Does a House Divided Stand? Kinship and the Continuity of Shared Living Arrangements

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Abstract

Shared living arrangements can provide housing, economies of scale, and other instrumental support and may become an important resource in times of economic constraint. But the extent to which such living arrangements experience continuity or rapid change in composition is unclear. Previous research on extended-family households tended to focus on factors that trigger the onset of coresidence, including life course events or changes in health status and related economic needs. Relying on longitudinal data from 9,932 households in the Survey of Income and Program Participation (SIPP), the analyses demonstrate that the distribution of economic resources in the household also influences the continuity of shared living arrangements. The results suggest that multigenerational households of parents and adult children experience greater continuity in composition when one individual or couple has a disproportionate share of the economic resources in the household. Other coresidential households, those shared by other kin or nonkin, experience greater continuity when resources are more evenly distributed.

Keywords

economic support; event history analysis; kinship; life transitions; living arrangements; multigenerational relations

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Social ties may buffer stressful life events, including unemployment, housing insecurity, or other shocks (Wright, Avshalom, Caspi, Moffitt, & Silva, 1998). Coresidence with kin or nonkin is one strategy employed by individuals when economic resources are constrained. Almost one fifth of individuals in the United States live with extended family members (i.e., those other than spouses and minor children) or nonkin (authors' tabulations from U.S. Current Population Survey data, 2000–2008). The proportion of individuals in these types of households is even higher among the poor, disabled, and elderly. Such complex living arrangements likely will increase in the near term as individuals adapt to economic and housing constraints resulting from the current economic recession. Although scholars have documented differences in living arrangements over time and across groups, we have less of an understanding of how continuous (i.e., long lasting) such complex living arrangements may be (Bethencourt & Rios-Rull, 2009; Rendell, 2011). We may expect that such living arrangements continue as long as needed, but there is some evidence that economic constraints not only motivate coresidence but also make those living arrangements somewhat tenuous (Menjivar, 2000).

Extensive scholarship on the nature of household composition and change demonstrated the importance of the many societal and individual factors that facilitate and discourage particular living arrangements over time and across place (Goody, 1976; Hammel & Laslett, 1974; Rossi & Rossi, 1990). In this paper, we focus on the continuity of living arrangements over time and ask whether some households are more likely to stay together than others. We consider two potential patterns for the continuity of complex living arrangements. First, with some important exceptions, much prior research on extended-family living arrangements seemed to presuppose that households fulfill a "private welfare" function in which the living arrangements are formed so that better-off people can care for needy family members. The underlying assumption of this perspective is that inequality among household members (i.e., households containing both the needy and a potential benefactor) is a key condition that justifies, and indeed may sustain, extended or complex living arrangements. For ease of explication, we refer to this private welfare approach as the *functionalist perspective* on living arrangements.

An alternative set of theoretical perspectives can be broadly termed the *contractual perspectives.* Here, the expectation is that living arrangements are formed in a more contractual manner in which everyone is expected to contribute and benefit from the living arrangement more or less equally. In other words, resources within the household will be comparatively equitable across individuals in order to allow for compatible exchanges or contributions among household members. For households formed under these expectations, inequality within the household may encourage individuals to seek alternative living arrangements.

To assess these alternatives, we explore whether households with an unequal distribution of resources—in other words, households containing a potential benefactor and the potentially —needy stay together longer than households with more equitable resource distribution. In doing so, we push beyond the prior literature on extended-family living arrangements in three major ways. First, we gain insight about the nature of coresidential relationships by following complex households over time rather than relying on cross-sectional snapshots of living arrangements. Second, to discern between the functionalist and contractual perspectives, we explore how continuity of residence in multigenerational or other complex households is related not only to the amount, but also the distribution of resources across adults living in these non-nuclear family households (Bethencourt & Rios-Rull, 2009). Third, we explore diversity across households in these relationships. We hypothesize that multigenerational households, those shared by parents and adult children, will operate in accordance with the functionalist perspective, whereas households containing other types of kin and nonkin will operate more consistently with the contractual perspective. Overall, the results provide insights about the conditions that bind extended kin and nonkin together under the same roof, thus helping to assess the likelihood of continuity of support among family and friends through coresidence.

Competing Models to Explain Coresidence

By their very nature, coresident relationships are complex and influenced by economic status, family ties, gender, and age as well as religious or cultural practices (Coleman & Ganong, 2008; Goode, 1982; Goody, 1976; Hammel & Laslett, 1974; Shuey & Hardy, 2003; Silverstein, Gans & Yang, 2006; Spitze & Trent, 2006; Wellman, 1990). Living arrangements may be influenced by dependencies and inequalities among coresident family members as well (Folbre, 2004; Liversage & Jakobsen, 2010; Menjivar, 2000). Our focus here is on the role of one form of inequality among household members—economic inequality—on the likelihood that coresidential relationships are sustained over time. There are two theoretical models that provide somewhat different expectations for the way

economic inequality among household members may be associated with household continuity.

First, economic inequality could increase the motivation for shared living arrangements. This would be consistent with research coming out of a functionalist theoretical perspective that explains extended-family living arrangements in terms of their social and economic functions (namely, meeting the economic and care needs of family members in a cost-effective way) (Goode, 1982). For example, extended-family living arrangements have been shown to be strongly associated with significant life course events (e.g., birth of a child, divorce, completion of schooling, death of a spouse, illness, retirement), low income, and the lack of other economic resources (Beresford & Rivlin, 1966; Burr & Mutchler, 1992, 1993; McGarry & Schoeni, 2000; Michael, Fuchs, & Scott, 1980; Mutchler & Burr, 1991; Pampel, 1983; Wolf & Soldo, 1988). Further evidence for this perspective has come from research suggesting that the formation of extended-family households was a sign of shifting economic fortunes. Better-off relatives tended to coreside with less-well-off kin in harder economic times, but live independently when less-well-off family members became better able to support themselves again (Bethencourt & Rios-Rull, 2009; Peek, Koropeckyj-Cox, Zsembik, & Coward, 2004; Stack, 1975). For example, coresidence with parents declined over the twentieth century as older adults became more economically independent (Ruggles, 2007), largely through the introduction of Social Security (McGarry & Schoeni, 2000).

The functionalist perspective identifies socially enforced norms of obligation, such as filial piety, as the primary reason people are willing to assist needy family members through coresidence, even if the living arrangement is not obviously equitable or in everyone's self-interest at the time. In other words, close kinship ties are expected to garner altruism and unidirectional assistance, for example, from parents to young adult children or from middle-aged adults to their aging parents (Coleman & Ganong, 2008). Family members may reciprocate this type of support but such reciprocity is not necessarily immediate or exchanged in kind (Rossi & Rossi, 1990).

The second, alternative perspective we identify has tended to emphasize the contractual nature of shared living arrangements. In this contractual perspective, coresidential arrangements are more likely to be maintained when all household members contribute to and benefit from the arrangement more-or-less equally and simultaneously. Menjivar (1997) highlighted this idea in her ethnographic study of Vietnamese, Salvadoran, and Mexican immigrants in San Francisco. She found that the kinship networks (and extended-family living arrangements) among the Vietnamese and Mexican immigrants offered more assistance and were longer lasting than those among Salvadoran immigrants. Menjivar's (1997) explanation was that the steady supply of resources available to the Vietnamese through refugee support and the community resources among Mexican immigrants helped foster stronger kinship ties through the exchange of resources and practices of reciprocity. This is consistent with other research suggesting that in order for extended-family households to be beneficial for participants, available coresidential kin must be able to provide either economic support or care for dependent family members so that the labor supply in the household can increase (Hogan, Hao, & Parish, 1990; Tienda & Glass, 1985). An underlying assumption of the contractual perspective is that the stability of relationships, even family relationships, depends on the practice of "balanced reciprocity" (Sarkisian & Gerstel, 2004). When reciprocity cannot be maintained, these relationships are weakened and may become less tenable over time (Plickert, Cote, & Wellman, 2007).

Here we evaluate the contradictory expectations of the functionalist and contractual perspectives by examining the relationship between household income inequality and the continuity of shared living arrangements. The functionalist perspective predicts that

household income inequality leads to longer-lasting coresidential living arrangements. This will be particularly true for households that contain both individuals with resources and those who have more limited resources, which may promote exchange across units or enhance the normative obligations family members may feel towards kin with fewer resources than they possess (Coleman & Ganong, 2008). But from a contractual perspective, income inequality is expected to undermine the cohesion of intrahousehold relationships and thus lead to less continuity of shared living arrangements over time. Although it may also be instructive to examine inequality in the exchange of nonmonetary resources, we focus here on the extent to which income inequality serves as an indicator of the conditions that would support the practice of "balanced reciprocity" for the reasons discussed above. There is a pragmatic reason for focusing on income inequality as well: It can be consistently measured across a larger population than has been previously assessed in smaller studies.

Although the prevalence of extended-family households in the United States is substantial, we currently know very little about the continuity of these living arrangements over time. A lack of longitudinal data has meant that researchers have had to rely on the simple prevalence of shared households as indicators of supportive ties. As a consequence, few studies go beyond cross-sectional analyses of household structure to observe how financial need or inequality is related to household continuity (Smits, van Gaalen, & Mulder, 2010). Our major contribution is that we gain insight about the nature of coresidential relationships by exploring the factors that affect their persistence over time. In doing so, we explore how the continuity of shared living arrangements is related not only to the amount, but also the distribution, of resources across adults in the same household.

Does the Applicability of the Functionalist and Contractual Models Depend on Relatedness?

Not all coresidential households are the same and it seems likely that the role potential reciprocity plays in the continuity of these living arrangements could depend on the type of relationships involved. Although some of these households may have been formed and operate to fulfill a "private welfare" function (the functionalist perspective), others may depend on the practice of balanced reciprocity for their persistence (the contractual perspective). Drawing on theories developed to understand union stability, we hypothesize that multigenerational households of parents and adult children correspond more closely with the functionalist perspective and that those containing other kin or nonkin have dynamics that are more consistent with the contractual perspective.

Economic theories and research on union stability distinguish between marriage and cohabitation. This distinction is instructive because of the parallels between the more formalized relationships of marriage and those expected from multigenerational ties among parents and their descendants, as compared to the less formalized relationships involving cohabiting partners and those of other kin such as siblings or cousins, or even relationships among nonkin including friends and more distant acquaintances. Prior research showed that marital unions in the United States are destabilized when both spouses make similar economic contributions (Becker, 1981; Kalmijn, Loeve & Manting, 2007; Oppenheimer, 1997), consistent with the expectations of the functionalist perspective. Interestingly, cohabiting unions have been found to display an opposite pattern. Income equality tended to increase the continuity of the shared living arrangement among cohabiters (Brines & Joyner, 1999), which is more consistent with the contractual perspective. Brines and Joyner suggested that legal and normative ties may encourage married couples to take the risks necessary to specialize and engage in the exchange of unlike goods and services, which then reinforced the dependency of spouses on one another and the stability of the union. But the

contingent nature of cohabiting relationships discouraged specialization and instead rewarded equality and exchange of like goods (Brines & Joyner, 1999; Kalmijn et al., 2007).

To extend these ideas to other coresidential relationships, we consider variations in the strength of legal and normative ties among kin and nonkin. Normative obligations most often extend to kin relationships before nonkin and to close kin before distant and extended kin (Bianchi, Hotz, McGarry, & Seltzer, 2007; Burton & Stack, 1993; Ganong & Coleman, 2006; Silverstein, Conroy, Wang, Giarrusso, & Bengston, 2002; Taylor, Chatters, & Mays, 1988). Parents and their dependent children, like spouses, have considerable obligations to one another both informally and legally (Swartz, 2009). Much of the research on living arrangements has focused on multigenerational coresidence of parents and their adult children (i.e. Burr & Mutchler, 1999; Choi, 2003; Ruggles, 2007, Silverstein et al., 2006) and the extent to which parents and their adult children rely on one another for instrumental and social support. Given that relationships among these family members may be guided by clearly defined social norms of responsibility, we may expect that a household shared by parents and adult children will garner a greater willingness to provide resources to family members, regardless of potential for immediate reciprocation, than households with other types of kinship ties (Hamilton, 1964; Goode, 1982). In other words, we expect that multigenerational households of parents and their adult children or grandchildren, or both, will operate in ways that, like marriages, are consistent with the functionalist perspective. We therefore hypothesize:

> *Hypothesis 1*: Multigenerational extended-family households will retain their structure when economic inequality is high in comparison to those households where the economic status is balanced across household members.

But social norms for behavior and altruism are less clearly defined in the case of relationships with other kin or nonkin (Coleman & Ganong, 2008; Rossi & Rossi, 1990). Like cohabiting partners, siblings and friends may be important sources of social and instrumental support, but their role is less clearly prescribed and their contact over the life course may be viewed as contingent on the quality of the relationship, and treated in more voluntary rather than obligatory terms (Spitze & Trent, 2006; Stewart-Williams, 2007; White, 2001). In the absence of institutional regulation or norms that monitor long-term relationships, unbalanced resources would represent too great of a risk of nonreciprocity (Molm, Collett, & Schaefer, 2007). In other words, we expect their households, like cohabiting unions, to conform to the expectations of the contractual perspective. We therefore further hypothesize:

> *Hypothesis 2*: Coresidential households other than multigenerational extended-family households, such as those shared by siblings, other extended kin, or nonkin, will have lower continuity of membership when economic inequality is high than those households where the economic status is balanced across household members.

There are, of course, other factors that may encourage continuity of shared living arrangements over time and our analyses take many of these into consideration in addition to our primary focus on the relatedness and distribution of economic resources among household members. For example, the overall level of resources in the household may be important because lower levels of income could add stress to households regardless of composition (Burton & Stack, 1993; Menjivar 1997, 2000; Portes & Sensenbrenner, 1993; Roschelle, 1997) and reduce incentives to remain in the same living arrangement. Likewise, the dependent care and health needs of household members are likely to be associated with living arrangements (Hogan, Eggebeen, & Clogg, 1993; Martikainen, Nihhtila, & Moustgaard, 2008; Speare & Avery, 1993). Previous research also demonstrated higher prevalence of extended-family households among some racial and ethnic groups when

compared to non-Hispanic Whites as well as among recent immigrants when compared to those of longer duration in the United States or those born in the United States (Van Hook & Glick, 2007). The analyses presented below take all of these characteristics into account when examining the role of the relative distribution of economic resources on household continuity.

Method

Data

We use the pooled 1990, 1991, 1992, 1993, and 1996 panels of the Survey of Income and Program Participation (SIPP), a longitudinal survey, to study the association between intrahousehold income inequality and the continuity of living arrangements in the United States. Each of the five SIPP panels includes a separate, independent sample that is interviewed every four months for roughly 3 to 4 years. For example, the 1990 Panel includes individuals who were interviewed up to eight times over a period of 32 months starting in 1990, and the 1991 panel includes an entirely new sample that was interviewed up to eight times over a period of 32 months starting in 1991. The respondents in the 1992, 1993, and 1996 panels were interviewed every four months over 40, 36, and 48 months, respectively. Crucial to our study, the SIPP follows individuals over time even if they leave their original households and form new ones, and includes time-varying information on living arrangements and standard social, demographic, and economic variables.

By combining five SIPP panels, we amass a sufficiently large sample to examine the duration of extended-family or nonkin households that contain at least one adult age 18 or older at first interview (10,224 households). Using the pooled data, we construct a longitudinal data file that includes an observation for each time a household is followed up or until the household experiences a transition in its structure as defined below. We drop the first interview because we use lagged variables in our analysis and most of our lagged variables are unobserved for the first interview. This leaves 40,954 household-interview observations. The U.S. Census Bureau uses the "hot deck" method to impute missing values for most but not all variables in the SIPP. We dropped 292 households (2.9%) and 1,256 (3.1%) household-interviews from the analytic sample with non-imputed missing values on one or more of the analytic variables, leaving a final sample of 9,932 households and 39,698 household-interviews.

Even though the SIPP offers unique advantages, it suffers the disadvantage of moderately high attrition rates. In a typical SIPP panel, 18% to 22% of the original sample drops out during the course of the study period; roughly half of all attrition occurs between the first and second interviews (Jabine, 1990). Even large amounts of attrition will not bias results unless cases fall out of the sample in a nonrandom manner such that attrition is significantly associated with the error term (Fitzgerald, Gottschalk, & Moffitt, 1998). Attrition rates (i.e., the percentage that left the sample before the end of the study) were significantly higher for Blacks (31.2%) and other racial minority groups (34.6%) than for non-Hispanic Whites (20.8%), but were not significantly different between multigenerational households (21.7%) and other coresidential households (23.9%). Attrition rates did not differ significantly by household structure within racial and ethnic groups.

Extended-family and nonkin household structure

We define household structure based on the number and relationships among minimal household units (MHU). The MHU refers to smaller identifiable units within households based on marriage or cohabitation and parentage of minor children (Biddlecom, 1994; Ermisch & Overton, 1985; Glick, Bean, & Van Hook, 1997; Glick & Van Hook, 2002). For

our purposes, married or cohabiting couples and parents with unmarried, childless children younger than 25 are defined as belonging to the same MHU. Young adults aged 24 and younger who are married or cohabiting or have children of their own are classified in their own MHU with their spouse or partner and children, if any. In addition, single adults age 25 or above without minor children make up an individual MHU. Finally, minor children not living with a parent (such as foster children) are classified in the same MHU as the householder. For example, a household containing a man, his wife, his mother-in-law, his 20-year-old single, childless daughter, and a boarder would include three separate MHUs: (a) the man, wife, and daughter, (b) the mother-in-law, and (c) the boarder. If the daughter had a young child or was married, she would be put in a separate MHU along with her child and husband, if any.

We identify coresidential living arrangements as households containing at least two MHUs. Among these households, we distinguish multigenerational households—those that contain MHUs from multiple generations, such as households including adult children and their elderly parents—from all other types of extended-family or nonkin households. Following prior work, we infer the relationships among MHUs based on relationship to the householder (Coward, Cutler, & Schmidt, 1989; Glick et al., 1997; Schmertmann, Boyd, Serow, & White, 2000). For example, in a household with three MHUs, if the first MHU head was the householder, the second was the child of the householder, and the third was the sibling of the householder, we would code the third MHU as the uncle or aunt of the second MHU. The entire household would be classified as multigenerational because it contains a parent–child relationship between the first and second MHUs. Seventy-four percent of the extended-family households in our sample are multigenerational.

Household structure and living arrangements are treated as time-varying across the SIPP panel. Among households that are ever classified as coresident during the SIPP study period, we model household change. These transitions can involve either changes in the household composition without a transition to a simple household structure or transitions to a simple household structure (i.e., no longer living with extended-family or nonkin). To distinguish changes in the household composition arising from birth, adoption, or changes in marital status from other types of change, we do not count changes arising from additions or departures of children under age 15 or of spouses as changes in the household roster.

Duration of on-going spells

We must account for the length of time extended-family or nonkin living arrangements have existed. For coresidential households that were formed during the SIPP panel, it is straightforward to measure the duration of the living arrangement (in months since formation). For coresidential households that were formed before the first interview, we use retrospective data on place of residence to deduce when the living arrangement was formed. The SIPP includes the month and year that each person age 15 or older moved into the household. We use this information to reconstruct households back in time in order to estimate how long adult (age 25 or older) family members had been living together. About half of the ongoing spells were 10 years or less in duration at the time of the first interview (M = 14 years). The start time estimates are only approximations and probably underestimate the duration of coresidential spells because they do not incorporate time spent in the household by MHUs who moved away prior to the first interview.

Intrahousehold income distribution

To measure the distribution of economic resources within the household at each interview, we use a measure that stems from DeMaris and Longmore's (1996) study of couple-level exchange. In a household containing n MHUs, each MHU can be paired with ($n-1$) other

MHUs in the household. For each MHU j, we estimated income contribution (C_j) as the ratio of its income (I_j) to the total income from all sources of each MHU pair, averaged across all pairs:

$$C_j = \frac{\sum_{k=1,\,k \neq j}^{n} \left(\frac{I_j}{I_j + I_k} \right)}{n-1}$$

For example, if MHU a makes \$100, b makes \$50, and c makes \$0, then the average contribution would be .83 for a ((100/150 + 100/100)/2); 67 for b; and 0 for c. If income were distributed equally across MHUs in the household and each MHU made \$50, then the average contributions of each MHU would be .50. Conversely, if MHU a contributed all of the income, the average contribution would be 1.0 for a and 0 for b and c. We then subtracted 0.5 from the MHU-level indicators of contribution (i.e., the difference from an equal contribution), squared it (to eliminate negatives), and averaged across all MHUs to obtain a household measure of inequality (Q_i):

$$Q_i = \frac{\sum_{k=1}^{n} (C_k - .5)^2}{n}$$

In the case of the first household described above, Q = .129. In the case of the household in which all three MHUs contribute equally, Q = 0. For households in which one MHU contributes all of the income, Q =.25. Thus, our time-varying measure of intrahousehold income inequality ranges from 0 to .25 ($M = 0.12$, $SD = .11$).

Other variables

In our multivariate analysis of the continuity of coresidential living arrangements, we control for several factors that may be associated with household transitions. All are permitted to vary over time. We take into account the size and selected characteristics of the household. We control for number of adults and the ratio of the household income to the federal poverty threshold. We adjust for potential needs for dependent care with dummy variables indicating the presence of certain types of persons in the household: at least one elderly person age 65 or older (41.5% of sample households), at least one child age 0–4 (14.7%), at least one person who is divorced or widowed (57.3%), and at least one unmarried parent of a minor child (age 0–17; 5.9%). Because life course transitions may be associated with changes in living arrangements, we further control for the number of children born to household members, the number of adults experiencing a change in marital status, and the number of children who turned 18 since the previous interview. We also include measures for the nativity composition of the household. We contrast households with new immigrants (i.e., in the United States for fewer than 10 years) to those with immigrants whose arrival in the United States occurred 10 or more years ago and those with no immigrants.

Finally, we account for characteristics of the householder in order to control for the ability (or opportunity) of the householder to take in kin: age, gender, educational attainment (less than high school, high school, some college, and college or more), number of children ever borne or fathered, and race and ethnicity. These factors have been observed to be associated with living arrangements and kin availability.

Data analysis

We analyze the (dis)continuity of coresidential living arrangements using life tables for descriptive analyses and discrete-time event history models for multivariate analyses. The life tables are used to estimate the probability that coresidential households experience a transition in composition within 1, 3, and 5 years since the formation of the living arrangement (Preston, Heuveline, & Guillot, 2001). The life table is a model that simulates reductions over time in the size of a synthetic cohort of 1,000 coresidential households. Decrements from the synthetic cohort occur as households experience a transition either by transitioning to a simple household or experiencing change in the household composition. The probability of household transition is calculated directly from the SIPP data as the proportion making the transition by duration of coresidence among those that had not made an earlier transition. The life tables are estimated separately by living arrangement (multigenerational and other coresidential households) and income inequality (above and below the median).

We also estimate discrete-time event history models (Allison, 1995; Guo, 1993) of household transition. These are well-suited for modeling the timing of events like death, divorce, or any other type of transition. Just like life tables, they divide the time at risk into small intervals (e.g., months, years), and then model the probability of experiencing the event within each interval, given that the event has not already occurred and conditional on the duration of time already at risk. As described above, our analytic sample includes one observation for each 4-month period between interviews until and including the interview at which the household roster changes (apart from changes due to births or adoptions) or is right-censored. We use logistic regression to model the logged odds of transition in living arrangement (L_{it}) within each time interval as a function of the duration of the spell (D_t), and lagged household (H_{t-1}) characteristics (measured at time $t-1$):

$$Ln(L_{it}/(1 - L_{it}))=\alpha+\varphi D_t+\delta H_{it-1}$$

We use modeling procedures designed by Stata Corporation (1997; also Levy and Lemeshow, 1999) to take into account clustering within sampling strata and PSUs.

Results

Table 1 provides means or percentage distributions for all of the variables used in the analysis for the entire sample of households as well as separately for multigenerational and other coresidential households. Multigenerational households were more likely to include elderly and divorced or widowed persons and tended to have older, less educated female householders with more children than other households. Other coresidential households were more likely to include recent immigrants and to have male and Hispanic householders.

Table 2 presents the lifetable analysis of the proportion of households with consistent composition over time. These estimates suggest that approximately 38% of all households remained intact after 1 year, 12% were intact after 3 years, but only 7% retained the same composition at the end of 5 years. This means that the majority of households experienced a transition in the first year and very few remained with the same composition continuously beyond 3 years.

We estimate household continuity for the upper and lower halves of the sample by income inequality (above and below about .12), and find small differences in the percentage remaining together across time periods; those in less equal households were slightly more likely to have remained together after 3 and 5 years. When we disaggregate the sample by

household structure, larger differences emerge that are consistent with our theoretical expectations. Multigenerational households were much more likely to remain together than other types of coresidential living arrangements (45% versus 25% of non-multigenerational households remained together after 1 year). Furthermore, among multigenerational households, income inequality is associated with a greater probability of retaining household structure than among those with equitable distributions of income across units. Among other coresidential households, income inequality is associated with a lower probability of retaining household structure. This is also depicted in Figure 1, which graphs the proportion of households estimated to retain the same composition by duration of living arrangement. The sharp drop indicates less continuity in household composition in the first year with fewer transitions after 3 years.

The results presented in Figure 1 provide some initial support for our hypotheses. First, the probability of continuity in multigenerational extended-family households was greater than in the other coresidential households. Further, we observe a different pattern based on the distribution of resources in the household. Multigenerational households with more equal income distribution across household members were more likely to experience a change in composition than those with less equitable distributions of income. The opposite pattern is observed among the other coresidential households. Here the potential for balanced reciprocity appears associated with increased continuity of composition.

To test these ideas further, we use multivariate discrete-time hazard models of household change that take into account the other factors associated with the probability that a household has continuous composition or experiences a change in composition. Results are displayed in Table 3. Unlike the lifetable estimates, which thus far provide a picture of duration in the same household (i.e., continuity), these models predict changes in household composition. Thus, positive coefficients indicate a greater likelihood of household change and negative coefficients indicate a lower likelihood.

Model 1 includes all of the independent variables, including duration of living arrangement, income inequality, household structure, race/ethnicity, and all of the control variables. Duration of living arrangement is associated with lower probability of transition (i.e., the likelihood of transition was highest among newly formed living arrangements and declined over time). And larger households, not surprisingly, experienced a greater likelihood of a change in composition. Somewhat surprisingly, we observe no significant effect of household poverty on the probability that a household experienced change. Households containing recent immigrants, persons age 65 or older, young children, and widowed or divorced persons were more likely to experience a change and those including single parents were less likely. Life course transitions occurring in the household, such as a child reaching age 18, are also associated with a transition in household composition.

There is some variation in the timing of household change when we look at the householder's characteristics. Householder's age is associated with a decreased probability of household change. Households with male householders were slightly more likely to experience a change in composition. We observe considerable racial and ethnic variation in household transitions as well. Black householders and householders of Mexican and Asian origin were less likely to experience a change in composition than non-Hispanic Whites.

To test our hypotheses, Model 1 includes the measure for household type and income inequality. As predicted, multigenerational extended-family households were less likely to experience transition in the observed time period. Overall, however, income inequality is not significantly associated with transitions. The next step in our analysis is to determine

whether the effects of inequality differ by type of household as suggested by the descriptive results.

To this end, Model 2 adds an interaction term between income inequality and household structure comparing the multigenerational households to others. The interaction effect is significant and negative ($p<.001$). To interpret the results, Figure 2 graphs predicted probabilities of transitions by inequality and household structure. The predicted probabilities are generated by substituting mean values of all the control variables into the estimated model, but varying values for inequality and household structure. The resulting estimates— predicted logged—odds are then converted to predicted probabilities (DeMaris, 1992). The results clearly show that income inequality is associated with an increased likelihood of change among non-multigenerational coresident households ($p<.001$). Income inequality is not significantly associated with household change among multigenerational households (the slope appears negative but post estimation tests show that this association is not significant; $p=.13$). In other words, consistent with the findings from Figure 1 but now adjusting for the composition of the different households, the association of income inequality with the continuity of living arrangements depends on the relationships of those sharing the household.

Discussion

The results of our analyses demonstrate the high frequency of moves among those in multigenerational and other coresidential living arrangements. These living arrangements change in composition frequently as kin and nonkin move into and out of shared households. Some of these changes are triggered by normative life course events such as marital transitions, births, and entering adulthood. Nonetheless, sharing a household with people other than parents, adult children, or grandchildren is associated with an even greater probability of transition than sharing a household with other multigenerational kin; these results persist even in the presence of controls for the life course and dependency characteristics that may be expected to trigger the departure from or persistence in these households. Distant kin or friends may share living arrangements temporarily, but this sort of coresidence is often short lived (Fertig & Reingold, 2008).

In addition, we find partial support for our hypotheses, based on a functionalist perspective, that multigenerational households are less likely to transition when resources are inequitably distributed. In fact, we find no significant association between intrahousehold income inequality and the continuity of multigenerational living arrangements, but the relationship ran in the expected direction. This may derive from the relative needs of household members for in-kind assistance as well as normative expectations for coresidence. For example, elderly household members may not be expected to work, so households containing elderly parents and their adult children may retain their composition over time even with greater income inequality. Likewise, households with many young children may contain adults who do not contribute earned income in order to provide childcare. In other words, these households may contain more opportunities to provide immediate reciprocity in the form of in-kind exchanges such as care for dependent family members. Unbalanced economic resources in these situations may be more normatively acceptable than if the household were comprised entirely of working-age adults. This is also consistent with idea that close kin relationships are guided by norms for reciprocity that carry out over the life course (Silverstein et al., 2002).

The opposite is the case for households with other types of kin and nonkin. These households are much more likely to experience a change in composition in the absence of balanced resources (with the greater risk of nonreciprocity) as suggested by the contractual

perspective. Thus, it appears that households made up of siblings or more distantly related kin or nonkin are likely to be more sensitive to the economic resources of household members. These results are consistent with the economic theoretical perspectives on union stability in which relationships with fewer prescribed norms carry greater expectations for similar contributions from all parties.

One of the primary limitations of our analyses is that we can only measure the balance of economic resources between individuals or couples in the household. As noted, individuals may provide in-kind services such as childcare or household labor in exchange for instrumental support, including housing. In addition, we cannot observe how economic resources are distributed within the MHUs or even across minimal household units. Thus, we cannot observe whether those bringing economic resources to the household are able to control how those resources are spent or distributed. Another related limitation in our analyses is that we can only observe coresidential relationships and not those relationships with individuals outside the household. Kin and nonkin networks extend beyond the household and resources and assistance may flow between as well as within households. But the formation and continuity of the extended-family household provides an excellent opportunity to observe the mobilization of resources in the form of shared housing (Aquilino, 1990; De Vos, 2000; Ruggles, 2007). Despite data limitations that preclude a direct test of the extent to which resources are directly exchanged within or beyond households or whether other factors such as preferences or power differentials among individuals in the households also influence the duration of shared living arrangements (Bianchi et al., 2007; Folbre, 2004; Kenney, 2006), the results presented here are consistent with the hypothesis that the potential for reciprocity of exchange is important for understanding living arrangements. And the strength of expectations for reciprocity depends, in part, on the types of relationships involved.

As the population ages, there is greater concern that family members and significant others may be called upon for instrumental and social support (Bengston, 2001). The results presented here suggest multigenerational ties are the ones most likely to maintain coresidential arrangements. This may place greater demands on adult child–parent relationships at a time when there are more older adults with fewer adult children. On the other hand, many of the other coresidential households also contain older adults and our results also suggest that these more contractually based coresidential relationships can also be maintained. But the role that individuals play in these households is likely to be quite different from those experienced in households shared with parents, children, and grandchildren. Further, our results suggest the fragility of some extended or complex households formed in response to severe economic constraints (e.g., Menjivar, 2000; Wright et al., 1998) may stem, in part, from the difficulty of sustaining equitable contributions by household members.

Acknowledgments

References

Allison, PD. Survival Analysis Using the SAS System: A Practical Guide. Cary, NC: SAS Publishing; 1995.

Aquilino WS. The likelihood of parent–adult child coresidence: Effects of family structure and parental characteristics. Journal of Marriage and the Family. 1990; 52:405–419.

Becker GS. Altruism in the family and selfishness in the market place. Economica. 1981; 48:1–15.

Bengston VL. The Burgess Award lecture: Beyond the nuclear family: The increasing importance of multigenerational bonds. Journal of Marriage and Family. 2001; 63:1–16.

Beresford JC, Rivlin AM. Privacy, poverty and old age. Demography. 1966; 3:247–258.

Bethencourt C, Rios-Rull JV. On the living arrangements of elderly widows. International Economic Review. 2009; 50:773–801.

Bianchi, SM.; Hotz, J.; McGarry, K.; Seltzer, JA. Intergenerational ties: Alternative theories, empirical findings and trends, and remaining challenges. In: Booth, A.; Crouter, AC.; Bianchi, SM.; Seltzer, JA., editors. Intergenerational caregiving. Washington, DC: Urban Institute; 2008. p. 3-43.

Biddlecom, AE. Immigration and coresidence in the U.S. since 1960. Paper presented at the annual meeting of the Population Association of America; Miami, FL. 1994 May.

Brines J, Joyner K. The ties that bind: Principles of cohesion in cohabitation and marriage. American Sociological Review. 1999; 64:333–355.

Burr JA, Mutchler JE. The living arrangements of unmarried elderly Hispanic females. Demography. 1992; 29:93–112. [PubMed: 1547905]

Burr JA, Mutchler JE. Nativity, acculturation, and economic status—explanations of Asian-American living arrangements in later life. Journals of Gerontology. 1993; 48:S55–S63. [PubMed: 8473706]

Burr JA, Mutchler JE. Race and ethnic variation in norms of filial responsibility among older persons. Journal of Marriage and the Family. 1999; 61:674–687.

Burton, L.; Stack, CB. Conscripting kin: Reflections on family, generation and culture. In: Cowan, PA.; Field, D.; Hansen, DA.; Skolnick, A.; Swanson, GE., editors. Family, self and society. New York: Routledge; 1993. p. 103-113.

Choi NG. Coresidence between unmarried aging parents and their adult children—who moved in with whom and why? Research on Aging. 2003; 25:384–404.

Coleman M, Ganong L. Normative beliefs about sharing housing with an older family member. International Journal of Aging and Human Development. 2008; 66:49–72. [PubMed: 18429483]

Coward RT, Cutler SJ, Schmidt FE. Differences in the household composition of elders by age, gender, and area of residence. Gerontologist. 1989; 29:814–821. [PubMed: 2620845]

DeMaris, A. Logit modeling:Practical applications. Newbury Park, CA: Sage; 1992.

DeMaris A, Longmore M. Ideology, power, and equity: Testing competing explanations for the perception of fairness in household labor. Social Forces. 1996; 74:1043–1071.

De Vos S. Kinship ties and solitary living among unmarried elderly women in Chile and Mexico. Research on Aging. 2000; 22:262–289.

Ermisch JF, Overton E. Minimal Household Units: A new approach to the analysis of household formation. Population Studies. 1985; 39:33–54.

Fertig AR, Reingold DA. Homelessness among at-risk families with children in twenty American cities. Social Service Review. 2008; 82:485–510.

Fitzgerald J, Gottschalk P, Moffitt R. An analysis of sample attrition bias in panel data: The Michigan Panel Study of Income Dynamics. Journal of Human Resources. 1998; 33:251–299.

Folbre, N. Disincentives to care: A critique of U.S. family policy. In: Moynihan, DP.; Smeeding, TM.; Rainwater, L., editors. The future of the family. New York: Russell Sage Foundation; 2004. p. 231-260.

Ganong L, Coleman M. Patterns of exchange and intergenerational responsibilities after divorce and remarriage. Journal of Aging Studies. 2006; 20:265–278.

Glick JE, Van Hook J. Parents' coresidence with adult children: Can immigration explain race and ethnic variation? Journal of Marriage and Family. 2002; 64:240–253.

Glick JE, Bean FD, Van Hook J. Immigration and changing patterns of extended household/family structure in the United States: 1970–1990. Journal of Marriage and the Family. 1997; 59:177–191.

Goode, WJ. The family. 2. Englewood Cliffs, NJ: Prentice Hall; 1982.

Goody, J. Production and reproduction: A comparative study of the domestic domain. Cambridge, UK: Cambridge University Press; 1976.

Guo G. Event-history analysis for left-truncated data. Sociological Methodology. 1993; 23:217–243. [PubMed: 12318163]

Hamilton W. The genetical evolution of social behavior: I & II. Journal of Theoretical Biology. 1964; 7:1–52. [PubMed: 5875341]

Hammel EA, Laslett P. Comparing household structure over time and between cultures. Comparative Studies in Society and History. 1974; 16:73–109.

Hogan DP, Eggebeen DJ, Clogg CC. The structure of intergenerational exchanges in American families. American Journal of Sociology. 1993; 98:1428–1458.

Hogan DP, Hao LX, Parish WL. Race, kin networks and assistance to mother-headed families. Social Forces. 1990; 68:797–812.

Jabine, T. Survey of Income and Program Participation quality profile. Washington, DC: U.S. Government Printing Office; 1990.

Kalmijn M, Loeve A, Manting D. Income dynamics in couples and the dissolution of marriage and cohabitation. Demography. 2007; 44:159–179. [PubMed: 17461341]

Kenney CT. The power of the purse: Allocative systems and inequality in couple households. Gender and Society. 2006; 20:354–381.

Levy, PS.; Lemeshow, S. Sampling of populations. 3. New York: John Wiley & Sons; 1999.

Liversage A, Jakobsen V. Sharing space—gendered patterns of extended household living among young Turkish marriage migrants in Denmark. Journal of Comparative Family Studies. 2010; 41:693–715.

Martikainen P, Nihhtila E, Moustgaard H. The effects of socioeconomic status and health on transitions in living arrangements and mortality: A longitudinal analysis of elderly Finnish men and women from 1997 to 2002. Journals of Gerontology, Series B: Psychological Sciences and Social Sciences. 2008; 63:S99–S109.

McGarry K, Schoeni RF. Social security, economic growth, and the rise in elderly widows' independence in the twentieth century. Demography. 2000; 37:221–236. [PubMed: 10836180]

Menjivar C. Immigrant kinship networks: Vietnamese, Salvadorans and Mexicans in comparative perspective. Journal of Comparative Family Studies. 1997; 28:1–24.

Menjivar, C. Fragmented ties: Salvadoran immigrant networks in America. Berkeley: University of California Press; 2000.

Michael RT, Fuchs VR, Scott SR. Changes in the propensity to live alone—1950–1976. Demography. 1980; 17:39–56. [PubMed: 7353707]

Molm LD, Collett JL, Schaefer DR. Building solidarity through generalized exchange: A theory of reciprocity. American Journal of Sociology. 2007; 113:205–242.

Mutchler JE, Burr JA. A longitudinal analysis of household and nonhousehold living arrangements in later life. Demography. 1991; 28:375–390. [PubMed: 1936374]

Oppenheimer VK. Women's employment and the gain to marriage: The specialization and trading model. Annual Review of Sociology. 1997; 23:431–453.

Pampel FC. Changes in the propensity to live alone—Evidence from consecutive cross-sectional surveys, 1960–1976. Demography. 1983; 20:433–447.

Peek CW, Koropeckyj-Cox T, Zsembik BA, Coward RT. Race comparisons of the household dynamics of older adults. Research on Aging. 2004; 26:179–201.

Plickert G, Cote RR, Wellman B. It's not who you know, it's how you know them: Who exchanges what with whom? Social Networks. 2007; 29:405–429.

Portes A, Sensenbrenner J. Embeddedness and immigration: Notes on the social determinants of economic-action. American Journal of Sociology. 1993; 98:1320–1350.

Preston, SH.; Heuveline, P.; Guillot, M. Demography: Measuring and modeling population processes. Oxford, UK: Blackwell Publishing; 2001.

Rendell M. Breakup of New Orleans households after Hurricane Katrina. Journal of Marriage and Family. 2011; 73:654–668. [PubMed: 21709733]

Roschelle, A. No more kin: Exploring race, class and, gender in family networks. Thousand Oaks, CA: Sage; 1997.

Rossi, A.; Rossi, PH. Of human bonding: Parent–child relations across the life course. New York: A. de Gruyter; 1990.

Ruggles S. The decline of intergenerational coresidence in the United States, 1850–2000. American Sociological Review. 2007; 72:964–989. [PubMed: 21562613]

Sarkisian N, Gerstel N. Kin support among Blacks and Whites: Race and family organization. American Sociological Review. 2004; 69:812–837.

Schmertmann CP, Boyd M, Serow W, White D. Elder–child coresidence in the United States. Research on Aging. 2000; 22:23–42.

Shuey K, Hardy M. Assistance to aging parents and parents-in-law: Does lineage affect family allocation decisions. Journal of Marriage and Family. 2003; 65:418–431.

Silverstein M, Conroy SP, Wang H, Giarrusso R, Bengston VL. Reciprocity in parent child relations over the adult life course. Journal of Gerontology: Social Sciences. 2002; 57:S3–S13.

Silverstein M, Gans D, Yang F. Intergenerational support to aging parents: The role of norms and needs. Journal of Family Issues. 2006; 27:1068–1084.

Smits A, van Gaalen R, Mulder CH. Parent–child coresidence: Who moves in with whom and for whose needs? Journal of Marriage and Family. 2010; 72:1022–1033.

Speare A, Avery R. Who helps whom in older parent–child families? Journal of Gerontology. 1993; 48:S64–S73. [PubMed: 8473707]

Spitze G, Trent K. Gender differences in adult sibling relations in two-child families. Journal of Marriage and Family. 2006; 68:977–992.

Stack, CB. All our kin: Strategies for survival in a Black community. New York: Harper and Row; 1975.

Stata Corporation. Stata user's guide, Release 5. College Station, TX: Stata Press; 1997.

Stewart-Williams S. Altruism among kin vs. nonkin: Effects of cost of help and reciprocal exchange. Evolution and Human Behavior. 2007; 28:193–198.

Swartz TT. Intergenerational family relations in adulthood: Patterns, variations and implications in the contemporary United States. Annual Review of Sociology. 2009; 35:191–212.

Taylor RJ, Chatters LM, Mays VM. Parents, children, siblings, in-laws, and nonkin as sources of emergency assistance to Black Americans. Family Relations. 1988; 37:298–304.

Tienda M, Glass J. Household structure and labor-force participation of Black, Hispanic, and White mothers. Demography. 1985; 22:381–394. [PubMed: 4043451]

Van Hook J, Glick JE. Immigration and living arrangements: Moving beyond economic need versus acculturation. Demography. 2007; 44:225–249. [PubMed: 17583303]

Wellman B. The place of kinfolk in personal community networks. Marriage and Family Review. 1990; 15:195–228.

White L. Sibling relationships over the life course: A panel analysis. Journal of Marriage and Family. 2001; 63:555–568.

Wolf DA, Soldo BJ. Household composition choices of older unmarried women. Demography. 1988; 25:387–403. [PubMed: 3266155]

Wright B, Avshalom RE, Caspi T, Moffitt E, Silva PA. Factors associated with doubled-up housing: A common precursor to homelessness. Social Service Review. 1998; 72:92–111.
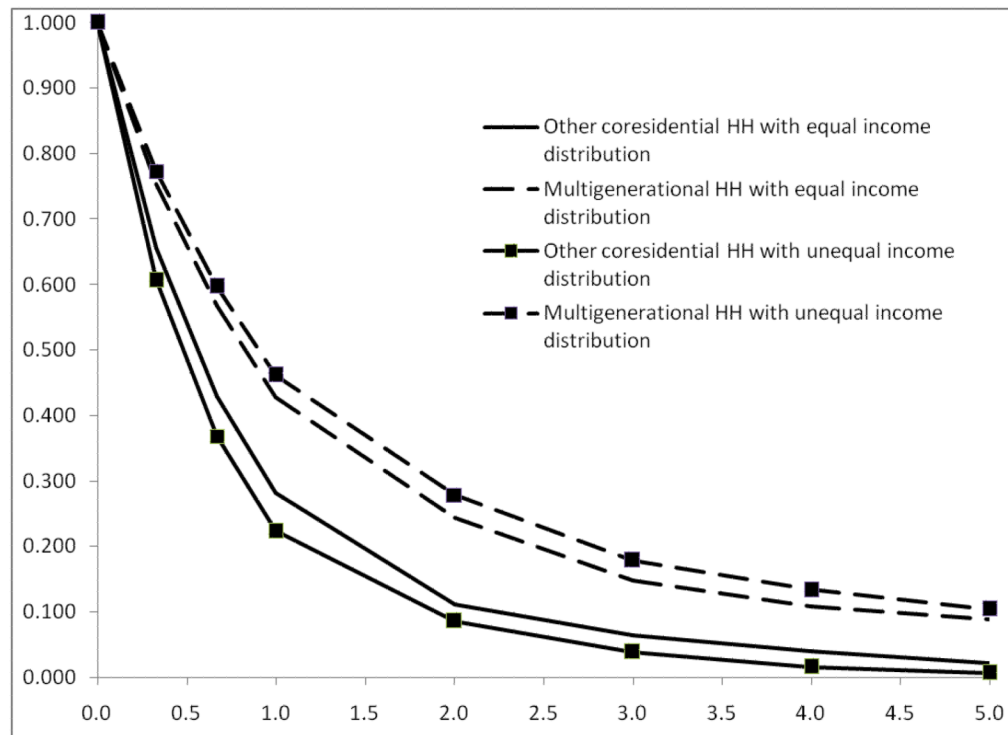
Figure 1.
Probability of Continuity of Coresidential Living Arrangement by Duration.
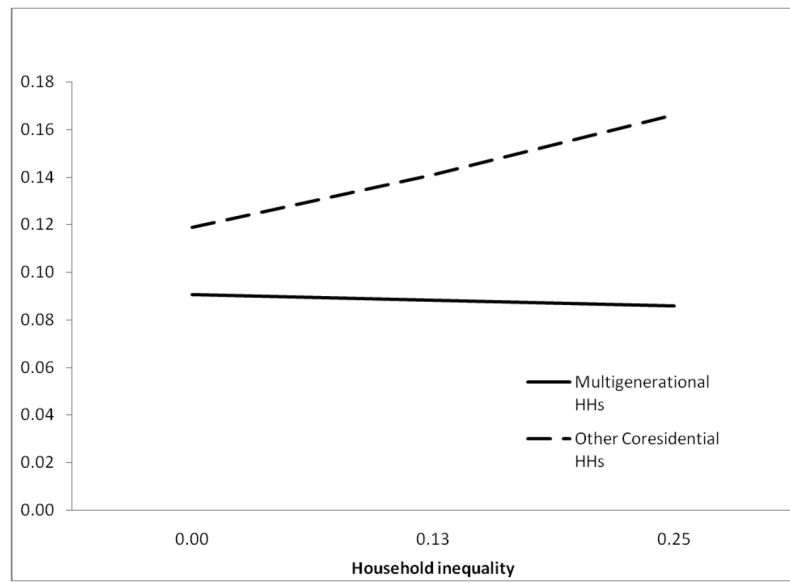
Figure 2.
Probability of Household Transition by Household Structure and Income Inequality (based on Table 3, Model 2).

Table 1

Sample Means or Percentages with Standard Deviations, All Coresidential Households (N = 9,932 households and 39,698 observations)

Variables	All Coresidential HHs		Multigenerational HHs		Other Coresidential HHs	
	M or %	*SD*	*M or %*	*SD*	*M or %*	*SD*
HH transitioned since last interview (%)	12.6		11.3		16.2	
Multigenerational HH (%)	73.6		100.0		0.0	
Income inequality	0.120	0.107	0.133	0.106	0.084	0.100
Duration of living arrangement (years)	12.1	13.0	10.6	10.9	16.2	17.0
Number of adults in HH	2.8	1.0	3.0	1.0	2.4	0.9
Income-to-poverty ratio	3.9	2.8	4.0	2.8	3.7	2.9
HH contains immigrant newcomers (0–9 years in United States) (%)	3.0		2.1		5.6	
HH contains other immigrants (%)	6.2		6.5		5.4	
At least one HH member is:						
Age 65 or older (%)	41.5		46.6		27.3	
Has child age 0–4 (%)	14.7		15.5		12.6	
Divorced or widowed (%)	57.3		58.9		52.9	
Single parent (%)	5.9		5.9		5.8	
Life course transitions in HH since last interview:						
No. of persons who changed marital status	0.017	0.146	0.017	0.142	0.018	0.156
Births	0.040	0.363	0.046	0.390	0.024	0.274
No. of persons who turned age 18	0.014	0.184	0.014	0.186	0.015	0.180
Characteristics of HH reference person						
Age	55.6	15.3	59.0	13.0	46.0	17.3
Male (%)	58.1		59.2		54.9	
Education						
High school graduate (%)	31.1		32.0		28.4	
Some college (%)	24.7		23.5		28.2	
College graduate (%)	18.8		16.2		26.2	
Number of children borne or fathered	2.4	1.9	2.9	1.8	0.9	1.3
Race/ethnicity						
Black (%)	7.0		7.7		4.9	

Variables	All Coresidential HHs		Multigenerational HHs		Other Coresidential HHs	
	M or %	*SD*	*M* or %	*SD*	*M* or %	*SD*
Mexican (%)	2.4		2.3		2.5	
Other Hispanic (%)	2.1		2.1		2.3	
Asian (%)	1.7		1.7		1.7	
n observations	39,698		29,669		10,029	
n households	9,932		7,029		2,903	

Note. The data are the 1990, 1991, 1992, 1993, and 1996 SIPP panels. The sample includes all coresidential households. Each household contributes one observation per interview until either the end of the survey or the household dissolves or otherwise changes composition. HH = household.

Table 2

Continuity of Coresidential Living Arrangements by Income Distribution and Household Structure (N = 9,932 households and 39,698 observations)

	Proportion Remaining in Living Arrangement After:		
	1 year	3 years	5 years
All coresidential HHs	0.383	0.124	0.065
Less equal income distribution[a]	0.395	0.137	0.071
More equal income distribution[b]	0.370	0.114	0.059
Difference: less – more equal	0.025	0.023[*]	0.111[*]
Multigenerational HHs	0.447	0.163	0.097
Other coresidential HHs	0.255	0.053	0.016
Difference: multigenerational - other	0.191[*]	0.109[*]	0.081[*]
Multigenerational HHs			
Less equal income distribution	0.462	0.178	0.104
More equal income distribution	0.427	0.147	0.088
Difference: less – more equal	0.034	0.031[*]	0.015[*]
Other coresidential HHs			
Less equal income distribution	0.223	0.038	0.007
More equal income distribution	0.281	0.063	0.022
Difference: less – more equal	−0.058[*]	−0.025[*]	−0.015[*]

Note. See Table 1 for description of data and sample. HH = household.

[a] upper half of sample on HH inequality scale.

[b] lower half of sample on HH inequality scale.

[*] Difference is statistically significant (*p*<.05).

Table 3

Logistic Regression Models of Transition Among Coresidential Households (N = 9,932 households and 39,698 observations)

Predictor	Model 1		Model 2	
	β	*OR*	β	*OR*
Multigenerational HH[a]	−0.51***	0.60	−0.31**	0.74
Income inequality[b]	0.32	1.38	1.56*	4.74
Income inequality × multigenerational HH			−1.78**	0.17
Duration of living arrangement (years)	−0.14***	0.87	−0.14***	0.87
Duration of living arrangement (squared)	0.00***	1.00	0.00***	1.00
No. of adults in HH	0.12**	1.12	0.11**	1.12
Income-to-poverty ratio	0.01	1.01	0.01	1.01
HH contains immigrant newcomers[a]	0.15	1.16	0.13	1.14
HH contains other immigrants[a]	0.08	1.08	0.08	1.08
At least one HH member is:				
Age 65 or older[a]	0.36***	1.44	0.39***	1.44
Has child age 0–4[a]	0.18*	1.19	0.18*	1.20
Divorced or widowed[a]	0.38***	1.46	0.37***	1.44
Single parent[a]	−0.14	0.87	−0.14	0.87
Life course transitions occurring in the HH since the last interview				
Number of persons who changed marital status	2.09***	8.12	2.09***	8.10
Births	0.03	1.03	0.03	1.03
Number of persons who turned age 18	0.68***	1.97	0.68***	1.98
Characteristics of HH reference person				
Age	−0.02***	0.98	−0.02***	0.98
Male[a](reference = female)	0.13*	1.14	0.13*	1.13
Education (reference = not a high school graduate)				
High school graduate[a]	−0.05	0.95	−0.05	0.95
Some college[a]	−0.05	0.95	−0.05	0.95
College graduate[a]	−0.07	0.93	−0.05	0.95
Number of children borne or fathered	0.08***	1.08	0.08***	1.08
Race/ethnicity (reference = non-Hispanic White)				
Black[a]	−0.14*	0.87	−0.13*	0.87
Mexican[a]	−0.28**	0.76	−0.27*	0.77
Other Hispanic[a]	−0.09	0.91	−0.09	0.91
Asian[a]	−0.17	0.84	−0.18	0.84
Intercept	−0.80***	0.45	−0.85***	0.43

Predictor	Model 1		Model 2	
	β	*OR*	β	*OR*
N		39,698		39,698

Note. See Table 1 for description of data and sample. *OR* = odds ratio.

[a]Coded as 1 = yes and 0 = no.

[b]Income inequality ranged from 0 (low inequality) to .25 (high inequality).

***
p< .001.

**
p< .01.

*
p< .05.