role of income before 1940 has been sought in a non-linear relationship between income and co-residence, which suggests that increased income only translates into separate living arrangements after more urgent needs have been met and if the increase is enough to purchase or lease separate living quarters (Michael, Fuchs, and Scott 1980; Bethencourt and Rios-Rull 2009).

Those arguing for a change in preference after 1940 point to the inability of income to fully account for mid-century declines in intergenerational co-residence (Pampel 1983). Demographic factors may, however, bear on changes in preference. In the absence of preference for intergenerational co-residence, declining rates of mortality and fertility alone would decrease the proportion of elderly persons living with a child, as life expectancy after the marriage of the youngest child lengthened (Glick 1977; Kobrin 1976). If there were a preference for co-residence, however, declining rates of mortality and fertility would not change parental propensities toward co-residence, but would increase the likelihood of co-residence for children, as more of them would have the opportunity to live with a parent (because they would have fewer siblings) and to do so for a longer time (because of increased longevity). Levy (1965) has argued that intergenerational co-residence may therefore have become less preferable for the younger generation as it became more attainable; in essence, the norm could be sustained when responsibility for parents fell on only one of five children, but it became less sustainable as chances moved to one in two (Gratton 1986). Ruggles (1994) and Kramarow (1995), however, argue that declines in co-residence and changes in other demographic indicators are all effects of broader social transformations that reduced family obligations of many kinds.

The idea that living-arrangement preferences may have changed over time is a variant of the idea that they differ cross-culturally. Scholars have examined whether the higher rates of intergenerational co-residence observed among African Americans and Mexican Americans in comparison to non-Hispanic whites are a result of cultural or socioeconomic differences, finding some support for each explanation (Sarkisian, Gerena, Gerstel 2007; Burr and Mutchler 1999; Gonzales 2007). Indeed, the linkage of ethnic culture to living arrangements is common in social gerontology. However, studies careful to distinguish between ethnic effects and immigration effects generally find the latter more important; in these, the distinct circumstances of recent arrival explain many of the differences in

living arrangements attributed to ethnic culture (Glick and Van Hook 2002; Gratton, Gutmann, and Skop 2007; Van Hook and Glick 2007; Gratton and Gutmann forthcoming).

In a sweeping study of intergenerational co-residence across nearly 150 years and 37 countries, Ruggles (2009) finds that living arrangements over time and in more and less developed countries in the present respond to the same demographic and structural indicators, with level of agricultural employment being the most important. This study is part of a series of articles challenging the scholarship linking affluence to decreases in co-residence. Instead, Ruggles (2003, 2007), who initially cited attitudinal change as a principal factor (1994), argues that changes in living arrangements reflect structural changes in the economy. The decline of household-based production (exemplified in agricultural economies) and inheritance and the rise of wage labor and occupational mobility undermined the patriarchal authority that once led to intergenerational co-residence. He contends that these changes made children less dependent upon their parents, and thus less likely to remain in the parental household. This perspective accounts for the observed reversal in the relationship between wealth and co-residence in the middle of the twentieth century without requiring attitudinal change. It is still not clear, however, that this observation explains a period of intense change that occurred well after the major structural changes.

The literatures reviewed here focus mainly on two distinct periods – the late nineteenth and early twentieth century and the critical mid-twentieth-century moment – but the decline in intergenerational co-residence occurred within the long course of the nineteenth and twentieth centuries, when major factors at work in the United States may have shaped both long- and short-term changes in living arrangements: reductions in fertility and mortality increased the ratio of older to younger adults and lengthened the portion of a woman's life following the marriage of her last child; changes in immigration laws and patterns raised and lowered the foreign-born proportion of the U.S. population and influenced how recently any group of immigrants had arrived; the decline of agriculture

and other forms of household production and the rise of wage labor reduced the proportion of young adults working in the parental home; and the growth of real income and new public welfare provisions (Social Security) made both generations less dependent on one other. Our research addresses this longer time span, examining relationships between these factors and intergenerational co-residence for women in the early decades of old age and assessing the chronology of these changes relative to the periodization of the decline in intergenerational co-residence.

Data and Analysis

This project relies on samples of U.S. decennial census data from the Integrated Public Use Microdata Sample (IPUMS) project (Ruggles et al. 2004) for all census years from 1880 to 2000, with the exception of 1890, for which individual-level data have been lost. IPUMS offers representative samples of the United States population at each census and provides a number of variables about individuals and their living arrangements that have been standardized over the period. There are limitations to this dataset. First, the data are cross-sectional, rather than longitudinal. We cannot observe changes in a person's household over time, and when we observe an older parent with a co-resident child, we cannot ascertain whether the child had always lived with the parent and, if not, whether the child moved back in with the parent, or the parent joined the child's household. Second, the data represent residential rather than familial relationships. We observe jointly only the characteristics of women and children who live together. Third, several variables appear only in certain years. The number of children ever born to a woman is available in 1900, 1910, and 1940-1990; educational attainment only since 1940, with literacy reported before that year; and income variables can be used consistently only beginning in 1960.[4]

We begin by exploring graphically the effects of various factors suggested by the literature as contributing to the decline of intergenerational co-residence, and then move to multivariate analyses to test their independent effects. Analyses focus on women aged 50-69, and we include information about

young adults aged 20-29 when relevant, as these are the groups we see as critical to the great transformation. We exclude African Americans, individuals residing in group quarters, and older women who have never been married. The outcome of interest is whether an older woman lived with a child of her own, regardless of who else may have been present in the household. We do not place a lower bound on the age of the child,[5] and therefore include minor children as well as adult children. We refrain from distinguishing between these categories because separation of residence is the phenomenon of interest to us, and the typical age of home-leaving varied over the period.

Graphical Analysis

The literature suggests that long-term demographic change – particularly declines in fertility and mortality – have had a major effect on intergenerational co-residence. Figure 3 illustrates the relationship between patterns of fertility and those of intergenerational co-residence, graphing total cohort fertility (left axis) alongside the percentage of women in each cohort living with a child at age 60 and the percentage of women aged 60 reporting having had a child (right axis). The 1850/1910 data point, for example, represents the completed cohort fertility of women born in 1850, the percentage of 60-year-old women living with a child in the 1910 Census, and the percentage of 60-year-old women reporting in the 1910 Census that they had ever had a child.[6] The figure indicates a strong relationship between fertility and intergenerational co-residence through the 1880 birth cohort (age 60 in 1940), and also suggests that increasing childlessness contributed to decreases in both total cohort fertility and intergenerational co-residence. Intergenerational co-residence then declined markedly for the 1880-1900 cohorts (as shown in Figure 1), outpacing the decline in fertility. After 1970, decreased rates of childlessness and increases in fertility linked to the baby boom corresponded with a slight upward trend in co-residence. Declining fertility after 1990 was again aligned with declining co-residence, even though childlessness had been reduced to the same level as its 1910 nadir. Remarkable in the 120 year period is

the close relationship between fertility and co-residence until 1940, an abrupt separation between 1940 and 1970, then a renewal of correspondence.

[Figure 3 about here]

The literature demonstrates that older widows are more likely to live with their children than are married women of the same age, and, across this period, male longevity rose, reducing the rate of widowhood for women aged 50-69. Figure 4 graphs the percentage of widowed and married women age 50-69 living with a child and the percentage of women in this age group who were widowed (and not remarried) at each census. Through 1960, widows were somewhat more likely to live with a child, suggesting that widowhood delayed, prevented, or reversed the home-leaving process. Still, the differences between widowed and married women are slight, the general periodization is remarkably the same, and, by 1970 marital status made little difference. Figures 3 and 4 suggest that, together, declining rates of fertility and widowhood over the twentieth century made it increasingly likely that a woman's last child would leave home before the death of her husband, but these factors do not fully explain the abrupt shift between 1940 and 1960.

[Figure 4 about here]

Another demographic factor potentially contributing to changes in intergenerational living arrangements is migration. A few studies have indicated that changing patterns of immigration may play a role, though these studies focus on the late nineteenth and early twentieth centuries, or the most recent decades. While scholars often attribute more complex family patterns among immigrants in this latter period to ethnic preferences, we have found little evidence that ethnicity has any bearing on long-term trends in co-residence. In contrast, the less frequently discussed effect of immigration itself appears to have a consistent effect in increasing the likelihood of co-residence (Gratton and Gutmann forthcoming; Van Hook and Glick 2007). Figure 5 indicates that foreign-born women were always more likely than native-born women to live with a child, and that the gap widened until after the 1940 Census.

After 1940, co-residence among both foreign- and native-born women fell rapidly until 1970 and the rates of the two groups converged. Rates of co-residence among foreign born women then rose again dramatically, and the gap registered in the 2000 Census is wider than at any time in 120 years. Disruptions from the First World War, followed by stringent restrictions on immigration between 1924 and 1965 reduced the proportion of the foreign born among older women and increased the average time since immigration. These factors contributed to the overall decline in intergenerational co-residence, and to convergence in the household forms of foreign- and native-born women. The slowing of the trend away from co-residence in recent decades corresponds to the renewal of mass immigration, which produced a slight increase in the proportion of older women who are foreign born and a marked increase in the recency of arrival. In the largest single group of recent immigrants, those of Mexican origin, levels of co-residence are substantially higher, for example (Sarkisian, Gerena, and Gerstel 2007; Gonzales 2007).

[Figure 5 about here]

Figure 6 graphs rates of intergenerational co-residence by farm status, along with the percentage of women 50-69 living on farms. Recent scholarship has turned to structural factors, particularly the decline of farming and other household-based production and the rise of wage labor, to explain changes in living arrangements. Farming represents the classic integration of production and reproduction; children provide labor, motivating parents to keep them at hand, while the farm, as inheritance, provides children an incentive to stay. Certainly, the agricultural sector declined precipitously between 1880 and 2000—in 1880, just under half of all jobs in the United States were in agriculture, and 74% of the population lived in rural areas dominated by the farming economy (Carter et al. 2006). By 2000, farming employment had fallen to less than 3% and over 80% of the population lived in urban locations (US Census Bureau 2000). Given high rates of co-residence on farms, these changes had an effect on overall patterns of co-residence. Figure 6 indicates that, until after the 1970 census,

women on farms were, surprisingly, only somewhat more likely to live with a child; by 1990, they had become less likely to do so. However, even among non-farm women, more than 70% were living with children in 1880, and the periodization of decline was similar for both farm and non-farm women, with both groups experiencing the precipitous increase in child home-leaving between 1940 and 1960. The shrinking proportion of women who were on farms and the simultaneously shrinking proportion of children who followed their parents into farming may have contributed to the overall decline in co-residence, but it seems unlikely that this factor accounted for the majority of change or its periodization.

[Figure 6 about here]

Economic resources have also been called on to explain differences in co-residence. Between 1940 and 2000 we find that the income of younger men and older women who did not co-reside was significantly higher than that of those who did, and this remains true when the income of the older woman's husband (when married) is added to her own, except in 1990.[7] For young women, economic circumstances changed over the period. Young women who lived with their mothers had higher incomes than those who did not until after the 1970 census, but then had lower ones, a change we link to increasing labor-force participation of married women (discussed later in more detail). Figure 7 illustrates how changes in the income of these groups correspond to trends in co-residence. Mean total income (indexed to 1999 dollars) is displayed on the left axis for women aged 50-69, for their husbands, and for men and women aged 20-29, with the percent of older women *not* co-resident displayed on the right axis. Co-residence therefore declined between 1950 and 1960 in concert with income increases in all four groups. However, after that year, continued income gains did not translate into lower rates of co-residence. Beginning in 1970, the income of young men actually tended to decline (though Bethencourt and Rios-Rull (2009) argue that these data exaggerate the magnitude of the decline), corresponding to a slowing of the trend away from co-residence, despite the continued increases in income for older women and their husbands.

[Figure 7 about here]

For older women, these income figures are linked to a famous transformation in labor force participation. Among women aged 50-69, those reporting an occupation rose from 5% in 1880 to nearly 70% in 2000, with the bulk of the change occurring between 1940 and 1970. Figure 8 contrasts co-residence rates for older women with and without an occupation, and also graphs the dramatic increase in the percentage of women reporting an occupation. In the period before 1940, pronounced differences appear, with working women much less likely to have a co-resident child. Beginning after the 1940 census, co-residence declines abruptly in both groups and the rates converge. In the 1970 census, there appears to be no difference, and after that date, those working are slightly more likely to have a child at home. This figure suggests a striking relationship between female labor force participation—among older women at least—and co-residence. It is nonetheless difficult to determine what is cause and what is effect, even though the change in living arrangements for these women coincides with a major transformation of their work status.

[Figure 8 about here]

Our graphical analysis demonstrates that certain demographic and economic factors correlate with the increasing propensity for women to experience all of their children leaving home in the early years of old age. However, these figures also indicate that no one factor can explain the entire shift, nor does any factor perfectly mirror the periodization of the transformation of living arrangements. Figure 9 begins to address this complexity by graphing a set of exogenous characteristics that is largely independent of choices about living arrangements, and seeing what remains after their effects are estimated. To account for some of the changes in fertility over the period, this graph includes only women reporting having had at least one child, and therefore uses data only for 1900-1910 and 1940-1990. Of these mothers, the solid line represents the percentage not living with a child. The dashed line represents the percentage of mothers who are married, native-born, and not living on a farm; that is, it

shows the percentage of mothers who do not have any of the characteristics we have identified as making them more likely to co-reside. The graph illustrates that, until after the 1940 census, the proportion of mothers falling outside of the groups most likely to co-reside is quite similar to the proportion of mothers living away from their children. In the second half of the twentieth century, the proportion of mothers married, native-born, and not on farms rises along with but not as rapidly as the proportion of mothers living away from their children. The figure suggests that, taken together, changes in fertility, mortality, immigration, and economic structure line up well with changes in the propensity of older mothers to live with their children, particularly through the first half of the twentieth century. This figure does not include incremental changes in fertility or income, which cannot be measured in the same manner, and does not allow us to assess the independent role of the variables in play. We therefore turn next to multivariate logistic models to isolate the effects of each variable and examine changes over time.

[Figure 9 about here]

Multivariate Analysis

We fit two multivariate logistic regression models to assess the factors determining the log odds of intergenerational co-residence for women aged 50-69 over the period from 1880 to 2000. In both models, living with own children (regardless of who else may be present in the household) is the 1 category of the dependent variable, and any other living arrangement is 0. Each model produces a separate set of regression coefficients for each year. **Model 1** includes only independent variables that are consistently available over the whole period. **Model 2** adds a categorical measure of children ever born, with levels indicating one (reference), two, three, or four or more children. For Model 2, analysis is limited to 1900, 1910 and 1940 through 1990, when the children born variable is available. In this model, we exclude women who have never had a child (as they are not at risk of living with their own children).

In both models, age is measured continuously and centered at age 60. Marital status is a categorical variable with levels indicating that a woman is married to a working husband (reference), widowed, divorced, or married to an unemployed or retired husband. Foreign birth, farm residence, and employment are included as indicator variables; each takes a value of 1 if the status applies to the woman and 0 otherwise. We also include an indicator of low educational attainment, which takes a value of 1 if the woman is illiterate in the years prior to 1940 and if she has not completed high school in the 1940-2000 period. Tables 1 and 2 give descriptive statistics for dependent and independent variables, and indicate the sample size, for Models 1 and 2 respectively. Coefficients and p-values for the logistic models are reported in Tables 3 (Model 1) and 4 (Model 2).

The results of Model 1 largely confirm our graphical findings. They indicate that age has the expected negative effect, with women becoming less likely to live with a child as they age. Widows are always more likely to live with a child than are married women, and divorced women are more likely to live with a child through 1970 but less likely thereafter. Married women whose husbands are unemployed or retired are somewhat less likely to live with a child than are women with working husbands, but the difference is not always significant. Foreign-born women are always more likely to live with a child than are native-born women, and the effect of foreign birth increases through 1940, decreases through 1970, and then increases again, in concert with the described immigration patterns. Women on farms are more likely to live with a child through 1980, but are less likely thereafter. A woman's employment always makes her less likely to live with a child, but this effect decreases over time. Finally, low education, when significant, makes a woman more likely to live with a child.

Model 2 adds a measure of children born, confirming the strong relationship between fertility and coresidence. Among women who have ever had a child, those with more children are always more likely to live with them. This effect is also largely consistent – the coefficients being quite similar across most years – until recent decades. Accounting for children ever born in this model, the effects of age

and marital status are stronger than in Model 1. The effects of foreign birth and farming are weaker than those in Model 1 until 1960, suggesting that some but not all of the effects of these variables result from higher fertility among foreign-born and farm women. The effects of employment are also weaker in Model 2, because some of the working women in Model 1 were childless, and thus were excluded from Model 2. Finally, the effect of low education changes markedly between the two models. In Model 1, women with low education were more likely to co-reside. However, much of this effect appears to be a result of the relationship between education and fertility; when fertility is included in the model, women with low education are less likely to co-reside, suggesting a complex relationship between children ever born, education, and income that we have not yet disentangled.

Finally, the intercept in each year captures the effects of variables not accounted for in the model and represents the log odds of co-residence for the reference woman (age 60, 1 child born in Model 2, married with working husband, native born, non-farm, not employed, high educational attainment) including these unspecified factors. In Model 1, the intercept declines steadily to 1960, with more change between 1940 and 1950, and then is relatively stable. This change is largely driven by falling fertility over the period. When fertility changes are controlled for (Model 2), the intercept declines somewhat to 1940, followed by a marked reduction to 1960, and is relative stable thereafter. This pattern suggests that the characteristics of older women represented in our model account reasonably well for the change in intergenerational co-residence through 1940 and since 1960, but that other explanations must be sought to explain mid-century changes. The following section will discuss these results in greater detail and begin to explore some further explanations for the sudden decrease in intergenerational co-residence after 1940.

Discussion and Conclusions

This paper began with the assertions that the well-known decline in co-residence between older women and their children since 1880 is concentrated among women younger than 70 and that the

decline has a marked periodization. Previous studies of the living arrangements of the elderly, while largely silent on the chronology of change or its timing within the lives of individual women, have identified a set of explanations for declines in co-residence: changing fertility, mortality, and migration, structural changes in the economy, increases in income among parents and children, and attitudinal change. Focusing on women aged 50-69, those most likely to experience their children leaving home, we examined the effects of various specifications of these factors on the likelihood that an older woman would live with children, and considered how these might explain periods of slow and rapid decline. While we reach certain conclusions, adding nuance to the findings of other scholars, we note that fully understanding the separation of generations will require the analysis of children who do and do not leave home, work that remains for us to do.

Our graphical analysis offered support to several hypothesized factors: reductions in fertility (including increasing childlessness) and mortality (leading to lower rates of widowhood), changing immigration patterns, the decline of agriculture, rapid increases in income for older women and their husbands, and the increase in labor-force participation of older women were all associated with declines in co-residence. Combining changes in certain aspects of population composition demonstrated that the declining proportion widowed, foreign-born, or living on farms among those who had ever had children tracked declines in the proportion of women living with their children and the periodization of these declines. Multivariate analysis allows us to assess the effects of these variables in greater detail. Because results were quite similar between Models 1 and 2, and because Model 2 indicated the signal importance of fertility in determining the likelihood of co-residence, we limit this discussion to results of Model 2.

Regression analysis confirmed a conventional principle that having more children made women more likely to live with a child, and this effect was largely consistent until the most recent decades. Some of the overall decline in co-residence can thus be attributed to the fact that, between the 1880

and 1970 censuses, the total cohort fertility rate of 60-year-old women declined from just over five children to just over two children, shifting the balance in the population between those with more children – and therefore more likely to co-reside – and those with fewer or no children. Using census data, we cannot measure whether declines in the average age of mothers at last childbearing accompanied declines in the average number of children born, but declines in fertility are usually associated with a concentration of childbearing in the earlier part of a woman's reproductive life (Knodel 1977). Women with more children were thus typically older, and more likely to be widowed or otherwise in need of assistance, when the last child reached home-leaving age; as fertility declined, women would have typically been younger and more likely to still be married when their last child prepared to leave. Moreover, in the latter decades, they were also more likely to be working. Our model indicates that the effect of having additional children declined at the end of the twentieth century; indeed, as completed fertility increased by one child between 1970 and 1990, the marginal effect of having more children diminished. Therefore, fertility increases associated with the baby boom did not reverse the already-established trend away from intergenerational co-residence. This finding may be explained by the fact that the baby boom resulted from younger and more universal marriage – a decrease in the proportion of childless women and in the age at first childbearing – neither of which would have had much effect on the average age of a woman at the marriage or home-leaving of her last child. It could also be associated with high levels of prosperity among this generation – which experienced rising income in both young and older adulthood – or a decisive shift in cultural norms about co-residence.

Of the four categories in our marital status variable, widowed women were the most likely to co-reside, reaffirming theories developed by historians of old age and the family in the late nineteenth and early twentieth century that a widowed mother's need for support was an important factor motivating co-residence. Over time, two trends militated against this pattern of co-residence. First, the

effect of widowhood on increasing the propensity for co-residence declined after 1950; second, the percentage of women widowed, among those who had ever had a child, fell from 32% in 1900 to just over 16% in 1990. Less attention has been given to the effects of divorce, which we show to have a smaller, but still significant positive effect on co-residence through 1970. Similar support motives may be at work, but divorce may signify a greater disruption of the familial household, leading to a lower propensity among children to remain with divorced mothers relative to widowed mothers. As the divorce rate among ever-married women 50-69 with at least one child jumped from 7.7% in 1970 to just over 13% in 1990, divorced women became equally likely and then less likely to live with their children than married women with a working husband, contributing to the overall decline in co-residence. Women with unemployed or retired husbands (distinct categories we cannot disentangle in early censuses) were least likely to co-reside, even compared to women with working husbands. This finding strongly suggests that married women – regardless of the employment status of their husbands – enjoyed a level of support higher than that available in widowed and divorced households, especially with the increasing prevalence of formal retirement after 1940.

While a large literature has explored potential relationships between ethnicity and living arrangements, in previous work by two of the authors writing here we have generally found that only African American origin has a durable effect (Gratton and Gutmann forthcoming). However, immigration, independent of ethnicity, is always linked to co-residence patterns, and is useful for explaining different rates of change in co-residence across time. Both graphical and multivariate analysis revealed that foreign-born women were always less likely than native-born women to experience their children leaving home. The gap between the experiences of these two groups widened between 1900 and 1940, narrowed through 1960, and widened again thereafter, with the effect of foreign birth reaching its highest level in 1990. We argue elsewhere (Gratton and Gutmann forthcoming; Gratton, Gutmann, and Skop 2007) that differences between immigrant and native family forms decrease as time

since immigration increases. In 1940 and in 1990 a typical female immigrant in the 50-69 year-old age group would have arrived recently and would have had less time to assimilate and amass resources. As a result of steep reductions in immigration beginning in 1914, an immigrant woman in 1960 would typically have arrived much earlier (for example, as a child), and her level of social and economic assimilation would have been markedly higher. The Immigration and Nationality Act of 1965, which relaxed quotas and sparked a new wave of immigration, also provided strong preferences for family reunification. It therefore encouraged the arrival of parents who, in previous immigration waves, were unlikely to have emigrated. These aggregate patterns contribute to the periodization of trends in inter-generational co-residence, and especially to the visible slowing in the decline of co-residence at the end of the twentieth century.

We have assessed economic and structural shifts using specifications for farm residence, employment status, and education. Through 1960, farm women were more likely to live with a child, confirming long-standing hypotheses regarding parents' reliance on their children's labor and children's reliance on the family business for employment or inheritance. The proportion of older women in farming declined substantially over this period, from over 40% in 1880 to less than 2% in 2000, and the marginal effect of farming declined over the period, turning negative after 1960, presumably a function of the declining capacity of the farm to attract children. Therefore, the overall increase in the proportion of women whose children left home is associated with both the contraction of the farm population and the convergence in co-residential patterns between farm and non-farm women. However, while residence on a farm was always significant, the aggregate differences between farm and nonfarm women were not striking in graphical displays, and both groups followed an identical periodization.

In all years, women who were employed were less likely to live with a child, and the proportion of older women working rose rapidly after 1950. No assumption can be made with these data about whether children left home because the mother had resources from employment, or whether she had

to work because her children had left home. A large aggregate shift in the proportion of older women in the labor force is almost perfectly linked to the periodization in co-residence – at the 1940 census less than 11% of women aged 50-69 with at least one child born were working, but by 1970 over half were. At the same time that more women in this age group entered the labor force, however, their employment became increasingly independent of their propensity to co-reside with their children, as indicated by a sharp reduction in the magnitude of the employment coefficient in the regression model between 1950 and 1960. These corresponding shifts suggest that the aggregate decrease in co-residence was associated not only with increasing labor force participation of mothers, but also with rising incomes for their husbands and their sons and daughters, as suggested in Figure 7. While the debate is not settled, the most convincing literature demonstrates that the income of both generations is a critical factor in explaining patterns of co-residence, though these studies show that the effects of income are not linear (Bethencourt and Rios-Rull 2009) and that they depend on the age of both parents and children (Whittington and Peters 1996). Our earlier work on married couples confirms these findings, suggesting that increasing income likely allowed both generations to choose to live separately (Gratton and Gutmann forthcoming). Therefore, the isolation of unexplained change in our model of co-residence between 1940 and 1960 might be attributable to the rising income of both generations. Certainly the decline in young men's income since 1970 seems to coincide with a slowing of the trend away from intergenerational co-residence. Social Security may have also played a role in the sudden post-1940 transition (McGarry and Schoeni 2000), but would have mainly affected the older women in our sample, and we show elsewhere that it cannot account for all change in elderly residence patterns in this period (Gratton and Gutmann forthcoming).

Our multivariate model accounts reasonably well for the factors associated with the long-term decline in intergenerational co-residence over the long twentieth century, and we have demonstrated that much of the aggregate change in co-residence is related to the shrinking size of the categories of

women most likely to co-reside relative to the total population of women 50-69. The dramatic shift between 1940 and 1960 indicates the importance of rising income for older women and their husbands and children over this period. Yet the decreasing magnitude of most of our regression coefficients over time suggests that co-residence became increasingly independent of a mother's characteristics.

Further explanation may lie in the behavior of young adults, which we will examine in subsequent analyses. The literature on young adult home leaving has found a dramatic increase in the proportion of young adults who left home and a decrease in the age at which they did so in the middle of the twentieth century (Gutmann, Pullum-Pinón, and Pullum 2002; Stanger-Ross, Collins, and Stern 2005). Gutmann and colleagues (2002) argue that the Second World War set off a chain of events that resulted in a lowering of the median age of home leaving: the military draft removed young men from their parents' homes, and expanded opportunities for higher education may have prevented them from returning to parental households after the war. Young people also married in increasing numbers and at younger ages than ever before in the middle of the twentieth century: between1940 and 1950, the proportion of persons in their twenties never-married fell from 44% to 27.5% and the singulate mean age at marriage declined from 25 to 23 for men and from 22 to 20 for women.[8] Stanger-Ross and colleagues (2005) attribute the decline in age at marriage to wage increases and to new government programs to finance home purchasing, but we suggest that increased earnings for older parents may have also helped to finance younger marriage and home leaving for their children. Although largely absent from scholarship on intergenerational co-residence and young adult home-leaving (but treated at length in labor economics), changes in female labor force participation in particular seem closely linked to the mid-century marriage boom and to changes in co-residence for older women. Not only did older married women enter the labor force during this period, but younger women increasingly retained their jobs after marriage.[9] Whereas only 23% of married women between the ages of 20 and 29 listed an occupation in the 1950 Census, nearly 80% did so in 1960, equalizing employment rates for married and

single women in this age group. The employment of these women may have contributed to the fact that age at marriage remained low through 1960.

In summary, between 1880 and 2000, the proportion of older women living with their children has declined dramatically, due largely to an increase in the proportion of women under 70 who experienced all of their children leaving home. The decline in co-residence occurred gradually from 1880 to 1940, as a result of declining fertility and mortality, a reduction in the foreign-born proportion of the population and an increase in the average time since immigration, and the replacement of agriculture and other forms of household production with non-farm wage labor. The dramatic shift toward separate living arrangements for parents and children after 1940 was associated with changes experienced by both generations: older women increasingly entered the labor force, even as the incomes of their husbands surged; young adults took advantage of new military, educational, occupational, and marital opportunities that increasingly brought them out of their parents' homes. Since 1960, the trend away from intergenerational co-residence has slowed, likely an effect of reduced fertility, less-restrictive and more family-oriented immigration policies, declining income for young men, and increases in the age at marriage. Despite these reversals, however, the continued expansion of higher education that began with the GI Bill, the increased labor force participation of both younger and older married women, and the continued increases in income for older women and their husbands have certainly contributed to the persistence of separate living arrangements for older women and their children.

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[1] Unless otherwise specified, all data are from IPUMS (Ruggles et al. 2004).

[2] We cannot tell if a co-resident child has never left, or has moved back in, but in the 50 to 69 group the former is much more likely than in the older group.

[3] In 1950, the Census stopped including children away at college in their parents' households (Ruggles and Brower 2003), which certainly contributes to the change we are seeing. The sudden mid-century transition in living arrangements, however, is not simply an artifact of the data. The following table compares observed rates of intergenerational co-residence for women aged 50-69 in 1880-1940 with those that would obtain if children age 18 or older who reported attending school were removed from the households. These figures offer a lower bound estimate of the proportion of older women living with their own children prior to 1950 if the same enumeration procedures had been followed. It is a conservative estimate because, even in 1950, 36.3% of college-age students were recorded in their parents' households (Ruggles and Brower 2003), but does not change the observation of a dramatic change between 1940 and 1950, when the rate of co-residence for women aged 50-69 fell to 44.2%.

Year	Observed % living with own child	% living with own child, adjusted for school attendance
1880	75.71	75.05
1900	72.58	72.04
1910	69.84	68.49
1920	66.32	64.93
1930	61.32	59.03
1940	57.91	55.86

[4] Only wage income was reported in 1940; in 1950, income was a sample-line item, so when it is available for women, it is not available for their husbands and vice-versa.

[5] The mean age of the youngest co-resident child varied from 19 in 1880 to 25 in 2000; within these bounds, mean age rose toward mid-century, then fell slightly and rose again at the end of the century

[6] We use two sources of data for cohort fertility. For the 1865-1930 cohorts, we use Heuser's (1976) estimates of completed cohort fertility. We extend these with the CHBORN variable from the 1900, 1910, and 1990 IPUMS samples for five-year birth cohorts from 1820 to 1865 and for annual birth cohorts from 1930 to 1945. We assume that this variable captures completed cohort fertility, conditional upon survival, for women aged 45 and older. However, if fertility is positively related to mortality (Jones and Tertilt 2006), it will underestimate total cohort fertility, and the magnitude of the underestimate will increase as the women get older. For this reason, we believe that the fertility of the 1820 to 1845 cohorts was likely higher than shown in our graphs, but have been unable to devise a justifiable adjustment factor.

[7] Income of Women 50-69, their husbands, and men and women 20-29, by co-residence status. Differences in group means all have p-values of .01 or lower:

	Women 50-69		Women 50-69 and Husbands		Men 20-29		Women 20-29	
Year	Not Co-R	Co-R	Not Co-R	Co-R	Not Co-R	Co-R	Not Co-R	Co-R
1940	994.70	523.80	7,064.40	6,258.10	9,533.20	5730.30	2,047.80	4647.70
1950	4,205.70	2,873.10			17,749.00	10730.20	3,917.80	8352.40
1960	7,388.30	5,847.50	27,720.30	25,640.90	24,513.30	14677.90	5,601.40	10956.40
1970	11,465.20	10,033.30	37,332.20	40,625.10	30,529.10	16103.80	9,823.30	12873.90
1980	13,468.00	11,895.40	41,461.20	44,504.40	28,572.70	16849.40	13,130.90	12460.80
1990	16,060.80	15,171.40	46,567.40	47,128.50	25,508.30	14893.20	15,238.80	12338.60
2000	21,596.80	20,125.80	56,877.00	54,960.60	24,335.40	14231.10	15,612.60	11642.80

[8] Calculated by the authors from IPUMS data.

[9] See Goldin (2006) for a brief history of female labor force participation in the twentieth century and of its measurement by labor economists.

A Sudden Transition – Figures

Figure 1

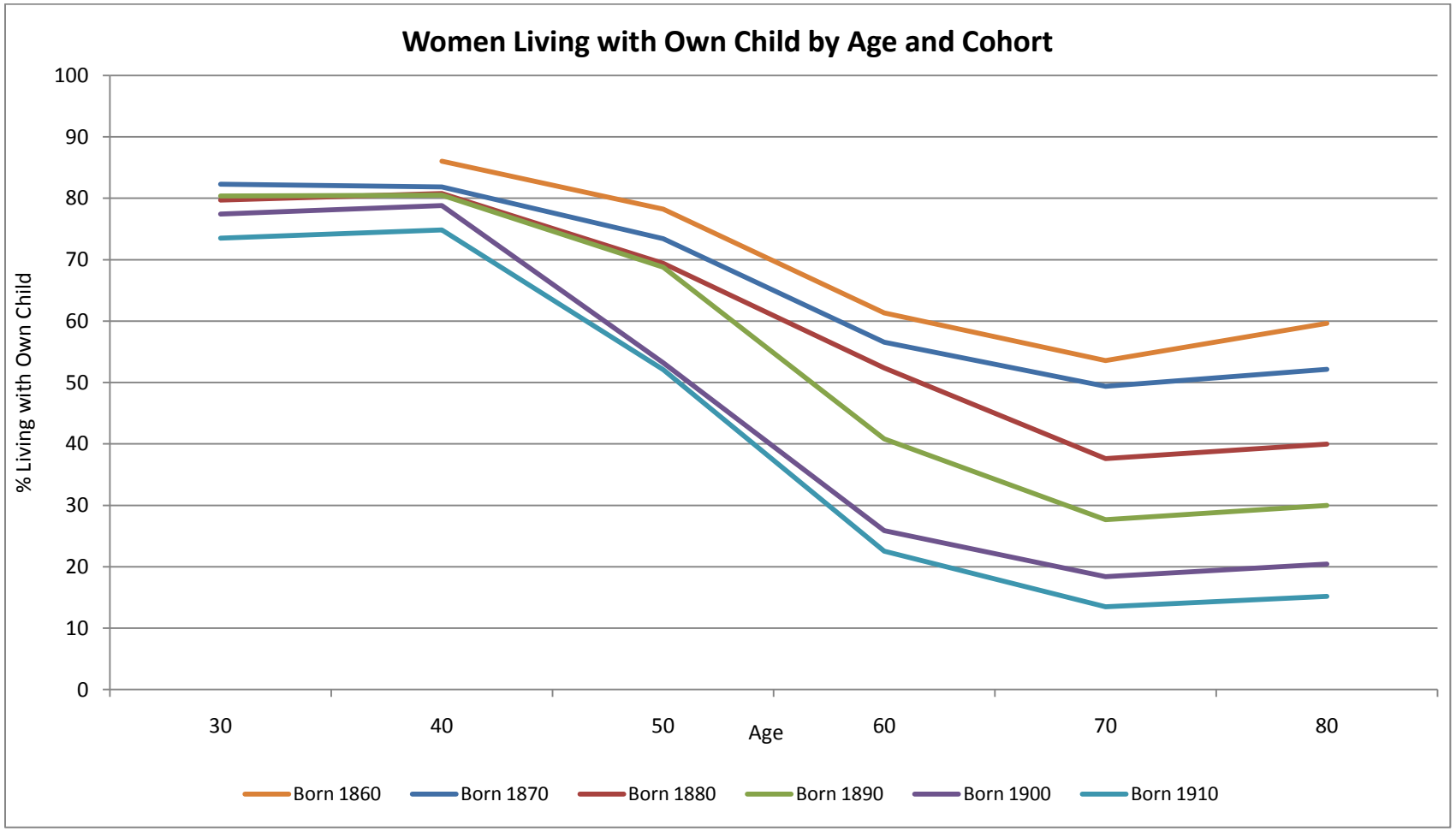

Figure 2

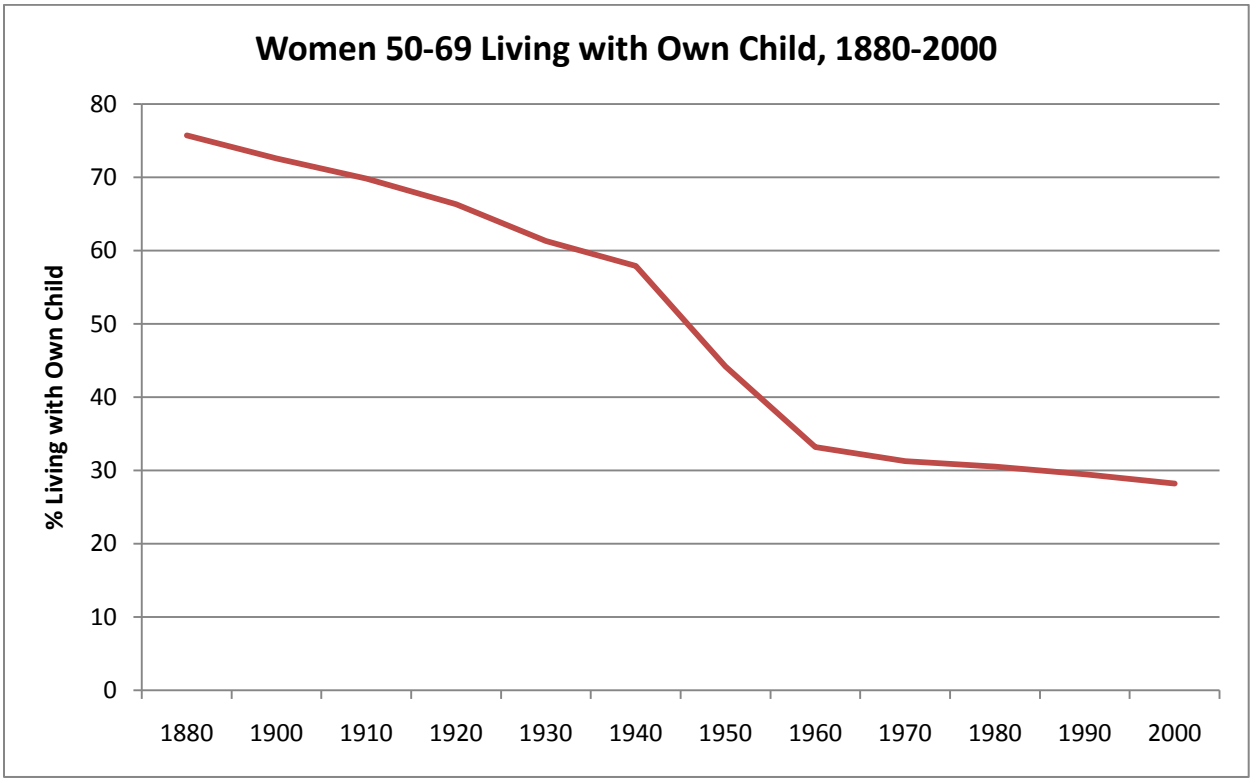
Women 50-69 Living with Own Child, 1880-2000
% Living with Own Child
80
70
60
50
40
30
20
10
0
1880
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000

Figure 3

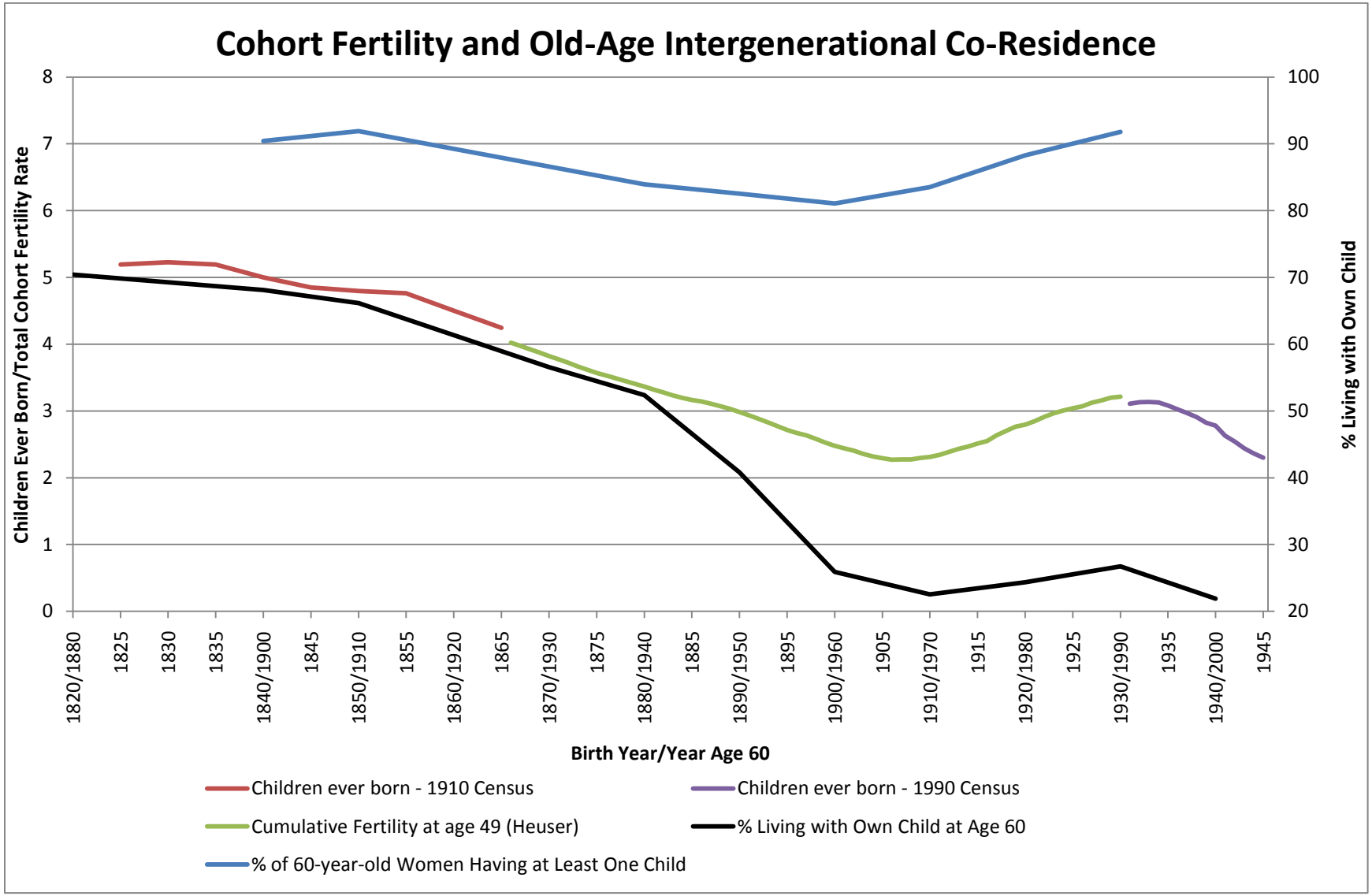
Cohort Fertility and Old-Age Intergenerational Co-Residence
Children Ever Born/Total Cohort Fertility Rate
% Living with Own Child
Birth Year/Year Age 60
0
1
2
3
4
5
6
7
8
20
30
40
50
60
70
80
90
100
1820/1880
1825
1830
1835
1840/1900
1845
1850/1910
1855
1860/1920
1865
1870/1930
1875
1880/1940
1885
1890/1950
1895
1900/1960
1905
1910/1970
1915
1920/1980
1925
1930/1990
1935
1940/2000
1945
Children ever born - 1910 Census
Children ever born - 1990 Census
Cumulative Fertility at age 49 (Heuser)
% Living with Own Child at Age 60
% of 60-year-old Women Having at Least One Child

Figure 4

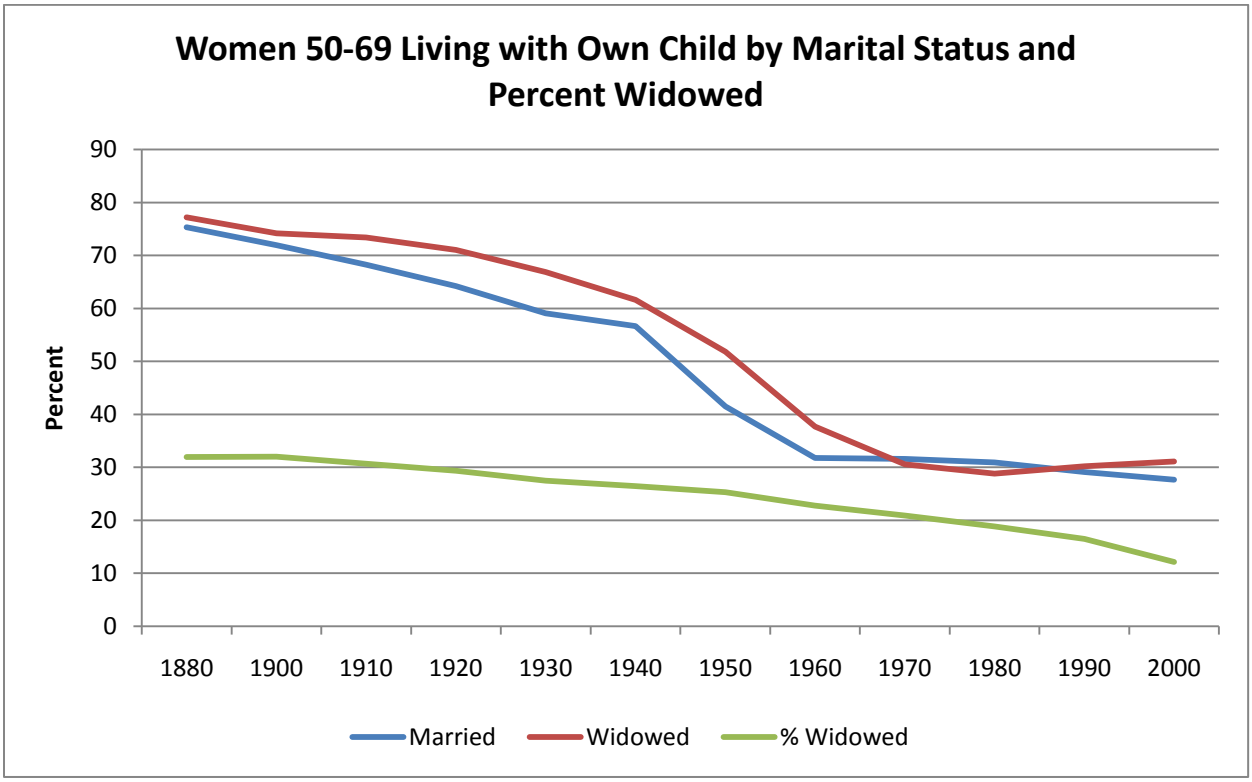
Women 50-69 Living with Own Child by Marital Status and Percent Widowed
Percent
90
80
70
60
50
40
30
20
10
0
1880
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Married
Widowed
% Widowed

Figure 5

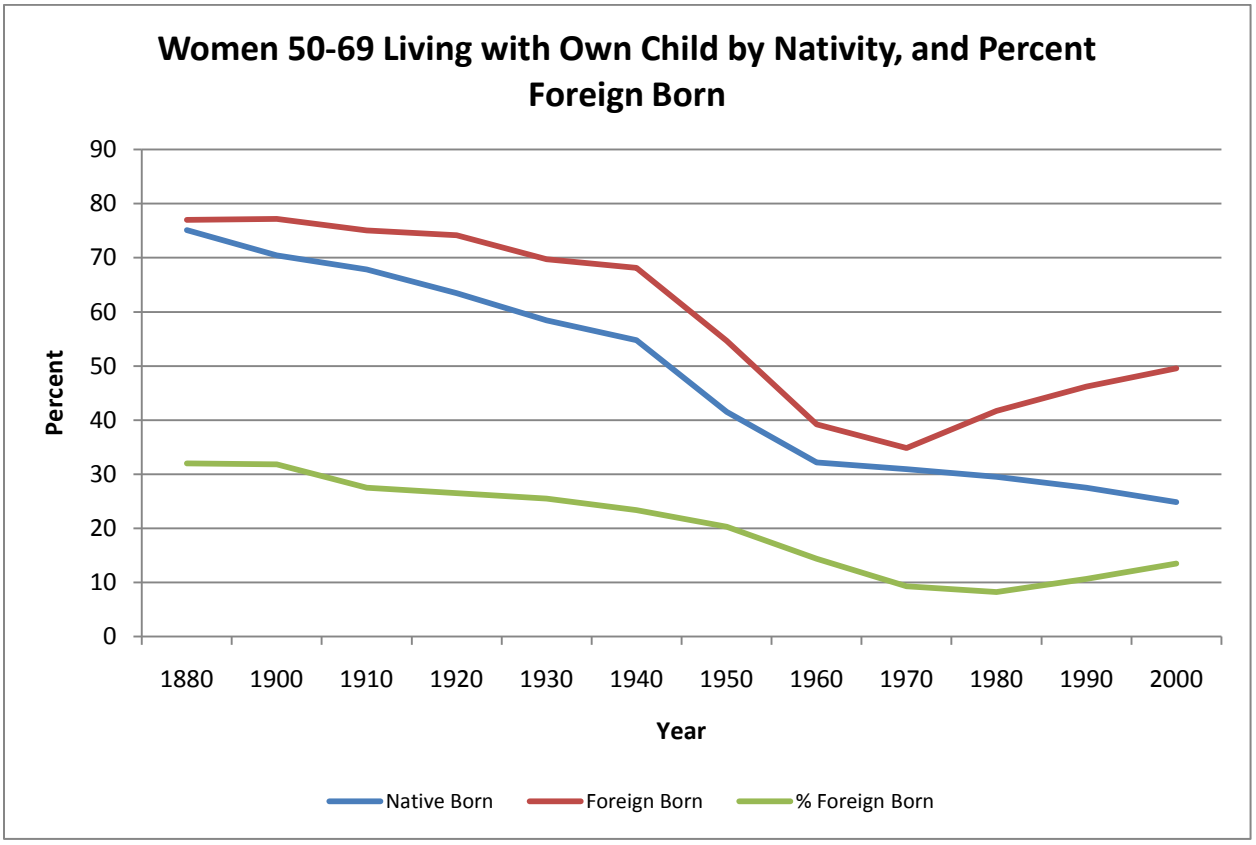
Women 50-69 Living with Own Child by Nativity, and Percent Foreign Born
Percent
90
80
70
60
50
40
30
20
10
0
1880
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Year
Native Born
Foreign Born
% Foreign Born

Figure 6

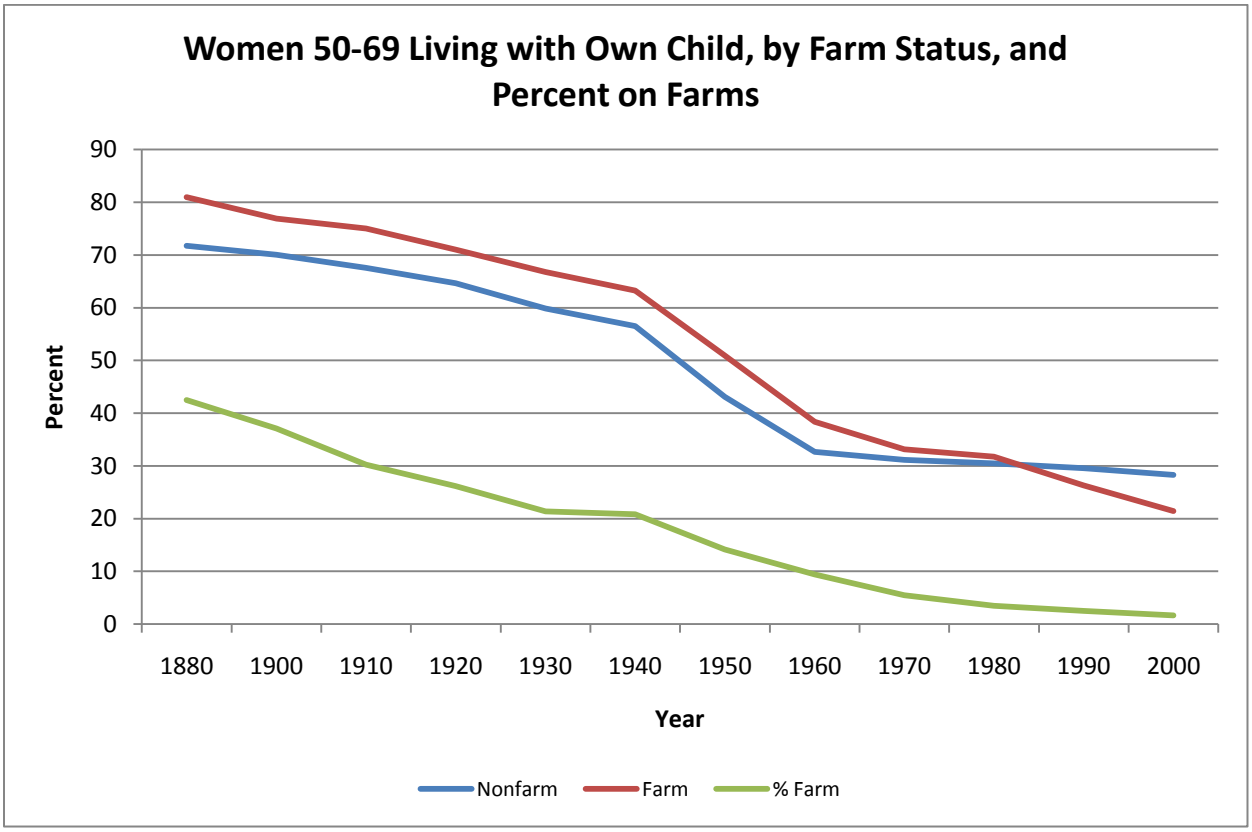
Women 50-69 Living with Own Child, by Farm Status, and Percent on Farms
Percent
90
80
70
60
50
40
30
20
10
0
1880
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Year
Nonfarm
Farm
% Farm

Figure 7

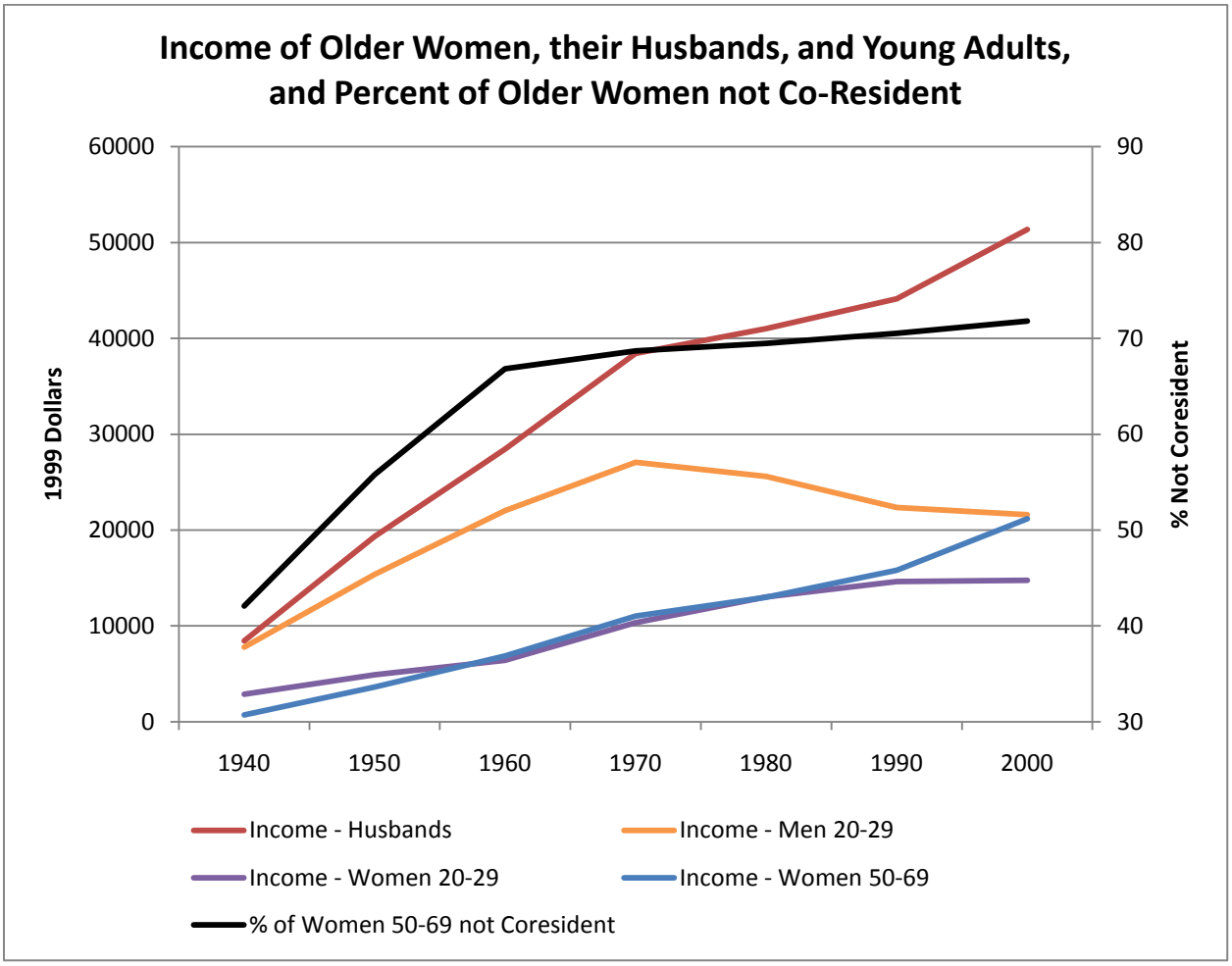
Income of Older Women, their Husbands, and Young Adults, and Percent of Older Women not Co-Resident
1999 Dollars
% Not Coresident
60000
50000
40000
30000
20000
10000
0
90
80
70
60
50
40
30
1940
1950
1960
1970
1980
1990
2000
Income - Husbands
Income - Men 20-29
Income - Women 20-29
Income - Women 50-69
% of Women 50-69 not Coresident

Figure 8

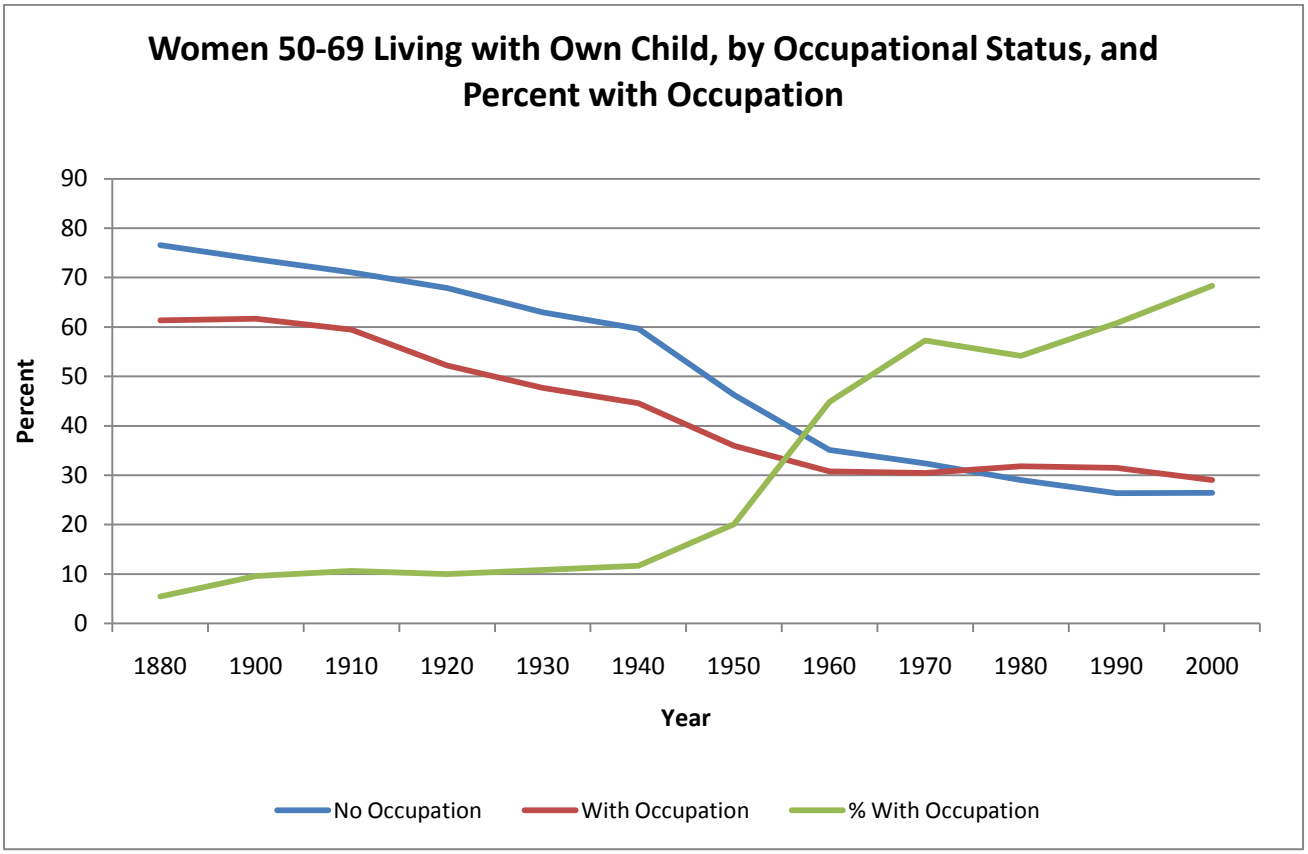
Women 50-69 Living with Own Child, by Occupational Status, and Percent with Occupation
Percent
90
80
70
60
50
40
30
20
10
0
1880
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Year
No Occupation
With Occupation
% With Occupation

Figure 9

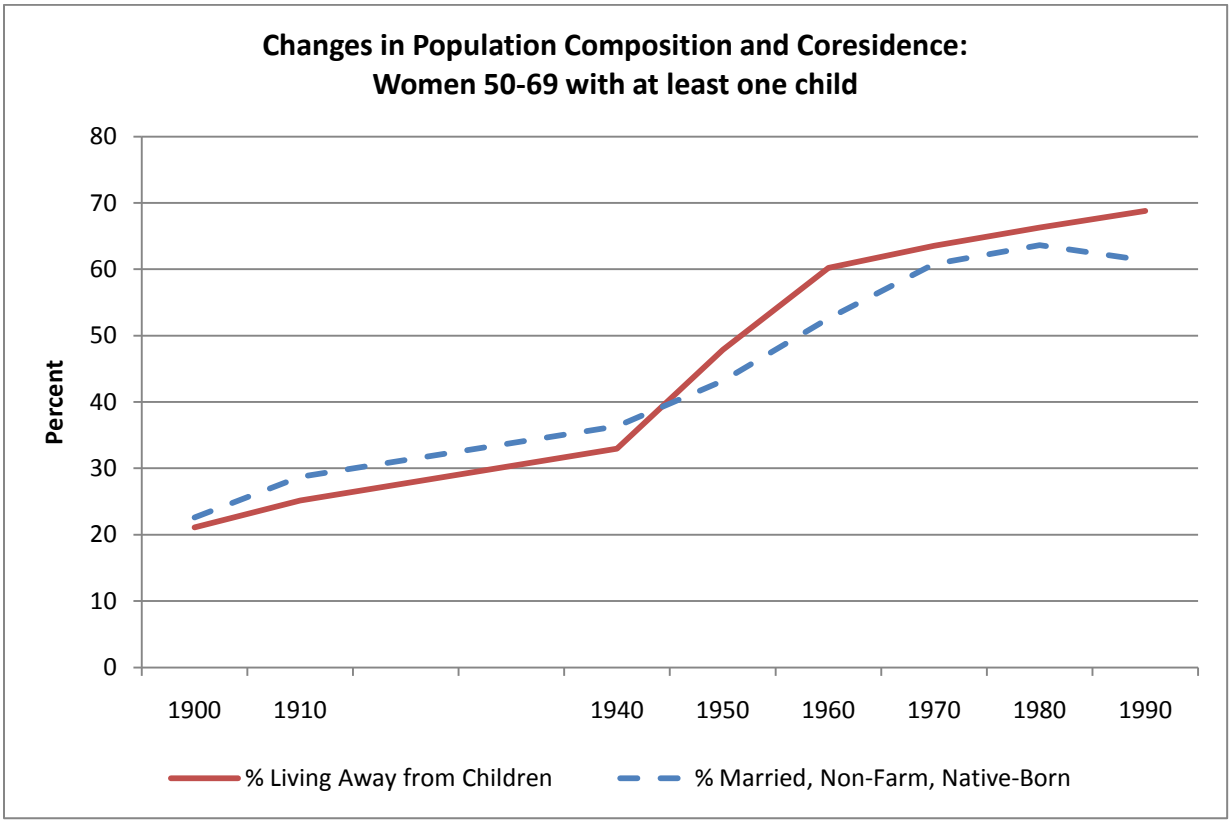
Changes in Population Composition and Coresidence:
Women 50-69 with at least one child
Percent
80
70
60
50
40
30
20
10
0
1900
1910
1940
1950
1960
1970
1980
1990
% Living Away from Children
% Married, Non-Farm, Native-Born

Table 1: Descriptive Statistics, Women 50-69

	Living with Child		Marital Status				Foreign Born	
Year	No	Yes	Married, Husband Works	Married, Husband Retired/Unemployed	Divorced	Widowed	No	Yes
1880	24.3%	75.7%	60.5%	4.9%	2.7%	31.9%	68.0%	31.9%
1900	27.4%	72.6%	58.7%	6.3%	3.0%	32.0%	68.2%	31.8%
1910	30.2%	69.8%	56.5%	9.3%	3.5%	30.7%	72.5%	27.5%
1920	33.7%	66.3%	58.2%	9.1%	3.3%	29.4%	73.5%	26.5%
1930	38.7%	61.3%	59.2%	8.9%	4.5%	27.5%	74.5%	25.5%
1940	42.1%	57.9%	54.5%	14.2%	4.8%	26.4%	76.7%	23.3%
1950	55.9%	44.1%	54.9%	14.1%	5.7%	25.4%	79.6%	20.4%
1960	66.8%	33.2%	64.5%	6.3%	6.5%	22.7%	85.7%	14.4%
1970	68.7%	31.3%	66.6%	4.6%	7.9%	20.9%	90.7%	9.3%
1980	69.5%	30.5%	58.7%	13.0%	9.5%	18.9%	91.8%	8.2%
1990	70.5%	29.5%	54.9%	15.1%	13.5%	16.5%	89.4%	10.6%
2000	71.8%	28.2%	53.9%	14.5%	19.5%	12.1%	86.5%	13.5%

	Farm		Listing Occupation		Low Educational Attainment		Age		Sample Size
Year	No	Yes	No	Yes	No	Yes	Mean	SD	
1880	57.2%	42.8%	94.5%	5.5%	84.7%	15.3%	57.5	5.6	19,408
1900	62.9%	37.1%	90.4%	9.6%	87.7%	12.3%	57.8	5.6	33,402
1910	69.8%	30.1%	89.3%	10.7%	90.7%	9.3%	57.8	5.7	42,437
1920	73.8%	26.1%	90.0%	10.0%	92.8%	7.2%	57.9	5.6	51,830
1930	78.6%	21.4%	89.2%	10.8%	94.8%	5.2%	57.9	5.6	67,687
1940	79.1%	20.9%	88.4%	11.6%	17.3%	82.7%	58.1	5.7	86,786
1950	85.8%	14.2%	79.9%	20.1%	24.1%	75.9%	58.4	5.6	102,070
1960	90.6%	9.4%	55.2%	44.8%	30.3%	69.7%	58.6	5.7	136,235
1970	94.5%	5.5%	42.7%	57.3%	45.2%	54.8%	58.6	5.7	163,741
1980	96.6%	3.5%	45.8%	54.2%	59.0%	41.0%	59,0	5.6	193,498
1990	97.5%	2.5%	39.2%	60.8%	74.9%	25.1%	59.4	5.8	205,319
2000	98.3%	1.7%	31.6%	68.4%	84.7%	15.3%	58.2	5.8	233,612

Table 2: Descriptive Statistics, Women 50-69 Reporting At Least One Birth

	Living with Child		Marital Status				Children Ever Born			
Year	No	Yes	Married, Husband Works	Married, Husband Ret/Unemp	Divorced	Widowed	One	Two	Three	Four or More
1900	21.1%	78.9%	58.6%	6.2%	3.0%	32.2%	10.6%	11.0%	10.4%	68.0%
1910	25.2%	74.9%	56.3%	9.3%	3.5%	30.9%	9.9%	11.6%	12.0%	66.5%
1940	33.0%	67.0%	54.6%	13.9%	4.7%	26.8%	17.4%	21.1%	16.8%	44.7%
1950	47.9%	52.1%	54.8%	13.9%	5.4%	25.9%	20.1%	23.2%	17.7%	39.0%
1960	60.2%	39.8%	64.4%	6.1%	6.2%	23.3%	22.8%	27.2%	18.1%	31.8%
1970	63.5%	36.5%	67.5%	4.3%	7.7%	20.5%	22.0%	30.4%	20.1%	27.4%
1980	66.3%	33.7%	59.8%	12.5%	9.3%	18.5%	16.6%	29.6%	22.9%	30.8%
1990	68.8%	31.2%	55.6%	14.8%	13.3%	16.3%	11.7%	27.4%	25.5%	35.4%

	Foreign Born		Farm		Listing Occupation		Low Educational Attainment		Age		Sample Size
Year	No	Yes	No	Yes	No	Yes	No	Yes	Mean	SD	
1900	67.8%	32.2%	62.2%	37.8%	90.8%	9.2%	87.6%	12.4%	57.8	5.6	30,206
1910	72.1%	27.9%	69.1%	30.9%	89.7%	10.3%	90.4%	9.6%	57.8	5.7	39,004
1940	75.7%	24.3%	77.8%	22.2%	89.4%	10.6%	15.9%	84.2%	58.1	9.7	24,887
1950	78.9%	21.1%	85.1%	14.9%	81.1%	18.9%	22.5%	77.5%	58.4	9.7	28,408
1960	85.2%	14.8%	89.9%	10.1%	56.9%	43.1%	28.2%	71.8%	58.7	5.7	110,466
1970	90.7%	9.3%	94.3%	5.8%	43.5%	56.5%	43.8%	56.2%	58.4	5.7	136,739
1980	91.9%	8.1%	96.4%	3.6%	45.5%	54.5%	58.8%	41.2%	58.8	5.6	170,822
1990	89.6%	10.4%	97.5%	2.6%	39.0%	61.0%	74.6%	25.4%	59.4	5.8	188,777

Table 3. Results: Model 1

		1880		1900		1910		1920		1930		1940	
		Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
Intercept		0.575	<.0001	0.426	<.0001	0.361	<.0001	0.203	<.0001	0.002	0.9076	-0.319	<.0001
Age		-0.080	<.0001	-0.067	<.0001	-0.065	<.0001	-0.060	<.0001	-0.063	<.0001	-0.074	<.0001
Marital	**Married, H works (ref)**												
	Widowed	0.550	<.0001	0.597	<.0001	0.630	<.0001	0.736	<.0001	0.761	<.0001	0.613	<.0001
	Divorced	-0.041	0.6894	0.221	0.0027	0.348	<.0001	0.492	<.0001	0.453	<.0001	0.222	<.0001
	Married, H unemp/ret	-0.166	0.0263	0.025	0.6285	-0.181	<.0001	-0.169	<.0001	-0.114	<.0001	-0.028	0.2031
Fborn		0.180	<.0001	0.456	<.0001	0.440	<.0001	0.549	<.0001	0.525	<.0001	0.626	<.0001
Farm		0.634	<.0001	0.548	<.0001	0.503	<.0001	0.463	<.0001	0.446	<.0001	0.368	<.0001
Employed		-1.019	<.0001	-0.924	<.0001	-0.874	<.0001	-1.066	<.0001	-0.987	<.0001	-0.819	<.0001
Low Ed		-0.001	0.9854	-0.009	0.8097	0.190	<.0001	0.193	<.0001	0.319	<.0001	0.271	<.0001

		1950		1960		1970		1980		1990		2000	
		Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
Intercept		-0.897	<.0001	-1.097	<.0001	-1.014	<.0001	-1.071	<.0001	-1.120	<.0001	-1.314	<.0001
Age		-0.063	<.0001	-0.092	<.0001	-0.129	<.0001	-0.137	<.0001	-0.100	<.0001	-0.091	<.0001
Marital	**Married, H works (ref)**												
	Widowed	0.800	<.0001	0.649	<.0001	0.434	<.0001	0.359	<.0001	0.341	<.0001	0.424	<.0001
	Divorced	0.372	<.0001	0.196	<.0001	0.039	0.0698	-0.044	0.0165	-0.089	<.0001	-0.056	<.0001
	Married, H unemp/ret	-0.061	0.0029	-0.136	<.0001	-0.250	<.0001	-0.309	<.0001	-0.256	<.0001	-0.201	<.0001
Fborn		0.544	<.0001	0.418	<.0001	0.417	<.0001	0.571	<.0001	0.758	<.0001	1.027	<.0001
Farm		0.438	<.0001	0.295	<.0001	0.063	0.0098	0.078	0.006	-0.127	0.0001	-0.194	<.0001
Employed		-0.711	<.0001	-0.431	<.0001	-0.377	<.0001	-0.222	<.0001	-0.068	<.0001	-0.113	<.0001
Low Ed		0.386	<.0001	0.248	<.0001	0.079	<.0001	0.099	<.0001	0.274	<.0001	0.415	<.0001

Table 4. Results: Model 2

		1900		1910		1940		1950	
		Coeff.	P-value	Coeff.	P-value	Coeff.	P-value	Coeff.	P-value
Intercept		-0.124	0.0062	-0.522	<.0001	-0.335	<.0001	-1.069	<.0001
Age		-0.091	<.0001	-0.091	<.0001	-0.096	<.0001	-0.082	<.0001
Chborn	**1 (ref)**								
	2	0.195	0.0003	0.456	<.0001	0.390	<.0001	0.313	<.0001
	3	0.515	<.0001	0.864	<.0001	0.703	<.0001	0.635	<.0001
	4+	1.299	<.0001	1.631	<.0001	1.295	<.0001	1.222	<.0001
Marital	**Married, H works (ref)**								
	Widowed	0.810	<.0001	0.770	<.0001	0.577	<.0001	0.830	<.0001
	Divorced	0.268	0.0019	0.391	<.0001	0.231	<.0001	0.453	<.0001
	Married, H unemp/ret	0.004	0.9487	-0.232	<.0001	-0.059	0.0217	-0.076	0.0009
Fborn		0.395	<.0001	0.330	<.0001	0.571	<.0001	0.538	<.0001
Farm		0.457	<.0001	0.314	<.0001	0.060	0.0044	0.243	<.0001
Employed		-0.991	<.0001	-0.881	<.0001	-0.746	<.0001	-0.616	<.0001
Low Ed		-0.165	0.0003	-0.001	0.9792	-0.057	0.0135	0.145	<.0001

		1960		1970		1980		1990	
		Coeff.	P-value	Coeff.	P-value	Coeff.	P-value	Coeff.	P-value
Intercept		-1.365	<.0001	-1.463	<.0001	-1.582	<.0001	-1.556	<.0001
Age		-0.113	<.0001	-0.133	<.0001	-0.130	<.0001	-0.103	<.0001
Chborn	**1 (ref)**								
	2	0.380	<.0001	0.366	<.0001	0.178	<.0001	0.131	<.0001
	3	0.742	<.0001	0.858	<.0001	0.653	<.0001	0.399	<.0001
	4+	1.377	<.0001	1.548	<.0001	1.412	<.0001	0.994	<.0001
Marital	**Married, H works (ref)**								
	Widowed	0.681	<.0001	0.506	<.0001	0.426	<.0001	0.400	<.0001
	Divorced	0.284	<.0001	0.130	<.0001	0.002	0.9336	-0.044	0.0065
	Married, H unemp/ret	-0.127	<.0001	-0.254	<.0001	-0.282	<.0001	-0.216	<.0001
Fborn		0.460	<.0001	0.531	<.0001	0.729	<.0001	0.895	<.0001
Farm		0.083	0.0002	-0.127	<.0001	-0.072	0.0176	-0.192	<.0001
Employed		-0.325	<.0001	-0.316	<.0001	-0.214	<.0001	-0.075	<.0001
Low Ed		-0.057	0.0002	-0.155	<.0001	-0.040	0.0009	0.144	<.0001