# Emptying the Nest: Older Men in the United States, 1880-2000 

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The elderly in the United States, who once nearly always lived with their children, now reside apart from them. For older women, the most noteworthy shift has been toward solitary households. For men, the focus of the present study, the empty nest-which we define as made up of a married couple and no one else-has become the dominant living arrangement. ${ }^{1}$ Between 1880 and 2000, the proportion of married men aged 60 and older living in an empty nest more than quadrupled, rising from 19 percent to 78 percent. We find that the transformation has an emphatic periodization, with most of the change occurring in the period from 1940 to 1970. We argue that longterm demographic, cultural, and economic models cannot explain this abrupt shift. Instead, short-term demographic and economic conditions in this period provided the impetus for both the elderly and their adult children to achieve a persistent ideal of living in autonomous households.

## Previous research

Two groups of scholars, whose work intermittently intersects, have examined the decline in co-residence of the elderly and their children, focusing on the "nuclearization" of the family, and, among the elderly, on older women in solitary households. The first group, mainly social scientists, has attempted to explain changes in American family structure after World War II. The second, chiefly historians, has sought to define family forms and family norms over the broad expanse of time before the mid-twentieth century.

In the 1950s and 1960s, as censuses recorded abrupt changes in American households, demographers reported a societal shift toward small nuclear families in mid-adulthood and toward solitary households in young and older
adulthood (Beresford and Rivlin 1966; Kobrin 1976; for similar changes elsewhere see Keilman 1988; Young and Grundy 2009). Household size decreased as a result of declining fertility, young adults setting up households of their own, and the elderly residing in empty nests and solitary households. These changes were salient given that the standard sociology of the family before that time assumed that large, extended households had been common in the past and were only slowly undermined by industrialization (Burgess 1916; Ogburn 1933; Parsons 1949; cf. Goode 1963). Even though such theory began to break down under closer historical scrutiny, the rapid postwar increase in autonomous households, particularly among the elderly, provoked a vigorous scholarship examining demographic, economic, and cultural explanations.

Glick revealed the demographic foundation for the increasingly isolated households of the elderly: earlier marriage, an earlier birth of the last child, and, most importantly, longer life expectancy (Glick and Parke 1965; Glick 1977; see also Uhlenberg 1969, 1978). Women who had married between 1900 and 1909 had 1.6 median years of joint survivorship with their husbands after the marriage of their last child; those born between 1920 and 1929 had 9.3 years. Other scholars (Treas 1977; Treas and Bengston 1982) described steep declines in fertility that "reduced the number of descendants to whom an older person can turn for assistance" (1977: 486). Reductions in mortality and fertility operated in tandem to increase the length of time a couple would survive after childrearing and to reduce the number of children with whom they might live. Kobrin concluded that such "demographic changes operating on the population-marriage structure" undid nineteenth-century norms of co-residence, and led to "a general redefinition of the family toward invariable ... nuclearity" (1976: 130).

These studies provided hypothetical scenarios, rather than direct tests, of factors that increased the likelihood of generations living separately, and such purely demographic explanations did not go unchallenged. McGarry and Schoeni (2000) found that variation in the proportion of elderly widows living alone did not closely parallel the rise in life expectancy. Fertility decline also seemed an insufficient cause; Crimmins and Ingegneri (1990) found that the proportion of elderly persons with surviving direct descendants had increased between 1962 and 1984. Moreover, although having more children increased the probability that an older person would live with a child, what mattered most was having at least one child (Kramarow 1995; Ruggles 1996). McGarry and Schoeni (2000) concluded that, for elderly widows, declining fertility could account for only 10 percent of the trend toward living alone after 1940.

Economists argued that this "nuclearization" of the family followed directly from rising affluence, contending that well-being was always served by the privacy achieved by living in small, separate households. The elderly increasingly lived alone, not because they could not depend on their children
but because they no longer had to. Once economic status reached a necessary critical level, parents and children seized the opportunity to live separately (Michael, Fuchs, and Scott 1980). The long-term decline in the co-residence of the elderly and their children correlated closely with long-term gains in the economic status of both generations (Bethencourt and Rios-Rull 2009; Costa 1997; McGarry and Schoeni 2000; Palloni 2000), and a significant relationship appeared between income and household structure for a variety of age groups (Corson and McConnell 1956; Carliner 1975; Chevan and Korson 1972). Social Security benefits played a prominent role in economic explanations, since a guaranteed stream of income could reduce uncertainty about lifetime resources. Researchers regularly found correlations between Social Security benefits and the probability that the elderly would live alone (Schorr 1960; Bethencourt and Rios-Rull 2009; McGarry and Schoeni 2000; Costa 1997, 1999)

Other scholars, however, suggested that neither demographic nor economic changes could fully explain the growing prevalence of nuclear and solitary households. They stressed the rise of a culture that valued independent and autonomous families; Americans used increasing affluence to achieve that new ideal (Beresford and Rivlin 1966). Pampel (1981, 1983) found that income alone explained only a small portion of the increase in solitary living between 1960 and 1976, arguing that much of this increase was the result of an "increased demand for...privacy and autonomy" (1981: 170). Evidence for the effect of diverse norms also appeared in cross-cultural comparisons. Similarly developed countries in Europe and Asia had different levels of co-residence of the aged with their children (Murphy and Grundy 1994), as did different ethnic and racial groups in the United States (Chevan and Korson 1972; Giuliano 2007; Zhou 1997). A large literature maintained that ethnocultural differences made some elderly more likely to live with their children (Burr and Mutchler 1999; Choi 1999; Giuliano 2007; Wilmoth 2001; Zhou 1997). Such findings suggested both that culture mattered and that shifts in the ethnic composition of the US population might affect family living arrangements.

Social scientists studying change in the mid-twentieth century were aware of a rising interest among historians in family and household (e.g., Kobrin 1976). After 1970, new sources of historical data in Great Britain and the United States made it possible to study families in the past with greater confidence. Historians began to seek the origins of family structure and to ascertain family values in previous eras (Thornton 2005). Major findings emerged first from the Cambridge Group for the History of Population and Social Structure. Using diverse records from seventeenth- and eighteenth-century Britain, Pe ter Laslett and his colleagues, especially Richard Wall, made the startling claim that the English family was, even in distant times, overwhelmingly nuclear, and that this family form-and the values that sustained it-were persistent
and highly resistant to change (Laslett and Wall 1972). Arguing that neither industrialization nor welfare had important effects on family structure at least through the early twentieth century, Wall concluded that it was "impossible to sustain the view of a linear progression from pre-industrial times when the elderly lived with their children to modern times when they live on their own" (1984: 483; 1989, 2001, 2002).

Subsequent work in the United States, especially by Hareven and Smith, confirmed these basic findings (e.g., Kertzer 1995; Hareven 1991, 1994, 1996; Chudacoff and Hareven 1979; Smith 1979, 1986), leading to a consensus that nuclearity and neolocality were deeply ingrained and persistent family values among Northwest Europeans and their New World descendants. ${ }^{2}$ Ruggles (1994) agreed that nineteenth-century US census data demonstrated that the nuclear family was the dominant form; he argued, however, that the dominance of the nuclear family resulted from patterns of fertility and mortality that made creating extended households unlikely. Because nearly all elderly persons who had surviving children lived with them, co-residence norms did exist. Other scholars confirmed the finding of co-residence, but disagreed about the cause (Chudacoff and Hareven 1978; Smith 1979; Hareven 1994). They argued that misfortune, rather than cultural values, compelled co-residence. Still, the fact that wealthier households were more likely to be extended in the late nineteenth and early twentieth centuries suggested that Americans exercised their preference for co-residence when capable of doing so (Smith 1979; Ruggles 1994, 2003). Rising economic standards during the twentieth century should have led to more extended households, rather than fewer; the fact that this did not happen implied a profound cultural change toward preference for autonomous households.

Ruggles $(2003,2007,2009)$ later abandoned the theory of a normative shift, focusing instead on structural explanations. He provided quantitative evidence for Frédéric Le Play's mid-nineteenth-century assertion that industrialization undermined family ties by offering the young an opportunity to escape patriarchal households (Silver 1982). In agricultural societies, the concentration of wealth in farm property made the young eager to please the old. In industrial economies, the young can live well on their own, and they are the ones who profit from autonomous living (cf. Brady 1958; Beresford and Rivlin 1966). Comparisons over time (Ruggles 2007) and across diverse societies (Ruggles 2009) revealed no cultural effect, no differential "propensity among the aged to reside with kin" (Ruggles 2009: 264).

Other historians found neither cultural nor structural change sufficient, and sought explanations for the shift toward autonomous households in a variety of economic, demographic, and political factors. They found that empty nest households among the elderly did not initially appear in the urban, industrial locales one would expect from a structural argument, but in rural settings, where successful North American farmers appeared to have
chosen to retire and live without their children (Haber and Gratton 1994; Costa 1995; Dillon, Gratton, and Moen 2010). Interpreting the high frequencies of extended affluent households in the past as a cultural choice seemed unduly simplistic; the average income of extended households in the early twentieth century approximated that of the households most likely to be extended in the mid-twentieth century (Gratton 1986). As Michael, Fuchs, and Scott (1980) argued, a threshold income may finance extension, and a higher threshold income may then finance autonomous households.

Historians have also developed broader interpretations of changing demographic conditions. Declines in fertility did not initially undermine coresidence opportunities for the elderly (as long as at least one child survived), but such declines immediately raised the probability of co-residence for the reduced number of adult children (Gratton 1986; see Levy 1965; Kobrin 1976; Ruggles 2007). Haber and Gratton (1994) argued that the increased likelihood that a young adult would be responsible for an aging parent led to widespread support in the United States for public pensions. Moreover, young adult children became more likely to move away from home in the mid-twentieth century owing to a set of unusual, exogenous factors, including wartime mobilization and the more widespread participation of young adults in university education (Gutmann, Pullum-Piñon, and Pullum 2002).

The social scientific and historical literatures feature the same contest between demographic, cultural, and economic explanations for the increase in separate households among the elderly in the United States. The scholarship suggests that declining fertility is not ipso facto responsible, since adult children remained available to aging parents. However, smaller families and greater longevity placed substantially greater demands upon adult children. Historical period effects, as well as distinct ethnic patterns, indicate to some scholars that preferences have changed over time or vary between cultural groups in the population. Economic conditions clearly determine the range of household choices available, and public and private pensions appear to be an especially attractive means for sustaining independent households, while reducing social tension over intergenerational burdens.

In their study of the elderly, the two literatures reviewed here have attended mainly to the fortunes of older women. In our research, we turn the focus to elderly men still living with their wives, the household configuration we define as "empty nest." We ask why these couples became increasingly less likely to live with their children or other family members. Given the explanatory models presented in previous studies, we require evidence that allows a comparative assessment of demographic, cultural, and economic influences on the emergence of the empty nest. Such evidence, at its best, ought to represent all elderly men in the United States and include variables useful to measuring each hypothesized influence. Given the reference in all scholarship to enduring trends, the evidence must permit
an extended historical view and allow us to distinguish between long-term trends and abrupt change.

## Analysis

## Data and variables

This research primarily employs samples of US census data from the Integrated Public Use Microdata Series (IPUMS; Ruggles et al. 2004) for all decennial census years from 1880 to 2000 except 1890, for which individual-level census data do not exist. IPUMS data reflect the circumstances of a representative sample of the US population and provide similar information about living arrangements across this period. While the census collects a rich variety of evidence, it lacks certain variables that would have been useful for this analysis (economic status, for example, is poorly measured in most years and culture at best is indirectly assessed), and the data are cross-sectional, rather than longitudinal. We also use a variety of other sources in the aggregate comparisons, identifying them where they are employed.

For the following analyses, we first exclude men residing in the inconsistently defined category of group quarters, and a few men whose household arrangements could not be ascertained; these exclusions amount to between 3 percent and 6 percent of the original sample, depending on the year. We then selected all married men aged 60 and older with spouse present, though we also use comparative data for younger men in certain analyses. We excluded men whose spouse was absent, and men who were widowed, separated, divorced, or never married. The percentage excluded by these criteria rises from 25 percent in 1880 to 33 percent in 1930, then falls again to about 25 percent after 1950. The proportion divorced increases across the series, and the proportion widowed declines. We classified each man into one of three household types:
-Empty nest (husband and wife, no others)
—Living with own child or children (in any household arrangement)
—Living in all other household arrangements

## Aggregate comparisons

Table 1 shows the sample size and distribution of living arrangements for married men aged 60 and older. We first use these data in figures that compare aggregate change in living arrangements to aggregate changes in other variables, and then turn to multivariate analysis of individual older men. The figures reveal a single historical period, 1940 to 1970 , during which most of the change in the proportion of older married men living in the empty nest took place. The pronounced shift within this period, and the long-term

TABLE 1 Married men aged 60 and older by living arrangement, United States, 1880-2000

| Year | Empty nest |  | With children |  | Other |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent |  |
| 1880 | 1,956 | 19.4 | 6,979 | 69.3 | 1,135 | 11.3 | 10,070 |
| 1900 | 3,745 | 23.3 | 10,459 | 65.1 | 1,855 | 11.6 | 16,061 |
| 1910 | 5,407 | 27.0 | 12,449 | 62.1 | 2,192 | 10.9 | 20,050 |
| 1920 | 7,869 | 31.0 | 14,981 | 59.0 | 2,546 | 10.0 | 25,396 |
| 1930 | 11,411 | 35.9 | 16,638 | 52.3 | 3,747 | 11.8 | 31,796 |
| 1940 | 16,362 | 38.5 | 21,230 | 50.0 | 4,859 | 11.5 | 42,451 |
| 1950 | 28,997 | 52.8 | 20,127 | 36.6 | 5,825 | 10.6 | 54,949 |
| 1960 | 48,343 | 66.1 | 18,495 | 25.3 | 6,345 | 8.7 | 73,183 |
| 1970 | 64,163 | 72.7 | 18,892 | 21.4 | 5,253 | 6.0 | 88,307 |
| 1980 | 83,518 | 76.2 | 20,996 | 19.2 | 5,078 | 4.6 | 109,592 |
| 1990 | 96,547 | 76.6 | 24,436 | 19.4 | 5,127 | 4.1 | 126,110 |
| 2000 | 105,892 | 78.4 | 23,596 | 17.5 | 5,574 | 4.1 | 135,062 |

SOURCE: See text.
moderate trends on each side of it, raise questions about the plausibility of certain explanations proffered in the literature. Any useful model for the rise of the empty nest among older men must explain the sharp increase during this period.

Figure 1 contrasts the rise of the empty nest for married men aged 60 and older to the simultaneous decline in the percentage living with one or more children. The latter share fell from over two-thirds of all men in 1880 to about 17 percent in 2000. The proportion in the empty nest quadrupled, rising from 19 percent to over 78 percent. The figure reveals the critical periodization mentioned earlier. From 1880 to 1940, increases in the empty nest are evident but moderate, rising about 3 percentage points per decade. After 1940 a sharp change begins, lasting through 1970. In this 30-year period, the increase is greater than 11 percentage points per decade. After 1970, the rate slows dramatically, to an increase of 2 percentage points per decade. A linear regression line from 1880 to 1940 shows that, at the first period's rate of increase, fewer than 60 percent of married men aged 60 and older would have been in the empty nest in the year 2000, instead of the nearly 80 percent reported. Using the points between 1940 and 1970, more than 90 percent of men would have been living in the empty nest by 1990. The regression line for 1970 to 2000 has a lower slope than the line from 1880 to 1940. The 30 -year interval from 1940 to 1970 represents a sharp break between past and present experience, accounting for more than half of the change over 120 years. An adequate explanation for the emptying of the nest requires understanding these three distinct stages: the first, a long and moderate trend away from living with children; the second, a rapid shift of about 30 years'

FIGURE 1 Percent of married men aged 60 and older living in an empty nest and living with children, with regression (dashed) lines by period: United States, 1880-2000


SOURCE: See text.
duration in which the empty nest became the predominant household form for older men; and the third, a recent, pronounced slowing of the trend. The gradual rates of increase in the first and third periods fit the slow transition implied in historical accounts: demographically, a long-term decline in fertility and a long-term increase in longevity, which reduced the number of children available to the aging parents' household and lengthened the period between the end of childrearing and the death of either spouse; culturally, a slow shift in attitudes about appropriate living arrangements; and economically, steady increases in affluence and long-term structural shifts such as the decline of an agricultural economy. The sharp transition between 1940 and 1970 is not adequately explained by these models.

After World War II, social scientists recognized this sudden change, but the demographic, cultural, and economic explanations they offered do not completely account for the periodization of the shift. We convey the strengths and weaknesses of demographic explanations for the rise of the empty nest through Figures 2 and 3. In Figure 2 we compare the expectation of life at age 60 for white men in the United States with the proportion of married white men aged 60 and older living in an empty nest. This comparison fixes attention on demographic potential: we expect that as men (and their wives) lived longer, they had more time after their children had grown to live by themselves in the empty nest. Longer joint survival does not automatically increase the probability of the empty nest-even with the brief expectation

FIGURE 2 Life expectancy of men at age 60 and percent of married men aged 60 and older living in an empty nest:
White men only, United States, 1880-2000


SOURCES: For percent in empty nest, see text. For life expectancy, 1880-1990: Haines 2006, Table Ab676; for 2000: Arias et al. 2008.
of joint survival in the late nineteenth century, all children could have left the parental home-but increased and increasingly secure longevity, we argue, made expectation and preparation for separate households much more likely in both generations. As shown in Figure 2, life expectancy for older white men increased slowly but steadily from 1880 to 1970, followed by a more rapid increase from 1970 to 2000. Life expectancy and prevalence in the empty nest grew in parallel from 1880 until 1940; then the percent in empty nests surged upward, outpacing changes in remaining years of life expectancy. The subsequent rapid increase in life expectancy since 1970 and the stabilization in the empty nest bring the two trends together again. The conclusion we draw is that the long, slow increase in life expectancy from 1880 to 1940 correlates well with a moderate rise in the empty nest for men, but the continued slow rise in life expectancy cannot explain the surge in the empty nest between 1940 and 1970.

In Figure 3 we turn to fertility, assessing the effects of the availability of children on parents' living arrangements. We compare the total completed fertility of cohorts of US women born from 1868 to 1932 (Heuser 1976) and the projected fertility of women born through 1941 (Ryder 1986) to the percentage of married men aged 60 and older living in an empty nest 60 years later. For example, the living arrangements of older men in 1970 correspond with the completed fertility of women born in 1910. Because fertility data

FIGURE 3 Correspondence between total cohort fertility of women born 1868-1932 and projected through 1941 and percent of married men aged 60 and older living in an empty nest 60 years later


Female birth cohort/Census year
NOTE: The data are offset by 60 and 65 years, so the percent living in an empty nest corresponds to census data collected 60 and 65 years after the indicated birth cohort.
SOURCES: For percent in empty nest, see text. For total cohort fertility, see Heuser 1976 and Ryder 1986.
are not available before the 1868 cohort, this comparison begins with the 1930 census and focuses on the period of rapid growth in the proportion of men living in an empty nest from 1940 to 1970 and the subsequent slowing of this growth. We invert the fertility scale (on the right) to visually compare the largely declining cohort fertility rates with the increasing percentage of men living in the empty nest (left scale). The figure demonstrates a steady decline in fertility through the 1908 birth cohort. Fertility then increases through the 1932 cohort and is projected to fall again thereafter. The proportion of older men living in an empty nest increases only slightly between the 1930 and 1940 censuses, while fertility for women born 60 years earlier declines rapidly. After the 1940 census, growth in the proportion of older men living in an empty nest outpaces fertility decline. The increase in fertility that begins with the birth cohort of 1909 corresponds to a slowing in the rate of growth of the empty nest for older men after 1970, although the proportion in empty nests still continues to increase. These trend lines demonstrate some concordance between fertility and the living arrangements of older men: more men inhabit an empty nest as the number of children born to women in their age group decreases. However, rapid fertility decline
was well underway before the critical shift toward the empty nest beginning in 1940, and the parents of the baby boom generations were still more likely to live in empty nests than were men reaching old age before 1970, suggesting that fertility alone cannot account for the observed changes in living arrangements.

Scholars studying changes in family norms have described slow shifts across time, insisting that family values, as expressed in family living arrangements, are highly resistant to change (Wall 2002). The period between 1880 and 1940 can fit such arguments. The abrupt transition between 1940 and 1970, on the other hand, would require a sharp cultural change. Census data, while largely silent on cultural factors, permit one useful exploration, relying on the scholarship that holds that distinct ethnic cultures led to distinct family forms. Figure 4 indicates the proportion of immigrant men from a variety of ethnic groups and immigration periods who live in an empty nest, as well as proportions for native white and native black men. ${ }^{3}$ The figure illustrates why ethnocultural arguments have often been persuasive: at any census point, distinctions may exist among men of different ethnic backgrounds. More impressive, however, is the shared shift toward the empty nest as immigration slowed after 1920, a change that occurs regardless of cultural background. Period 1 (mid-nineteenth-century) immigrants, such as Germans, exhibit the moderate rise in empty nest living arrangements to 1940, rapid rise until 1970, and modest increases thereafter characteristic of native white men in

FIGURE 4 Percent of married men aged 60 and older living in an empty nest, by period of immigration and ethnic group: United States, 1880-2000


NOTE: Period $1=$ mid-nineteenth century; Period $2=$ early twentieth century; Period $3=$ late twentieth century. SOURCE: See text.
those three periods. Period 2 (early-twentieth-century) immigrants, such as Italians, show flat or declining rates to 1940, a sharp rise in the empty nest between 1940 and 1970, and modest increases thereafter. Period 3 (late-twentieth-century) immigrants exhibit low proportions in the empty nest in the current period. Mexicans, the only group to arrive in high volume in both Period 2 and Period 3, show patterns in living arrangements characteristic of both periods. While all share in the sharp transition, trends also fit immigration history: for each chronologically defined group, fewer live in the empty nest during their period of large-scale immigration, and the end of immigration makes that living arrangement more common. Thus the demography of immigration may be one cause for the periodization observed.

Long-term economic trends also provide some concordance with the three periods. Figure 5 compares the trend in GDP per capita with the percentage of married men aged 60 and older living in the empty nest, with GDP values scaled to 100 in 1880. The moderate increases in the empty nest in the period before 1940 exceed those in GDP per capita, but there are parallel shifts toward rapid increases after 1940, and GDP rises more steeply than empty nest residence in the last decades. ${ }^{4}$

Figure 6 employs income data for individuals between 1950 and 2000. It contrasts the empty nest percentage among married men aged 60 and older with their median income, scaled to 100 in 1950, and median income for all men aged 35-44, who represent the age cohort of many of their children. We

FIGURE 5 Correspondence between an index of real GDP per capita (in 2000 dollars) and percent of married men aged 60 and older living in an empty nest: United States, 1880-2000


[^0]FIGURE 6 Correspondence between an index of median income for married men aged 60 and older and all men aged 35-44 and percent of married men aged 60 and older living in an empty nest: United States, 1950-2000


SOURCE: See text.
cannot display 1940 figures because the census collected only wage income in that year, and median wage income for older men was 0 . But mean income (not displayed) increased sharply between 1940 and 1950 for both age groups, so the rapid rise shown between 1950 and 1970 is likely to extend back to 1940. The figure reveals a strong correlation between the steep increase in empty nest households through 1970 and an equally steep increase in median income for older men and their children's cohort. After 1980, however, while older men's income continues to rise, income of men aged 35-44 falls, corresponding to continued but modest increases in the empty nest after that year. Because median income for women aged 35-44 was 0 in 1940 and 1950, we do not display their trends, but women's mean income did not stagnate, continuing to rise through $2000 .{ }^{5}$ The abrupt increase in resources seen in these data for all age groups between 1940 and 1970 becomes a prime candidate for explaining sharp increases in empty nest living in that period, and the slowing down of that trend may be linked in part to the lack of income gains for younger men after 1980.

Availability of Social Security also appears to explain the observed periodization, since it changed radically in the critical period. In 1940, Social Security benefits were meager and covered a very small proportion of the elderly population. By 1950, the rapid expansion of Old Age Assistance benefits meant that the population aged 65 and over in many states had or could
expect a steady stream of income that did not depend on work. By 1960 Old Age Insurance benefits were guaranteed, were larger in average value, and were available to nearly all elderly Americans (Haber and Gratton 1994). Figure 7 shows, however, that it is unlikely such benefits can fully account for the dominance of the empty nest. The figure compares the percentages living in the empty nest among married men in three age groups: 65 and over, 62-64, and 50-61-the first always eligible for Social Security, the second eligible beginning in 1970, and the third never eligible. For each group we find the same pattern. Moderate upward trends in empty nest living until about 1940 give way to sharp increases through at least 1960, succeeded by modest change in the last decades of the twentieth century. Men aged 62-64, who were ineligible for benefits until 1970, shift rapidly toward the empty nest before that year. For those aged 50-61, who are never eligible, the trend is more modest, but again features a sharp rise between 1940 and 1960. The participation of ineligible persons in this historical periodization means that Social Security itself cannot fully explain the phenomenon, unless we grant a very large role to anticipation of benefits. Social Security may have been part of the package that allowed eligible persons to finance the empty nest, but income increases independent of Social Security had to have funded the shift for many families.

Ruggles $(2007,2009)$ has recently revived a structural explanation for the decline in co-residence with children, based on the disappearance of the

FIGURE 7 Effects of access to Social Security benefits illustrated by percent of married men in three age groups living in an empty nest: United States, 1880-2000


SOURCE: See text.

FIGURE 8 Percent of population urban and in nonfarm occupations and percent of married men aged 60 and older living in an empty nest by urban or rural residence: United States, 1880-2000


SOURCES: Urban population 1880-1990: Haines 2006, Tables Aa716 and Aa728; nonfarm employment 18801990: Sobek 2001; urban population 2000: US Census Bureau 2000, Summary File 1, Table GCT-P1; nonfarm employment 2000: US Census Bureau 2000: Summary File 3, Table GCT-P13.
farm household. Figure 8 explores this argument by displaying the proportion of married men 60 and older living in the empty nest by location (farm household, rural nonfarm, and an urban place with 2,500 persons or more), the proportion of the total US population (of any age) living in urban areas, and the proportion of the workforce engaged in nonfarm occupations. The three-period shift is evident for older men wherever they live: slow increases before 1940, rapid increases from 1940 to 1970, and modest increases after that date. Neither the proportion living in urban places nor the proportion in nonfarm occupations mirrors the sharp period of change. Moreover, the transition from an agriculturally based society is largely complete in the United States by 1940: nearly 60 percent of the population lived in urban places, and 80 percent had nonfarm occupations. Over the long term, the disappearance of farm households may have undermined the structural grounds for co-residence, but it cannot explain a rapid shift after 1940, or one that occurred for men living outside its realm.

These comparative exercises suggest that long-term demographic, cultural, and economic causal models cannot sufficiently explain the rise of the empty nest. The sharp transition between 1940 and 1970 does appear to rely on unusually rapid economic gains for all age groups in this period, and the periodization of mass immigration may influence the overall pattern. Useful
as these comparisons are, they do not tell us how these variables influenced individual older men, or how they worked in conjunction with one another. We therefore employ multivariate analysis of individual-level sample data to assess factors that influenced the probability that married men aged 60 and older would live in an empty nest.

## Multivariate analyses

The analysis first employs separate multinomial regressions for each census year from 1880 to 2000 (excluding 1890). We comment on these but display full results only for two pooled models, the first for 1880 to 1930 and the second for 1940 to 1990. We choose this division because, from 1940 to 1990 , the census provided a variable indicating the number of children ever born to the wives of older men. ${ }^{6}$ In the earlier period, only the 1900 and 1910 censuses had such data, so the pooled model does not include that measure; we use the 1900 and 1910 censuses with and without the fertility variable to assess the possible consequences of its absence. In each of the pooled models, we include census year variables to assess trends not captured in the other independent variables. The dependent variable is household structure, using the three living arrangement categories for married men described earlier: 1) empty nest (husband and wife only); 2) at least one own child (other kin and non-kin could also be present); 3) living in any other arrangement.

Although there are multiple outcomes, we focus here on the relative importance of the empty nest as a living arrangement, and it is the excluded, comparative category. Thus a logistic regression coefficient indicates whether the variable has a positive or negative effect on the probability that a man would live in a category other than the empty nest. We report results in Table 2 (for 1880 to 1930) and Table 3 (for 1940 to 1990). Age has the expected effect in both the early and later pooled models. Across 120 years, higher age increases the likelihood that men will live in an empty nest rather than with children or in other arrangements-for living with children, the magnitude of the effect increases from -0.044 in the first period to -0.059 in the second. The second expected and powerful variable, shown in the second period only, reflects fertility: the more children the wife of an older man had, the higher the likelihood of co-residence. In individual census years, this variable is remarkably consistent; even in the models for the 1900 and 1910 censuses, the coefficient has a magnitude quite similar to that in individual census and pooled models.

Controlling for expected age and fertility effects, other variables show greater variability across time. A consistently available measure of socioeconomic status in IPUMS is the socioeconomic index (SEI), which ranks men by reported occupation on the Duncan Socioeconomic Index (Ruggles et al. 2004). A temporal shift is evident: between 1880 and 1930, higher SEI makes living with children or in other arrangements more likely than living in an
TABLE 2 Multinomial logistic regression of living arrangements of married men aged 60 and older: United States,
1880-1930

| Factor | Response | With children |  |  |  | Other ${ }^{\text {a }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Estimate | SE | Chi-square | Pr>ChiSq | Estimate | SE | Chi-square | Pr>ChiSq |
| Intercept |  | 3.789 | 0.090 | 1,761 | <. 0001 | -0.449 | 0.135 | 11 | 0.001 |
| Higher age |  | -0.044 | 0.001 | 1,239 | <. 0001 | -0.005 | 0.002 | 9 | 0.003 |
| Higher SEI |  | 0.003 | 0.000 | 36 | <. 0001 | 0.007 | 0.001 | 138 | <. 0001 |
| No occupation | Yes | 0.027 | 0.023 | 1 | 0.226 | 0.018 | 0.036 | 0 | 0.615 |
| Location | Farm | 0.306 | 0.020 | 225 | <. 0001 | 0.000 | 0.031 | - | 0.996 |
|  | Rural | -0.378 | 0.018 | 427 | <. 0001 | -0.382 | 0.028 | 185 | <. 0001 |
|  | Urban | Ref |  |  |  | Ref |  |  |  |
| 1st generation | Yes | 0.274 | 0.017 | 254 | <. 0001 | -0.363 | 0.029 | 157 | <. 0001 |
| Black | Yes | 0.084 | 0.033 | 6 | 0.012 | 0.524 | 0.046 | 131 | <. 0001 |
| Literacy | Yes | -0.130 | 0.028 | 22 | <. 0001 | -0.042 | 0.043 | 1 | 0.330 |
| Year | 1880 | 0.396 | 0.031 | 163 | <. 0001 | 0.336 | 0.046 | 55 | <. 0001 |
|  | 1900 | 0.162 | 0.026 | 40 | <. 0001 | 0.185 | 0.038 | 23 | <. 0001 |
|  | 1910 | Ref |  |  |  | Ref |  |  |  |
|  | 1920 | -0.192 | 0.022 | 77 | <. 0001 | -0.248 | 0.034 | 52 | <. 0001 |
|  | 1930 | -0.451 | 0.021 | 468 | <. 0001 | -0.244 | 0.032 | 58 | <. 0001 |

${ }^{\text {a }}$ Any living arrangement other than empty nest or with own child.
NOTE: $\mathrm{SE}=$ standard error; $\mathrm{Pr}>$ ChiSq $=$ probability of observing the Chi-square statistic under the null hypothesis; $\mathrm{SEI}=$ socioeconomic index; Ref $=$ reference (omitted) category.
TABLE 3 Multinomial logistic regression of living arrangements of married men aged 60 and older: United States,

| Factor | Response | With children |  |  |  | Other ${ }^{\text {a }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Estimate | SE | Chi-square | Pr>ChiSq | Estimate | SE | Chi-square | Pr>ChiSq |
| Intercept |  | -1.983 | 0.016 | 16,418 | <. 0001 | -2.635 | 0.025 | 10,792 | <. 0001 |
| Higher age |  | -0.059 | 0.001 | 6,347 | <. 0001 | -0.019 | 0.001 | 284 | <. 0001 |
| Higher SEI |  | -0.003 | 0.000 | 215 | <. 0001 | -0.001 | 0.000 | 17 | <. 0001 |
| More children |  | 0.254 | 0.002 | 22,229 | <. 0001 | -0.007 | 0.003 | 6 | 0.019 |
| No occupation | Yes | -0.230 | 0.012 | 344 | <. 0001 | -0.142 | 0.020 | 50 | <. 0001 |
| Wife's education | $\leq$ Grade 4 | 0.124 | 0.018 | 46 | <. 0001 | 0.211 | 0.029 | 51 | <. 0001 |
|  | Grade 5-8 | 0.024 | 0.014 | 3 | 0.079 | 0.125 | 0.022 | 32 | <. 0001 |
|  | Grade 9-12 | 0.026 | 0.012 | 5 | 0.032 | 0.096 | 0.020 | 23 | <. 0001 |
|  | College + | Ref |  |  |  | Ref |  |  |  |
| Location | Unidentified | -0.261 | 0.019 | 183 | <. 0001 | -0.070 | 0.031 | 5 | 0.022 |
|  | Farm | -0.048 | 0.014 | 11 | 0.001 | -0.013 | 0.023 | 0 | 0.571 |
|  | Rural | -0.351 | 0.010 | 1,239 | <. 0001 | -0.122 | 0.016 | 60 | <. 0001 |
|  | Urban | Ref |  |  |  | Ref |  |  |  |
| 1 st generation | Mexico-born | 1.174 | 0.049 | 570 | <. 0001 | 1.036 | 0.083 | 157 | <. 0001 |
|  | Other foreign | 0.467 | 0.012 | 1,637 | <. 0001 | -0.117 | 0.021 | 31 | <. 0001 |
|  | Native | Ref |  |  |  | Ref |  |  |  |
| Black | Yes | 0.706 | 0.016 | 1,858 | <. 0001 | 1.299 | 0.021 | 3,820 | <. 0001 |
| Year | 1940 | 1.302 | 0.016 | 6,778 | <. 0001 | 1.283 | 0.025 | 2,718 | <. 0001 |
|  | 1950 | 0.681 | 0.014 | 2,238 | <. 0001 | 0.911 | 0.022 | 1,654 | <. 0001 |
|  | 1960 | 0.152 | 0.014 | 128 | <. 0001 | 0.469 | 0.021 | 499 | <. 0001 |
|  | 1970 | Ref |  |  |  | Ref |  |  |  |
|  | 1980 | -0.101 | 0.015 | 46 | <. 0001 | -0.296 | 0.026 | 133 | <. 0001 |
|  | 1990 | -0.139 | 0.013 | 116 | <. 0001 | -0.363 | 0.023 | 258 | <. 0001 |

[^1]NOTE: $\mathrm{SE}=$ standard error; $\mathrm{Pr}>$ ChiSq = probability of observing the Chi-square statistic under the null hypothesis; $\mathrm{SEI}=$ socioeconomic index; Ref $=$ reference (omitted) category.
empty nest. In contrast, between 1940 and 1990 (and in the 2000 census regression), higher SEI makes living in an empty nest more likely. In the later period a man reporting no occupation is likely to be retired, and the response is linked to an increased likelihood of living in an empty nest. In the earlier period, when the same response may indicate poverty and dependency, the variable is not significant. Before 1940, the census provided only literacy as an education measure; between 1880 and 1930, being literate makes the empty nest more likely than living with children or in other household forms. In the later period, specifying the children ever born variable required that we use the wife's educational level (models using the husband's education yielded broadly similar results); we find that a wife's higher education increases the probability of living in an empty nest. In summary, in the period 1940 to 1990 higher socioeconomic status leads to the empty nest. Socioeconomic status effects are mixed in the earlier period. Although individual-year regressions reveal a monotonic decline in the positive effect of SEI for living with children or in other arrangements between 1880 and 1930, the effect remains clearly visible in the early twentieth century.

Location variables are strongly affected by the inclusion of a fertility measurement, so that results from 1880 to 1930 exaggerate the farm household's positive effect on living with children. ${ }^{7}$ In the later period, after controlling for the number of children born, elderly men living on farms are no more likely than their urban counterparts to reside with their children or in other arrangements. What stands out in both periods is that rural couples are the most likely to dwell in an empty nest. Preliminary regression analyses confirmed that ethnicity has little impact on living arrangements, although race and immigrant status do matter. Older black men are more likely than older white men to live with children or in other arrangements rather than in the empty nest, and these differences become substantially stronger after 1930. The inclusion of a fertility measure weakens the effects of immigration. Still, even when holding the number of children constant, being an immi-grant-and particularly being of Mexican birth—makes it more likely that an older man will live with his children.

Variables for each year measure the trend not captured by the other specified variables. In the first model, where 1910 is the excluded year, the secular pattern moves monotonically toward the empty nest. Net of other variables, men enumerated before 1910 are more likely than men canvassed in that year to live with children or in other arrangements rather than in an empty nest, while those canvassed in 1920 and 1930 are less likely to do so. For the period 1940 to 1990, 1970 is the excluded year; holding constant other factors (such as the rise in fertility during the baby boom), the trend is again monotonic toward living in an empty nest. Thus, controlling for the variables we have included, there is a consistent shift toward the empty nest from 1880 forward, and most rapidly in the critical period 1940 to 1970.

## Discussion and conclusion

Two groups of scholars have sought to explain change over time in American family structure. Each has explored the troika of demography, culture, and economics. Social scientists examined mid-twentieth-century transitions, but without a broad historical framework. In contrast, historians debated the longue durée before the mid-twentieth century, giving little attention to the more recent period. In assessing the ascendancy of the empty nest living arrangement among older men, we argue that a satisfactory explanatory model must account for a striking periodization. After a long period of slow change, dating from at least 1880 until 1930, a sharp and extraordinary shift occurred in little over a single generation, from 1940 to 1970. After that year, only modest increases have been seen in the proportion of empty nest households. We conclude that economic factors provide the best explanation for this periodization, although demographic factors, including immigration rates, also contribute to the patterns observed.

We base these conclusions on evidence from aggregate comparisons and micro-level data for a representative sample of married men aged 60 and older, drawn from United States censuses. In the aggregate comparisons, we recognize that correlation is not causation, but a lack of correlation between proportions living in an empty nest and other indexes makes certain explanations problematic. Long-term gains in life expectancy are closely linked to the slow change in living arrangements before 1940, but do not correspond to the 30 -year period of abrupt transformation that followed. A decrease in fertility corresponds to but also predates the critical period, while the dramatic midcentury boom in fertility has not stopped-though it may have slowed-the shift toward the empty nest. These demographic indexes taken together highlight the issue of social burden featured in some recent scholarly arguments: longer life expectancy might not lead to the empty nest, as long as there were still surviving children, but falling fertility raised the likelihood that any one child would bear the increasingly long burden of co-residence.

Cultural measures in census data are at best indirect, but they provide no confirmation of possible ethnocultural effects on living arrangements. Moreover, because diverse ethnic groups moved toward the empty nest in the critical period, a cultural shift in the majority population would have had to convert a wide variety of immigrants and their children. Immigration itself is a more promising force for change: between the mass immigration eras of 1880-1930 and 1970-2000 lies an era of modest immigration, when the empty nest became more common. Periods of mass arrival-as in the case of Mexico-born persons both early in the twentieth century and in its last decades-reduce the probability of empty nest living arrangements.

Economic indexes also help explain the change. Aggregate GDP per capita as well as individual income gains and income stagnation for older
and younger age groups follows the three-period pattern. The relatively slow growth in affluence until 1940 is followed, through 1970, by striking gains for all age groups. Income levels thereafter decline or stagnate for men aged 35-44 (though not for women of that age), and this period sees only modest increases in the empty nest. In contrast, Social Security benefits, often invoked to explain independent living among the elderly, cannot be responsible for the rapid rise of empty nest households among persons ineligible to receive benefits. Finally, no apparent relationship exists between the large-scale abandonment of the farm economy or rural life and the abrupt transition to the empty nest. Declines in farming may influence long-term trends, but they do not correspond to the periodization of change in living arrangements during the twentieth century. Most Americans were no longer living on farms or employed in agriculture by 1940, when the most rapid and important change began to occur.

Regression analysis of factors influencing the household living arrangements of individual older men provided corroborative evidence, controlling for a variety of hypothesized factors. The effect of age grew stronger across the 120-year time period observed, while fertility maintained a nearly constant influence. Farm households were no different from urban ones by the mid-twentieth century. Being of foreign birth, net of differences in fertility and socioeconomic status, always reduced the probability that an older man would live in an empty nest. The slowing rate of change in empty nest living after 1970 for all Americans can be traced in part to the renewal of mass immigration in the current period. No simple explanation presents itself for this outcome. Immigrants of diverse cultural backgrounds may share socioeconomic differences from the native-born population (e.g., lack of assimilation and facility in English) not captured in our models. After 1940, higher occupational status became more strongly linked to the empty nest. Educational measures followed the same pattern. Neither, however, is well-measured across the data series. Still, given that economic resources for all age groups underwent one of the sharpest expansions in US history in this postwar period, a heightened capacity to achieve something desired-the autonomous household-is the best single candidate for explaining the uniqueness of the critical period from 1940 to 1970. A positive linkage with the socioeconomic index occurs in the later period, when affluence rose rapidly for nearly all Americans. Why SEI was not linked to the empty nest before 1940 remains unexplained-this effect may be cultural, as some have argued; or it may be that economic resources were beneath the threshold that permits empty nest living, as others propose; or it may be that economic resources were still linked to inheritances that children counted on.

Culture might also bear on the more recent period, and it may exert itself in the strong year effects in the 1940 to 1990 model. Some have argued that demographic pressures transformed a previous ideal of co-residence. As
fertility fell, maintaining that ideal would have required that the coefficient for number of children born rise substantially, instead of remaining largely constant. Studies more sensitive to culture, and better able to demonstrate its effects or the lack thereof, will be needed to assess that question. But in the mid-twentieth-century United States, increasingly well-off Americans, from a wide variety of backgrounds, sought to establish autonomous households. In an extraordinary 30 -year period, elderly men, their wives, and their children largely accomplished that objective.

## Notes

Figures in this article are available in color in the electronic edition of the journal.

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1 We have chosen to analyze older men separately, not only because the more complex living arrangements of older women make a combined analysis difficult, but also because the households of men have been less commonly studied.

2 In emphasizing cultural forces, these scholars traveled the road common to early historians of the elderly (Fischer 1977; Achenbaum 1978; Haber 1983).

3 We place those immigrants not specifically identified in three categories: Period l, those from countries whose immigrants largely arrived in the mid-nineteenth century (e.g., Ireland); Period 2, those from countries of early-twentieth-century immigration (e.g.,

Poland); Period 3, those from countries whose immigrants arrived mainly after World War II (e.g., China).

4 We do not normalize the empty nest percentage since, unlike GDP per capita, it has an upward bound. When both variables are normalized, the same parallel change can be seen until 1990, when change in GDP per capita begins to exceed change in empty nest residence.

5 In absolute terms, income was always higher for younger than for older men. In 1999 dollars, income for men aged 35-44 rose from $\$ 21,350$ to $\$ 35,000$ between 1950 and 2000, while for married men aged 60 and older, it rose from $\$ 10,850$ to $\$ 25,450$. The rate of increase for older men was, however, substantially greater after 1960 (and the absolute level for younger men peaked in 1980), leading to the standardized curves in Figure 6. The series in IPUMS data produces steeper declines after 1980 in younger men's real income than declines captured in other series, such as in US Census Bureau (2007).

6 No census enumerates children born or surviving for men, and only the 1900 and 1910 censuses provide information on children surviving for women.

7 After 1940, census confidentiality rules restricted identification of certain locations; sample members living in these locations were placed in the category "Unidentified."

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[^0]:    SOURCES: For percent in empty nest, see text. For GDP, Johnston and Williamson 2008.

[^1]:    ${ }^{2}$ Any living arrangement other than empty nest or with own child.

