Variation in the Formation of Complex Family Households during the Recession SEHSD Working Paper Number 2011-32

Authors:	Diana B. Elliott, U.S. Census Bureau; Rebekah Young, Penn State University; Jane Lawler Dye, Pennsylvania State System of Higher Education
Phone:	301-763-2416
Fax:	301-457-3500
Email:	diana.b.elliott@census.gov
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Abstract:

The recession that began in December 2007 has been dubbed by some as the "Great Recession" (Wessel 2010). The housing bubble and related recession have prompted researchers and journalists to explore changes in family households and living arrangements (see PEW Research Center, March 2010; October 2011). Have there been changes in complex family households as a result? This paper examines how complex family households changed during the recessionary period (2007-2009) with 1-year and 3-year data from the American Community Survey (ACS). The paper first examines the characteristics of individuals who moved into existing family households, as well as the characteristics of such complex family households, in order to refine which changes are attributable to the economic downturn. Additional descriptive and multi-level analyses explore if metro areas harder hit by the recession had detectable changes in multifamily households. The proportion of complex family households increased from 2006 to 2010. Such households were more likely to be headed by younger householders, householders of Hispanic origin, and to include a family member who was unemployed. Individuals in 2006 and 2010 who lived in complex family households were more often never married. County-level unemployment rates are not as important as the employment characteristics of household members themselves for predicting the likelihood that a family household will be complex.

This report is released to inform interested parties of ongoing research and to encourage discussion of work in progress. The views expressed on statistical or methodological issues are those of the authors and not necessarily those of the U.S. Census Bureau.

The recession that began in December 2007 has been dubbed by some as the "Great Recession" (Wessel 2010). The origin of the recession has been largely accepted to be a consequence of the housing boom and subsequent housing bust. Consequently, the housing bubble and related recession have prompted researchers and journalists to explore changes in family households and living arrangements (see PEW Research Center, March 2010; October 2011). Although anecdotal accounts of families "doubling up" in the same household during the recession have been popularized in the media, it is difficult to pinpoint the magnitude of the situation. Has there been a detectable increase in shared family living arrangements? Who is likely to live in such households and do they differ remarkably from other family households? Are the hardest hit areas of the country characterized by notable increases in complex family households?

This paper examines how complex family households changed during the recessionary period with 1-year and combined 3-year data from the American Community Survey (ACS). We define "complex family households" as containing household members who are related to the householder but are not the spouse or the child of the householder. The ACS data are collected annually from a large, nationally representative sample and are ideal to investigate this topic as they include data prior to (2006 and 2007) and following the start of the recession (2008, 2009, and 2010). The paper first examines all households and the formation of complex family households over time, as well as the characteristics of noncomplex and complex family households (2006-2010). Subsequent analysis then explores the likelihood that individuals live in complex family households in 2006 compared to 2010 to understand what changes, if any, could be attributable to the economic downturn.

Finally, this paper investigates geographic differences among complex family

households. First, ten select metro areas that were hard hit by foreclosures and the downturn in the housing market are examined in detail with respect to complex family households. Then, a multi-level model is performed to examine whether unemployment rates affected the incidence of complex family households in every county in the U.S. in the same way.

Background

"Doubling up" is an expression often used to describe families and individuals who are sharing a housing unit, often temporarily, and usually because of economic difficulties. The basic idea is that when tough economic times threaten housing stability, people mobilize their social resources and move in with friends or relatives (Lee, 1998). People who lose their homes to foreclosure, for example, may temporarily move in with relatives until an alternative can be arranged. The term "doubling up" has been used in the popular press as well as in diverse areas of academic research. Many authors have expressed concern that the recent economic climate in the U.S. has increased the incidence of doubling up as job loss and unemployment force people into shared housing situations.

If indeed doubling up is occurring more frequently, the available evidence on the matter suggests potentially problematic consequences. Shared housing may prove to be a hardship for the people of a household. Crowding, in particular, is often thought to relate to stress and other health outcomes (Booth and Johnson, 1974; Krieger and Higgens, 2002). Second, marginally housed people may be particularly vulnerable to future homelessness. Link et al. (1994) estimated that approximately 11% of the population has ever doubled up and 59% of those people were also ever homeless. In 2009 the most common prior living arrangement among homeless people who used residential shelters was with friends or family (29.5 percent) (HUD,

2010). Finally, when doubling up occurs, it may change the quality of the neighborhood (Ahretzen, 2003).

An obvious challenge of measuring the doubled up population is to identify good indicators of this housing experience. The phrase "doubling up" pervades the literature, because the term is used so widely.¹ While the spirit of the phrase is often similar, "doubling up" is used in many ways and few papers agree on a specific definition of the term. Even when well defined, identifying doubled up households based on a standard household roster is challenging due to three general factors.

First, key parts of the doubling up concept often go unmeasured. Questions about the motivations and causes of home-sharing, the voluntary or involuntary nature of a shared housing situation, and who benefits from the situation, are not asked. The second difficulty in identifying doubled up households is that the arrangement is often temporary. People who are tenuously attached to the residence are likely to be omitted from the survey roster and altogether skipped by the standard survey process (Martin, 2007). Finally, doubling up is closely linked with status transitions, such as beginning or ending a marriage, having a child, leaving the workforce (via unemployment or retirement), finishing school, or being discharged from an institution or the military (Curtis and Geller, 2010; Koebel and Murray, 2009). Even though people are known to pursue home-sharing strategies at predictable points in the life cycle, identifying these changes from a roster is not possible.

¹ We use the phrase "doubling up" to describe the research literature on this topic, because it is used widely and across studies. This paper focuses on a specific subset of the "doubled up," or complex multifamily households which are linked across generations and across extended family networks. Restricting our study to multifamily households is a more specific analysis than the term "doubling up" entails. When later discussing methods and findings in this paper, we use the phrase "complex family households" rather than "doubled up households" because it is more specific to our analyses.

Many previous studies seeking to explain co-residence have posited an economic framework that competes with cultural preferences or norms (Tienda and Angel, 1982; Tienda and Glass 1985). It is clear that this dichotomy is an oversimplification of the housing choices that people make. It is known, for example, that household extension is not particularly related to the income of the total household (with the exception of extension of adult children returning home) (Koebel and Murray 1999). Lack of a strong correlation between doubling up and income suggests that the decision to share housing involves more than just financial considerations. Economic factors play a role in people deciding to double up, but so do factors such as lifestyle, ethnic background, age, and migration status of both guests and host (Van Hook and Glick, 2007). People of Hispanic origin may find co-residence more acceptable than do non-Hispanic whites, and co-residence with a relative becomes less preferable as people age (Seltzer, Strohm and Bianchi 2010).

Moving beyond a model where economic and cultural factors compete, Ahrentzen (2003) identifies four typologies of shared housing motivations. First, people may move in with friends or family as a temporary strategy in response to an emergency situation and need. The guest and the host are likely to perceive the situation as less than ideal and perhaps even as largely involuntary. A second reason people may move in together is for a subsidy or residential improvement. Homesharing reduces the rent burden on each of the householders, potentially allowing people with low incomes to afford better housing in a more desirable neighborhood. While this population probably sees their situation as largely voluntary, they may still experience some of the problems characteristic of low income extended households, such as overcrowded or physically inadequate housing (Krieger and Higgens 2002). Third, people who are unable to care for themselves move in with others who may assist them with daily activities. This

behavior is prevalent among the older population (Silverstein 1995). Finally, people may live together to foster social connections and companionship. These four typologies for doubling up are not mutually exclusive or exhaustive but serve as a useful guide for thinking about how the recent economic downturn in the U.S. may or may not influence the way people arrive at diverse living arrangements.

This paper accepts that some complex family households are formed in a voluntary way, driven by preferences to live with and share housing with family members. But, the focus of this paper is to investigate if economic insecurity as a result of the recent recession and housing downturn has created an increase in complex family households. One way to analyze the link between increased economic insecurity and increases in complex family households is to look at changes over time. Another way is to understand correlations between particular macro-level social and economic indicators in various metropolitan areas with increases in the formation of complex family households. For example, if the hypothesis that economic factors are linked with increases in complex family household formation holds, then areas disproportionately affected by the housing bust and high rates of unemployment might show increases in complex family household formation. Performing analyses which can control for such indicators could illuminate the power of the recession on the formation of complex family households.

There have been scattered media reports, but scant in-depth analyses about recent increases in multigenerational and shared extended family households because of the recession. This paper explores in detail whether the economic downturn known as the "Great Recession" has produced an increase in multifamily households, and which individuals and households were most likely affected. Using data from the ACS, a large, nationally representative data set, we have estimates on the eve of the recession (2006 and 2007) and estimates after the start of the

recession (2008, 2009, and 2010). Thus, our paper focuses primarily on variations in multifamily households over time, and whether these changes were attributable to economics and the recession. We pay particular attention to those areas hardest hit by the housing crisis to note if there is a relationship between the housing market and increased multigenerational and extended family households.

Data and Methods

Data

To investigate any increases in doubling up as a consequence of the economic downturn and recession that started in December 2007, we use 1-year data from the 2006, 2007, 2008, 2009, and 2010 American Community Survey (ACS) and 3-year data from 2008-2010. In the analyses in this paper, we draw from the total sample of occupied households in each year, thus eliminating those residing in group quarters facilities from our analyses.² Overall, descriptive tables in this study use data from households nationwide from 2006, 2007, 2008, 2009, and 2010. There were 111,617,402 occupied households nationwide in 2006, 112,377,977 occupied households in 2007, 113,097,835 occupied households in 2008, 113,616,229 occupied households in 2009, and 114,567,419 occupied households in 2010.

The multilevel model analyses draw from individuals and households and all counties in the United States. The analyses are restricted to family households (complex and noncomplex) that do not have a foster child present within them.³ The multi-level analyses use a combined sample of 76,139,456 households from the 2008-2010 3-year file and data from the 3,143 counties in the United States.

² In 2010, the number of people in non-institutionalized group quarters in the ACS numbered 7,987,323. This population may include people who had no homes to live in due to economic hardship.

³ Foster children may be related or unrelated to the householder, so were excluded because of the lack of clarity about whether the household was a family one or not.

The ACS was started in the late 1990's to replace the collection of data from the long form questionnaire previously distributed to 1 in 6 households during decennial censuses. In contrast, data from the ACS are collected on a regular basis: the Census Bureau mails out a quarter-million ACS questionnaires every month to a nationwide sample, and follows up through phone and in-person interviews, ultimately collecting data from a sample about 2 million households annually. This sample is then weighted to be representative of the nation's population as a whole. The ACS is notable for its ability to examine annual data for small geographies (such as metropolitan areas) and consequently is well suited for analyzing changes nationwide and in counties in the years prior to and following the recession. Additional information about the ACS, its methodology, and data products can be found at

http://www.census.gov/acs/www.

Methods

The incidence of complex family households is the primary dependent variable in this paper. It is defined primarily as the presence of an individual in a household who according to the household roster is related to the householder, but is not a member of the householder's immediate nuclear family. This can include extended family members such as siblings, parents, grandchildren, and other distant kin. This is a more specific measure than a more generalized measure of doubling up because it is attempting to identify changes in family households rather than non-related roommate or roomer household living arrangements.

We also include analyses of another dependent variable, the presence of an adult child in the household (age 22 to 34). While adult children are members of a householder's immediate nuclear family, societal expectations are that adult children will move out of households after they have left school and have begun working for pay. Some have suggested that adult children,

however, are returning to their parents' homes in greater numbers during this recession due to a lack of employment and affordable housing (Wang and Morin 2009).

We include various independent and control variables at the individual, household, and county level in this study to understand if economic and housing difficulties are related to increases in complex family households. By examining these various predictive factors for each year, we can understand those characteristics most closely tied to the incidence of complex family households, and whether or not there are increases that coincide with the recession.

Demographic factors. Particular demographic characteristics have been linked in the literature to a greater likelihood of complex family households. Race and ethnicity are important predictors as the different economic conditions faced by and family preferences of ethnic groups can contribute to a greater likelihood of complex household arrangements (Schwede 2005). Gender may be an important predictor because the recession may affect young people's living arrangements differently for men and women (Wang and Morin 2009).

Economic factors. Without a doubt, the economic factors of individuals and households are related to the recession. Consequently, measures such as poverty or program participation may be related to complex family households during a recession. This recession has been characterized by a persistently high unemployment rate, and so unemployment may be tied to a lower earning potential and a diminished ability to afford housing. Similarly, because a number of people have dropped out of the labor force rather than continue to look for employment, whether a household member is not in the labor force may be an important predictor.

Housing factors. The "Great Recession" had its origins in the housing bubble, or the overpriced housing market that caused a number of people to purchase overvalued homes that were beyond their means to pay for them following the housing crash. Thus, when housing costs

more than 30% of net income, it could be related to difficulty in households for affording high mortgages and rents. Furthermore, renters are more tenuously tied to housing and it is anticipated that they may be more inclined to live in complex family arrangements.

Geographic factors. For multi-level analyses, we also include county-level characteristics to understand if the incidence of complex family households were linked to the local context. Three county-level variables were also included in the multi-level analyses. The unemployment rate for 2009 (from the Bureau of Labor Statistics) was included to examine if there is a relationship between the economic difficulties in a particular county and the incidence of complex family households. Two county-level control variables were also included – the percent White and the percent Hispanic (both from U.S. Census Bureau 2009 population estimates) to control for the cultural context that might relate to a lower or higher incidence of complex family households.

Findings

Are there more complex family households following the recession than existed before?

One of the first questions this paper sets out to address is whether or not there was an increase in complex family households after the recession as compared to before the recession began. As Table 1 shows, the overall number of complex households (defined as those households which are not nuclear families, single parent families, or householders living alone) increased 1.0 percentage point between 2006 and 2010 (18.2 percent to 19.2 percent). An increase of 0.7 percentage points (from 12.2 percent in 2006 to 13.0 percent in 2010) occurred in those complex households that were family-based.⁴ A smaller increase occurred in complex households that were non-family based (5.9 percent in 2006 to 6.2 percent in 2010). In complex

⁴ The 0.7 percentage point increase is noted in Table 1 and is not the same as the difference between estimates, due to rounding.

family and complex nonfamily households, increases also occurred in those households where a householder had a cohabiting partner present (0.4 percentage point increase in family households and 0.2 percentage point increase in nonfamily households between 2006 and 2010).⁵

Table 1 also shows that noncomplex households went down by 1.0 percentage point from 2006 to 2010. Although noncomplex households constituted the majority of households in 2010 (80.8 percent of all households), this was down from 81.8 percent in 2006. Noncomplex nonfamily households (in other words, one person households) were not significantly different between 2006 to 2010. Noncomplex family households went from 54.4 percent of all households in 2006 to 53.3 percent of all households in 2010.

What are the demographic characteristics of householders and individuals in complex family households?

Table 2 shows the characteristics of noncomplex and complex family households between 2006 and 2010. On the whole, higher proportions of complex family households were headed by householders age 15-34 (25.3 percent in 2010) than was the case in noncomplex family households (16.9 percent in 2010). While 80.8 percent of noncomplex family households were headed by White householders in 2010, 64.3 percent of complex family households were headed by White householders. Similarly, 73.4 percent of noncomplex family households in 2010 were headed by White non-Hispanic householders compared with 49.2 percent of complex family households. Overall, about one quarter of complex family households were headed by householders of Hispanic origin in 2010, representing a significant 2 percentage point increase since 2006.

⁵ The 0.4 percentage point increase is noted in Table 1 and is not the same as the difference between estimates, due to rounding.

Not surprisingly, both noncomplex and complex family households show a notable increase in the proportion having at least one household member report being unemployed. In noncomplex family households, there was a 4.7 percentage point increase in households that had someone who was unemployed in 2010 compared with 2006. In complex family households, there was a 9 percentage point increase in households that had someone who was unemployed in 2010 compared with 2006. In complex family households, there was a 9 percentage point increase in households that had someone who was unemployed in 2010 compared with 2006, such that about one quarter of complex family households had an unemployed household member in 2010. Complex family households also had a higher incidence of poverty in 2010 (19 percent) compared with noncomplex family households (9.4 percent). The evidence from Table 2 suggests that complex family households were affected more by unemployment and poverty than was the case in noncomplex family households.

Table 3 presents results from models predicting the likelihood that individuals live in complex family households in 2006 and 2010 given characteristics of individuals, householders, and households. Overall, there is very little difference in the significant characteristics predicting a greater likelihood of living in complex family households in 2006 compared with 2010. Individuals who were never married were 3.6 times more likely than married individuals to live in complex family households in 2010. Individuals in households where at least one household member was unemployed were 2.4 times more likely than others to live in a complex household in 2010. Individuals in households where at least one household in 2010. Individuals in households where at least one likely than others to live in a complex household in 2010. The relationship of a greater likelihood of living in complex family households to predictors like unemployed household members and household members not in the labor force suggests that such households have been affected more by the economic downturn than noncomplex family households.

Table 4 displays households with the presence of adult children. Adult children are not included in the standard definition of complex households (because children, regardless of their age are considered part of their parents' nuclear family) and are not represented in the estimates of complex households shown on Table 1. However, recent research suggests that adult children have been a group disproportionately affected by the recent recession, not only with respect to their employment, but their household living arrangements as well (Wang and Morin 2009). As Table 4 shows, between 2006 and 2010, there was a 2.7 percentage point increase in adults aged 22 to 34 living in parents' households. Interestingly, the increase started before the recession, as there was a 0.4 percentage point increase in this living arrangement among adults age 22 to 34 between 2006 and 2007. There was an increase in the proportion of adults age 22 to 34 living with a parent *during* the recessionary period of 0.9 percentage points between 2008 and 2009. These data cannot show that unemployment was a precipitating cause of adults age 22 to 34 living with parents in greater proportions. But, the data do show greater increases between 2006 and 2010 in the proportion of households with an adult age 22-34 living with parent(s) with at least one unemployed household member (10.9 percentage point increase between 2006 and 2010) compared with adults age 22-34 who lived in other household arrangements (6.1 percentage point increase).

Are explanations for increases in complex family households during the recession found in geographic indicators?

A much discussed aspect of the current recession is the variation with which it has affected different metropolitan areas, states, and regions. Because the recession has hit some locations harder than others, the following analyses examine characteristics and variations at the level of metropolitan areas. The following analyses use the 2008-2010 ACS combined 3-year

data files which provide more robust analyses at lower levels of geography. The estimates from these data sets represent a combined estimate for the 2008-2010 3-year period which corresponds with the time period that followed the start of the recession.

Table 5 highlights information about complex family households from ten metro areas hard hit by the recession, particularly with respect with drops in housing prices. Given how tied the recent recession has been to the decline in the housing market, falling housing prices may be one indicator as to the health of a metropolitan area in 2010. The ten metro areas featured in this table include Tucson, AZ, Boise, ID, Palm Bay-Melbourne-Titusville, FL, Jacksonville, FL, Lakeland-Winter Haven, FL, Phoenix, AZ, Camden, NJ, Atlanta, GA, Portland, OR, and Chicago, IL. It is notable that these metro areas are from different regions of the country and have different local economic factors at work. The characteristics of complex households in each city reflect the diversity of each area. While 42 percent of Atlanta's population is Black, 4 percent of Portland's population is Black. In Tucson, 46 percent of the population is of Hispanic origin, while only 6 percent of Jacksonville's population is of Hispanic origin. While 40 percent of households in Boise had at least one household member who moved in the last year, 23 percent of Chicago households reported such movement. There are differences among the 10 metro areas featured in Table 5 and the economic characteristics of complex families living there. But, no one city stands apart as having complex families who have been particularly hard hit with regard to having unemployed family members, housing burdens, or income and poverty burdens. Thus, Table 5 reflects the diversity in the metro areas hard hit by falling housing prices, but there is little evidence to suggest that falling housing prices are related to the characteristics of complex family households.

Table 6 shows results from a multi-level analysis examining the likelihood that a family household is complex given county-level and household-level characteristics in the 2008-2010 3-year combined ACS data file. At the county-level, this model incorporates the percent unemployed, the percent white, and the percent Hispanic in all 3,143 counties in the United States. These variables are included in the model to determine if there are macro-level characteristics at the county-level that might be associated with a greater or lesser likelihood of living in a complex family household as compared with a noncomplex family household. Furthermore, household-level characteristics are included to understand if the characteristics of households and those living within them are associated with the likelihood of living in a complex family household, regardless of the macro-level factors occurring at the county level. This model was run with the Proc Glimmix command in SAS to control for the use of two levels of predictor variables in these logistic regression models (in other words, county- and household-level data). All variables were grand mean centered to aid with the interpretation of the final modeled results.

Looking at Table 6, the intercept does not have high variance associated with it (0.0883). This suggests that county-level clustering has a small effect on the likelihood that a family household will be a complex one. Looking at the county-level characteristics, while all are significant, the F values associated with them are not as large as the F values for the householder and household-level characteristics. This shows that county-level variations in the unemployment rate, percent White, and percent Hispanic are not as important for predicting whether a household is a complex family one, as compared with what is happening within the household and the individuals within it.

The two household characteristics that have the highest F values associated with them in Table 6 are whether at least one of the household members is unemployed and whether at least one of the household members is not in the labor force. Because of the high F values for each of these variables, Least Squares Means were calculated to understand the differences that having an unemployed household member or one not in the labor force would have on the likelihood of living in a complex family household.⁶ Having an unemployed household member had a higher probability for living in a complex family household than did not having an unemployed household member (0.37 compared with 0.20). Similarly, having a household member not in the labor force was associated with a higher probability for living in a complex family household than did not having a household member who reported not being in the labor force (0.37)compared with 0.20). The calculated odds ratios show that households with at least one unemployed household member were 2.3 times more likely to be a complex family household than households without an unemployed household member. Households with at least one household member who was not in the labor force were 2.2 times more likely to be a complex family household than households that did not report having household members out of the labor force. The findings in Table 6 suggest that the difficulties experienced by household members at the individual level were more often associated with complex family household arrangements than were the county-level unemployment characteristics. Across the United States, regardless of the local employment conditions, what mattered most for complex family living arrangements were the employment outcomes affecting families themselves.

Conclusion

⁶ The least squares means output and calculated odds ratios are not shown on Table 6, because this was run separately for two variables of interest: having at least one unemployed household member and having at least one household member who was not in the labor force.

There is modest evidence in this paper that suggests that complex family and nonfamily households increased from the period of 2006 to 2010 (1.0 percentage point). Within that increase, complex family households accounted for a 0.7 percentage point increase⁷ from 2006 to 2010 (Table 1). These increases, while constituting small shifts in proportions overall, were significant. Whether or not this change can fully be attributed to the recession is not fully discernable.

Unemployment is an important theme that emerges through the data in this paper. In this paper, household-level unemployment was investigated rather than focusing on the individual employment characteristics. This was done deliberately, because the data do not offer the precision we might need to fully understand the complexities of relationships and economic stability within the household. In other words, do household members live in a household in order to help a family member householder struggling to pay bills? Or do household members live in a household because they needed assistance and housing that the householder could offer? Or was the arrangement mutually convenient and of assistance to all family members living in a complex family household because of patchy and unpredictable employment prospects?

Using the household level measures of unemployment and absence from the labor force, there is evidence that unemployment has strong associations with complex family living arrangements. Certainly when comparing the percentage point change from 2006 to 2010 in the proportions of noncomplex and complex family households, complex family households have been more affected by unemployment. Both noncomplex and complex family households had higher proportions with at least one unemployed household member in 2010 than in 2006, but the increase was greater among complex family households (Table 2). Overall, 7.1 percent of

⁷ The 0.7 percentage point increase is noted in Table 1 and is not the same as the difference between estimates, due to rounding.

noncomplex family households in 2006 had at least one unemployed household member and this percentage increased to 11.9 percent by 2010 (4.7 percentage point increase).⁸ In contrast, 15.6 percent of complex family households in 2006 had at least one unemployed household member, increasing to 24.6 percent by 2010 (9 percentage point increase). With respect to unemployment, complex family households were already at a disadvantage prior to the recession, and the recession may have affected the unemployment of those living in complex family households to a greater extent by 2010. This is evident in logistic regression models (Table 3) which show that the odds for complex family households to have at least one household member unemployed or at least one household member who was not in the labor force increased from 2006 to 2010. Again, complex family households were more likely to have unemployed household members in 2006, but this is especially the case in 2010.

As shown in Table 4, there was a 2.7 percentage point increase in young adults aged 22 to 34 living in a parents' households in 2010 as compared with 2006 (Table 4). Again, the theme of unemployment reemerges: 30 percent of young adults aged 22 to 34 who were living in a parents' household lived in a household where at least one household member was unemployed as compared with 15 percent of adults aged 22 to 34 in other living arrangements. Certainly, not all of the young adults were unemployed themselves and may have been living in parents' households for reasons other than economic uncertainty. However, the increase in the proportion of adults aged 22-34 living in parents' households where at least one household member was unemployed is noteworthy (10.9 percentage point increase from 2006 to 2010).

Finally, Tables 5 and 6 explore what relationship, if any, macro-level housing and employment characteristics have on complex family households. Surprisingly, there is not

⁸ The 4.7 percentage point increase is noted in Table 2 and is not the same as the difference between estimates, due to rounding.

strong evidence in either table that macro-level housing and employment characteristics are associated with complex family households. Looking at metro areas that were especially hardhit by losses in housing values, there were no clear commonalities among the complex family households across these metro areas (Table 5). Table 6 reveals that in a multi-level model where county-level unemployment rates are incorporated in the model, the unemployment of the families themselves were more strongly associated with the likelihood of being a complex family household.

The evidence in this paper suggests that complex family households before the recession consisted of household members who were already at a greater disadvantage with respect to unemployment. The recession may have affected those most likely to live in complex family households more than others. Thus, the increase in complex family households could be attributed, in part, to higher unemployment of those living in such households. Such living arrangements are not necessarily tied to the unemployment rates of the local economy, but may be linked more to the characteristics of those who live in complex family households.

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