The Economic Organization of Extended Family Households by Race/Ethnicity and

Socioeconomic Status

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Abstract: This study examines differences in the amount of economic support or mutual benefit derived from extended family living arrangements by studying differences in monetary contributions to essential household expenditures across family units in extended family households. Using the 2008 Survey of Income and Program Participation, multivariate regression and selection models are estimated to assess racial differences in family contributions toward household expenses in extended family households. Extended family households have very unequal monetary contributions towards household rent and utilities, although Hispanics have less unequal monetary contributions compared to other racial groups. Hispanic and Asians extended family households experience decreasing inequality in financial contributions as the income of each family increases whereas no relationship between financial contributions and income is found for whites or blacks. This suggests a different cultural orientation to extended family living arrangements for Asians and Hispanics compared to non-Hispanic whites.

Keywords: Ethnicity; Family economics; intergenerational; race

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Running Head: Rental Contribution in Extended Households by Race

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INTRODUCTION

The proportion of the population living in extended family households has steadily increased from 12 percent in 1980 to 18 percent in 2012, with even higher rates among race/ethnic minority groups (Fry and Passel, 2014). Despite this increase in extended family households, information on the economic organization within these households is relatively sparse. Higher rates of extended family households among minority and impoverished groups have often been attributed to economic necessity with little attention paid to the extent the economic need was of all members in the household or just some members of the household. As the number and proportion of people living in extended family households has increased, the heterogeneity in the factors that precipitate their formation as well as the differences in expectations that accompany their formation have undoubtedly changed. For example, the extent to which these households are formed in response to chronic versus episodic vulnerability among low-income families is unclear. Economic motivations for extended family households could be to make living arrangements more affordable or to assist family members in need. Although society has seen an increase in the incidence of residential phenomena such as cohabitation and extended family living arrangements, the economic organization of these households in which complex familial relationships evolve is not well understood (Cherlin, 2010). Nor is it clear the extent to which organizational difference may reflect differences in socioeconomic status, racial differences in cultural expectations, or some combination.

Extended family living arrangements are often framed as an informal safety net for family members in need or as a cultural preference for living with extended kin (Kamo 2000; Pilkauskas, Garfinkel, & McLanahan, 2014). As such, the limited work on the economic organization of these households has focused on who supports who within the household using income receipt of members (Cohen and Casper, 2003; Kahn, Goldscheider, and García-Manglano, 2013). However, the benefits may be mutual and exchanges may occur across generations (Pilkauskas, 2012). Further, income receipt within households may not correspond with the economic organization of these households, given prior research has found the distribution of resources within households to be unequal (Himmelweit et al., 2013). Therefore, income receipt may not match up with actual monetary support to household expenses. Raising the question, do individuals who move in get a "free ride," or is there an expectation of a financial contribution?

Income dynamics within extended family households have remained relatively unexplored; thus, in this research, I begin to unfold the patterns of these within-household income dynamics. Prior research on within-household income inequalities has tended to focus on gendered inequalities of economic decision-making within couples; however, the greater complexity of household forms in contemporary society requires an amplification in the scope of our thinking about household economic processes (Himmelweit et al., 2013). This study will examine the within-household economic dynamics of extended family households. Racial

differences in within-household economic dynamics will also be examined to assess the extent to which differences may reflect both cultural expectations and economic differences across groups.

BACKGROUND

Shared Living Arrangements

Shared living arrangements occur in many forms, with the extension of generations both vertically and horizontally. This article focuses on extended family households, defined as a household with any relative that is not the spouse/partner of the householder or child under the age of 25. Extended family households may include parents or adult children. They may also be extended horizontally to include other family relatives such as siblings, aunts, and cousins. This paper uses the household reference person to define the primary or host family within the extended family household and identifies all other family units within the household as auxiliary families.

Racial and ethnic minority families are significantly more likely to live in extended family households than whites (Kamo 2000; Keene and Batson, 2010). Differences across groups have been attributed to both economic reasons and cultural preferences (Kamo and Zhou, 1994; Burr and Mutchler, 1992). Blacks and Hispanics have higher rates of poverty and lower household incomes (Dockterman, 2011), which may make pooling resources more beneficial (Angel and Tienda, 1982). Additionally, black and Hispanic households have a net-worth of about \$6,000 compared to white households who have a net-worth of about \$113,000 (Taylor et al., 2011). This wealth disparity suggests that in times of economic need blacks and Hispanics

may need to rely more on family since they have less wealth to weather a rough patch. Stronger cultural norms for caring for family in need may also contribute to higher rates of extended family households among Hispanics and Asians (Burr and Mutchler, 1999). A key question then involves whether different household structures and organization primarily reflect socioeconomic status, racial differences in how families are expected to function, or some combination of the two.

Extended family households can be formed with either of two basic economic understandings: informal social assistance or mutual benefit. Families may provide help altruistically, based on need, which has been found in help from parents to children (Fingerman et al., 2009; Ward and Spitze, 2007). This one-sided type of help would be an example of informal social assistance. Families may also share the costs of household expenses to gain economies of scale and provide a mutual benefit to both families. An important note is that the focus of this study is on monetary support, and does not measure non-monetary support that may be exchanged within households, such as unpaid childcare.

Research that has looked at economic inequality in extended family households has concentrated on income in co-residential parent—child dyads, noting the shift over time towards parents having a greater share of the combined income and the stability of households with more income inequality (Glick and Van Hook, 2011; Kahn et al., 2013; Ruggles, 2007). Although support mostly flows from parents to children, this is not always the case, and deviations from that pattern are particularly common for certain groups. For example, assistance has been found

to flow from children to parents in low-income and minority families (Fuligni, 2007; Napolitano, 2015; Sanchez et al., 2010). Qualitative work has found that, in middle-class families, most young adults who return to parental homes do not contribute financially to the household, regardless of income, and that those that do contribute, do so only begrudgingly (Sassler et al., 2008). On the other hand, for adult children in low-income families, contributing financially is much more common (Napolitano, 2015). Although qualitative work has provided a picture of how extended family households operate in distinct ways for certain subgroups, we know far less at the population level about group differences or how these households function economically.

Sharing one house might be more economical for both families involved in a multifamily living arrangement. The commonly presumed dichotomy of one generation supporting the other does not reflect the complexities of extended family households, some of which may not be able to survive without multiple earners. The 1960s saw a large influx of wives into the labor market due to economic shifts that required couples to put both members into the workforce in order for their households to maintain their economic position (Oppenheimer, 1973). Hence, it may be that when marriages remain intact and both spouses work, the household unit can remain as a single family, whereas individuals who do not marry or who divorce (delayed marriages and divorces being more common today than in the 1960s) must seek alternatives to the dual-earner couple model by joining or forming extended households. Extended family households are more common among unmarried mothers compared to those who are married or cohabitating (Pilkauskas, 2012).

Economic theories of inter-household transfers and kinship have mostly focused on interaction between couples in households, with support theorized as altruistic, an exchange, or collective (Becker, 1981; Bennett, 2013; Himmelweit et al., 2013). Collective models of household resource sharing suggests shared priorities, an agreed upon definition of fairness, and sufficient flexibility to renegotiate arrangements when circumstances change. The more people involved and the greater the uncertainty about the future, the more difficult this becomes (Beck and Beck, 1984). Households with multiple families contributing to rent and utilities imply a level of cooperation that suggests a collective orientation to household economics. Interhousehold transfers within extended family households may occur altruistically without an expectation of reciprocity to help family members in need. When one family pays all of the rent and utilities, this would suggest an altruistic orientation. Exchange theory suggests some sort of exchange in resources, similar to theories of the division of labor within the household (Becker, 1981; Bennett, 2013; Pollak, 2005). Exchanges that include non-monetary contributions are unable to be assessed in the current study.

Intergenerational solidarity theory provides a framework for understanding private welfare support, as the theory provides the base for contemporary research on intergenerational relationships. This theory identifies several factors on which support depends, including need, closeness, and norm of obligation (Bengston et al., 2002). Intergenerational support, both "up" to parents and "down" to children, is thought to be motivated by altruism, reciprocity, and feelings

of family obligations (Seltzer and Bianchi, 2013). Closeness of relations may infer a greater acceptance of providing support for families, so those extended up or down may be less likely to be making economic contributions. On the other hand, horizontal relations may be less close and have a greater expectation of contributions. Contingency theory would predict that this support is available in times of hardship and directed to members with the greatest needs (Fingerman et al., 2009). Within shared living arrangements, the primary family who is able to maintain a home, likely has less need, therefore the host may be expected to shoulder a majority of the costs to maintain the household (Cohen and Casper, 2002).

Racial differences in intergenerational support may be rooted in cultural preferences and normative expectations. Older black and Hispanic adults are more likely to agree that each generation should provide assistance through shared living arrangements (Burr and Mutchler, 1999). Normative differences in filial assistance by race have also been found in surveys of younger generations, with Asian and Hispanic youth feeling more obligation to help parents than non-Hispanic white youth (Fuligni, 2007). Racial and ethnic norms of obligation may define responsibilities to family and potentially expand one's sense of obligation to a wider array of extended kin, suggesting more familial support to horizontal family ties. Stronger norms for assistance across generations in minority families may suggest that shared living arrangements are used to provide economic support to family in need.

The decision to live in an extended family household is likely influenced by some combination of preferences and economic motivations. Among economic motivations, extended

family households may form as a strategy for coping with low-wage and involuntary part-time employment or as a response to individual hardships to weathering economic rough patches. One way to gain leverage on the economic function of extended family households is to assess their economic organization. If these households form under mutual benefit one would expect all families in each household to be contributing financially. On the other hand, if these extended family households form in response to individual hardships, one would expect one family to provide resources for its co-residential family in need.

In this paper, I draw from theories of inter-household transfers, intergenerational support, and filial responsibility to study familial support in shared living arrangements. I focus on individual family units' contributions to essential household expenditures within extended family households. I assess three related questions:

- 1) What is the economic organization of extended family households? How are monetary contributions divided among families within extended family households? Living arrangements can provide a private welfare function or form under mutual support.

 Altruism and contingency theory would suggest these living arrangements are providing a social safety-net to those in need. On the other hand, collective models suggests shared living arrangements have a mutual benefit. I hypothesize collective households will be more common among those with fewer household resources.
- 2) Do auxiliary families contribute money towards the household expenses according to their financial means or their familial relationships? Intergenerational solidarity theory

suggests that providing resources to family is more likely among closer relations, such as vertical extensions as opposed to horizontal. A collective household model would suggests contributions correlate to a families' ability to contribute. I hypothesize contributions to household expenses will be made according to family's ability to contribute, with families with more income contributing a greater proportion of household expenses.

3) Are the economic strategies and organization of household monetary contributions different across race and ethnic groups? Are racial differences in financial contributions moderated by the level of family income? Racial minorities' stronger normative obligations of providing assistance might suggest racial minorities will be more likely to benefit from a private welfare function of extended family households (Burr and Mutchler, 1999; Fuligni, 2007). On the other hand, blacks and Hispanic families often have fewer resources and may be more likely to live in households in which all members must contribute in order for the household to survive. I hypothesize that contributions will be most equal in black and Hispanic households given the structural determinants of disparities for these groups, but once controlling for these structural determinants contributions will not differ across groups.

DATA AND METHODS

Data

The data for this study come from the fourth wave of the Survey of Income and Program Participation (SIPP; http://www.census.gov/sipp/), which provides a nationally representative sample of 36,147 households in the U.S., along with information on all members living within the household. Wave 4 of SIPP collects detailed information on living arrangements, income, employment, monetary contributions to household expenses, and health in 2009. The sample is limited to the 4,650 extended family households without unrelated adults. Of these extended family households, 148 households are excluded because the household reference person is of "other" race, 437 households are excluded because all members are younger than age 25. Additionally, 151 cases are dropped because of inability to calculate their rental contributions. The U.S. Census Bureau imputes missing data on most variables in SIPP using a "hot-deck" procedure, therefore no cases in this analysis were lost due to missing data. The final analytic sample for this study is the 3,914 extended family households comprised of 7,998 family units and 11,368 adults between the ages of 25 and 85. Although information is collected on all individuals in the household, typically their responses are answered by proxy of the household reference person. Though this may question the reliability of these reports especially for sensitive topics such as income, previous work using administrative data has found that the household reference person reports other household members' income with the same level of measurement error as they report their own income (Bound and Krueger, 1991). Although in terms of monetary contributions to the household expenses, those receiving money may under estimate

contributions as has been found among other intergenerational transfers (Kim et al., 2011). The implications of reporting bias are further addressed in the discussion.

For the purposes of this analysis, "extended family households" are those comprised of two or more family units as defined by the smallest economic decision making unit within the household or the minimal household unit (Ermisch and Overton, 1985). A family unit consists of married or cohabitating partners and their unmarried children under age 25 living in the household. Family units can take many forms including, an unmarried adult, a couple and their children, or a childless couple. Although households can also include non-related extended units, such as roommates, the dynamics of these relationships are likely very different; therefore, households with any non-related members (that are not a cohabitating partner) are excluded from this analysis.

A further distinction among family units is made in the analysis to distinguish between the "primary family" in the household, which is defined as the family with the household reference person, who is the owner or renter of record, and the "auxiliary families" who are all the other family units in the household. So, for example, in a household with a married couple (in which one of them is the household reference person) and one adult child aged 25 or older, the adult child (and each of his/her own family unit's immediate relatives — i.e., partner and/or offspring — if any) would be considered an auxiliary family. Extended family households can be composed of one or more auxiliary families (about 15 percent of households have more than one

auxiliary family), standard errors are adjusted to account for the possibility of multiple auxiliary families in the same household.

Dependent Variables

The main dependent variable is the proportion of monetary contributions made by each family towards household rent and utilities. Monetary contributions are measured as the amount of money contributed towards two key household expenditures: rent or mortgage and utilities for the household in the last month. Some households report that they do not pay anything for rent and utilities, these households are excluded from the analysis (N=70 households). The household reference person reports the cost of rent and utilities for the household (excluding any government subsidized rent or transfers) and the amount paid by household members. However, the household reference person is only allowed to name up to three people who contribute (including themselves). Therefore, households that name three contributors (only 5 percent of households name three contributors) with more than 3 adults eligible as contributors (those 18 and older excluding spouses) are excluded from the analysis, because other household members may have also made contributions that are not captured (N=81 households). From these reports of monetary contributions by household members, the amount of expenditures contributed is aggregated up to the family level to create the proportion contributed for each family towards total household expenses.

At the *household* level, a categorical variable is created to assess the economic organization of households with three categories: mutual economic support, family safety net,

and unneeded family safety net. Mutual financial support is defined as households in which the primary and at least one of the auxiliary families are contributing money to household expenses. Though contributions may still be quite unequal, these households still suggest a collective orientation to their economic organization. Family safety-net households are households where the primary family pays all expenses and the auxiliary families have such low incomes that using federal poverty thresholds they would be considered in poverty if on their own. The last and largest category of households is those with enough resources to not be in poverty if on their own yet contribute no income towards household expenses.

Family Level Independent Variables

The primary independent variable is the race/ethnicity of the head of the family, which in over 90 percent of families is the same as all members of the family. Race and ethnicity is collapsed into a single categorical variable, with respondents classified as non-Hispanic white, non-Hispanic black, Asian, or Hispanic. Less than 4 percent of the sample identifies as some other race and are excluded from this analysis. Although 90 percent of extended family households are monoracial, households with multiple races may have varying levels of social support, as a sensitivity test, the analysis was replicated on a sample excluding households with multiple races and results were consistent. An indicator of nativity is also included, coded '1' for families in which the head is foreign-born.

Auxiliary families are classified into three mutually exclusive categories of extension type based on the families' relationship to the household reference person: downwardly extended

(include adult children or grandchildren); upwardly extended (include parent of the reference person); horizontally extended only (include sibling or other relatives). Because these types of extension are highly correlated with age of the family head, age is not included in multivariate analysis. Education is coded as the highest level of educational attainment within the family: "less than high school," "high school graduate," "some post-secondary education," and "college completion or more."

Some measures of family characteristics are measured for both the primary family and the auxiliary family including: income, the presence of young children, and the health of the family members. Income is measured as each family's total income in thousands for that month by combining the individual income for each member of the family from all sources including: earned income, social security income, pension income, asset income, and other income from government programs. Income is also measured at the household level by combining the income of all families in the household to assess the poverty status of the household using the U.S. Census poverty thresholds and to create household income quartiles. An indicator of the presence of any young children aged 0–4 in the family is also included as a proxy for the need for intensive childcare, which may influence both living arrangements and parents' ability to contribute to household expenditures. Further if the primary family has young children, it may indicate some exchange that is not captured by the monetary contributions. Similarly, the presence of any members in poor or fair health is included, to indicate potential exchange in care among families. Homeownership is measured at the household level and indicates whether the

living quarters are owned or being bought, typically by the household reference person. Some households receive subsidized rent (including those living in public housing) and/or other assistance with household expenses, however receipt of these programs is measured at the household level, so it cannot be determined if some families use it as a trade-off for determining who pays household expenses. Supplemental analysis found no significant difference in contributions to household expenses among families in households receiving these types of assistance.

Analytic Strategy

The analytic strategy proceeds in two parts. First, descriptive analysis of households by the economic organization are presented to give a basic understanding of the characteristics associated with household economic organization. In the second stage of the analysis, the focus is on family units. Descriptive statistics by race for primary and auxiliary families are estimated. Then multivariate regression models are estimated to assess racial differences in the proportion of monetary contributions to household expenditures among auxiliary families (given near universal contributions among primary families). The last step of the analysis quantifies the disjuncture between one's family having income and one's family contributing to household expenditures for auxiliary household members.

Although having very low income is a strong predictor of providing support, practically speaking, in order to contribute income towards rent, a family must have income to contribute in the first place. In order to adjust for the low income that precludes contributions, I estimate a

series of Heckman selection models to assess differences in contributions accounting for having income to contribute (Heckman, 1979). In these models, two equations are estimated simultaneously: (a) a selection equation explaining whether respondents have a "minimum amount" of income to contribute and (b) an outcome equation assessing the proportion of rent and utilities contributed to the household while simultaneously accounting for the estimated error from the selection equation. This model assumes that the likelihood of contributing money to household expenses is a function not only of the independent variables, but also upon the likelihood that a family has income to contribute.

The criteria for the selection model of whether or not a respondent's family unit within the household has a "minimum amount" of income is defined as follows. Family income is the sum of reported income from each member of the family unit. Because 92 percent of families report at least some income and because contributions to the household would be difficult at very low levels of income, I consider a family to have a "minimum amount" of income if they have a monthly income of at least \$580. This amount corresponds to half time at the federal minimum wage of \$7.25. Among this sample, 73 percent meet the threshold. As a robustness check, alternate cut points were tested, yielding similar substantive results.

RESULTS

Household Level Descriptive Findings

The economic organization of two thirds of households was an unneeded safety net household, meaning only the primary family paid for rent and utilities despite auxiliary families

having enough income to live on their own above the poverty line (Table 1). One-fifth of households had mutual support with monetary contributions coming from both primary and auxiliary families. Only 14 percent of households had auxiliary families not contributing because of very low incomes. Family safety-net households had the largest share of poor households (52.9 percent) and those in the lowest income quartile, suggesting these poor auxiliary families may be straining already limited resources. A small minority of mutual support and unneeded safety net households were poor (7.9 percent and 3.1 percent, respectively).

Mutual support households had the highest proportion of horizontally organized households and the lowest proportion of households with auxiliary families that were downwardly extended. Unneeded safety net households were most common among households with auxiliary families that are downwardly extended, perhaps reflecting norms about contributions from children. Family safety net households had similar types of extension as unneeded safety net households, with slightly more upward, horizontal, and mixed households compared to unneeded safety net households.

Most unneeded safety net households were owned by the household reference person.

This may indicate less need for rent and utilities by the primary family. Family safety-net households had the least educated household reference person whereas unneeded safety-net households have the most educated, with mutual support households in between. Unneeded safety-net households had the largest proportion of non-Hispanic whites whereas safety-net and

mutual support households had larger proportions of Hispanics. Safety-net households had the largest share of black households.

[Table 1 About Here]

Family Level Descriptive Findings

Next, I present descriptive statistics of families by race/ethnicity and family type in Table 2 to highlight racial differences in the family contributions to household expenditures and other characteristics of both primary and auxiliary families. Nearly all of the primary families contributed money towards household expenses across race and ethnic groups. Non-Hispanic white primary families contributed 89.7 percent of the household expenses on average, whereas primary Hispanic families contributed only 83.6 percent. Hispanic auxiliary families were most likely to be contributing rent and contribute the highest proportion of household expenses among all race/ethnic auxiliary families. Though Asian auxiliary families were also more likely to contribute compared to both non-Hispanic white and black families.

[Table 2 About Here]

Primary families were more educated than auxiliary families, and Asian families had higher levels of education than other race/ethnic groups but also the largest educational gap between primary and auxiliary families. In non-Hispanic white and black families, the auxiliary family was more likely to have young children than the primary family, perhaps the grandchildren of the primary family head. However, both Asian and Hispanic primary families were more likely to have children than auxiliary families; this matches race differences in family

extension. The high proportion of primary families with young children in Asian and Hispanic families (15.1 and 17.3 percent respectively) provided greater opportunity for auxiliary families to provide informal childcare assistance. Non-Hispanic whites and blacks were most likely to be vertically extended down with 68 percent of auxiliary families including the adult child or grandchild of the householder. Whereas Asians were almost twice as likely as other race/ethnic groups to have families upwardly extended with parents of the householder. About a third of Hispanic auxiliary families were horizontally extended, the most of any race/ethnic group.

Having a family member in poor health was most prevalent in primary black families and then primary non-Hispanic white families. Primary families were more likely to be headed by a married couple than auxiliary families across all race/ethnic groups, though marriage rates were high among both primary and auxiliary Asian families. Within race/ethnic group, primary families had more income than auxiliary families, especially non-Hispanic white and Asian primary families. White households were most likely to be organized as an unneeded safety net, while Hispanic households are least likely. Hispanics were most likely to provide a safety net for family followed by blacks, with Asians and whites being much less likely to provide a safety net for household members.

Family Level Multiple Regression

Results so far have suggested racial differences in the economic contributions of auxiliary families, with Asians and Hispanics having more equitable economic contributions. However, differences may also have been due to differences in family and household characteristics. In

order to test whether contributions to household expenditures represent consistent racial differences in family economic norms, regression models on the proportion of monetary contributions to households' expenditures are presented in Table 3. In the first stage, only race and extension type were included; then, socioeconomic characteristics of the auxiliary family were included, and finally socioeconomic characteristics of the primary family were included.

Model 1 tests whether race differences persist with controls for type of family extension. Hispanics auxiliary families contributed a significantly greater proportion of household expenses compared to non-Hispanic whites (b=4.62, se=1.29), regardless of family extension type. Similarly, Asian auxiliary families also contributed a greater proportion household expenses compared to non-Hispanic whites (b=4.20), though not quite statistically significant. Respondents in vertically extended upward and horizontally extended households were also more likely to contribute than those vertically extended down.

[Table 3 About Here]

Once controls for auxiliary characteristics were added to the model, race and household extension type differences remained. Auxiliary families headed by a married couple contributed a greater proportion of money to household expenses. Surprisingly, families that had a member in poor health contributed a greater proportion to household expenses. Perhaps having a member in poor health was associated with disability insurance that was used to compensate for care potentially received. Having an employed family member was also associated with greater contributions, as was auxiliary family income. Overall, these results suggest Hispanics were

more likely to have contributed than non-Hispanic whites, regardless of their own economic position.

Contribution of income to the household expenses may not have only depended on the resources available to auxiliary families but also the needs of the primary family. Model 3 controlled for the socioeconomic status of the primary family as well as potential need for care by including indicators of any young children and any poor family members in the primary family. Auxiliary families, net of other controls, contributed less money to households that are owned by the primary family and where primary family has higher income. Additionally, if the primary family had young children, auxiliary families contributed less money. This may have indicate some level of informal care exchange in these families. Controlling for the socioeconomic characteristics of the primary family however did not change the associations between the auxiliary family characteristics and proportion contributed. Hispanics continued to contribute a greater proportion of household expenses, though the difference was about one percentage point lower once accounting for the primary family characteristics.

In the case of unequal contributions, one reason these may arise is that, simply, some families have no income at all, an economic reality which couches household relationships differently than when all families do have income but co-reside without jointly supporting their shared home. Hence, in the next set of analyses, I accounted for families' having potential income to contribute as having at least \$580 (the equivalent of working 20 hours a week at

minimum wage). Model 4 included the same controls as Model 3 but was run using a selection equation.

Controlling for having income, Hispanics and Asians had an even larger positive association with proportion of rent and utilities contributed compared to non-Hispanic whites. Upwardly extended and horizontally extended households also contributed a greater proportion to household expenses compared to downwardly extended households. Married couples also continued to have higher rates of contributions. Having an employed family member or family member in poor health was no longer significant. The economic characteristics of the primary family continued to be significant, with lower contributions for houses that were owned and with higher primary family income. Respondents who lived in a household that is owned rather than a property that is rented by a co-resident were less likely to contribute money towards household expenses to the household's owner. This may suggest that expenses are lower overall than they were in a rental unit (where rent is due every month), a situation that, in turn, may have lead to lower expectations of financial compensation. Young children in primary families also remained significant, which means primary families with young children still provided more resources than auxiliary families. Overall, accounting for having income using a selection equation did not alter key relationships observed.

Given persistent racial differences in the proportion of household expenses contributed, an interaction term between race and family income was included in Model 5 to assess how consistent this racial difference is across different levels of family income. The relationship

between family income and amount contributed was significantly different for Asians and Hispanics compared to non-Hispanic whites. The racial differences in proportion of money contributed to household expenses observed previously were larger at higher levels of family income. The marginal effects of these significant interaction terms were plotted in Figure 1 to show the increasing marginal effect of race at higher levels of family income.

[Figure 1 About Here]

As family income increases, the racial difference in contributions between non-Hispanic whites and Hispanics increased, as denoted by the gray line increasing up away from the reference line (representing non-Hispanic whites). At low levels of income Asians had a smaller amount contributed compared to non-Hispanic whites, but as income increases past about \$1250 the different crossed over such that at higher incomes Asians contributions increased. The difference between low and high-income Asians households may have accounted for non-significant differences between non-Hispanic whites and Asians in previous models. Overall, racial differences were largest at higher levels of family income, with the proportion contributed for Hispanics and Asians increasing relative to their family income, but the proportion contributed among non-Hispanic whites did not vary by family income. This may have indicated a different cultural understanding and household organization among Hispanics and Asians.

DISCUSSION

The first goal of this study was to assess variations in the economic organization of extended family households. The findings make several contributions to the literature on family

and living arrangements. First, these results show that extended family households are predominantly supported by the primary family in the household, with few contributions from other household members. The lower number of households with mutual contributions suggests that the economic organization of most extended family households aligns with intergenerational solidarity theory; the primary household family supports additional members, either to weather a rough patch, or to offer an extended period of assistance (Bengston et al., 2002). Many of the families not contributing have sufficiently large incomes that independent living would be feasible. Intergenerational solidarity in these extended family households extends beyond just those in desire family need, but implies that obligations to shared living arrangements may occur for a multitude of reasons.

Given the large share of unneeded dependence, extended family households may not be purely economically motivated. Assistance through coresidence is not aimed solely at those with the greatest economic need as contingency theory would suggest (Fingerman et al., 2009). However, having income above the poverty line may theoretically be enough to live independently, especially in some areas where housing costs are high, independent living may still be difficult. Overall, the economic organization of extended family households appear to operate under altruistic principles with few families exchanging or pooling economic resources.

The second question examined the determinants of auxiliary families contributing money towards household expenses. While no direct measure of closeness is available in the data, vertical family ties are often theorized to be closer than horizontal ties. As hypothesized and

intergenerational solidarity suggests horizontally extended families contributed the largest proportion towards household expenses (Bengston et al., 2002). Upwardly extended families contribute more income towards household expenses than downwardly extended families, intergenerational solidarity may be stronger for relationships with children than with parents. The expectations between the parent and child relationship may prevail such that parents do not want to ask their children to contribute. Suggesting households with adult children are reverting to childhood dependency roles regardless of the actual income of the adult child. Adult children perhaps are more likely to move in with their parents if they know they will not have to contribute as a way to pay off debt and increase savings. Additionally, older parents may contribute financially because they are not able to contribute to physical household chores if their health is declining, which could account for some unobserved exchange within the household.

The norms of filial assistance embraced by blacks and Hispanics are evident from a larger share of black and Hispanic families operating as a safety-net for families without enough money for independent living (Burr and Mutchler, 1999). Asian and Hispanic auxiliary families, however, are more likely to contribute to household expenditures than those from other racial groups. These families operate on and organize around a different economic expectation; namely, that all families contribute according to their means. The extended family household function for these Asian and Hispanic extended families does not operate under a contingency theory but rather the organization of these households appear to be motivated by an economic survival strategy that requires support from all members. Additionally, even once adjusting for

having income from earnings, benefits, and other sources, racial differences are found in household economic contributions: Hispanic auxiliary families are more likely to contribute financially, especially if they have income. Racial differences are most pronounced at higher levels of income. Asians are also more likely to contribute financially than non-Hispanic whites at high levels of family income. Though even in Hispanic families with mutual support, contributions by auxiliary families are still relatively low and rarely reach parity with the contributions of the primary family. The duration of coresidence may effect contributions, however in supplemental analysis, length of residence in current household was only marginally associated with contributions to household expenses and did not change any key findings. Suggesting variances in the length of coresidence do not drive these racial differences, but perhaps a different orientation to shared households among Asians and Hispanics.

This study is not without its limitations. First, contributions to the household expenses only include monetary contributions for rent, mortgage, or utilities. These expenses represent almost half of household expenditures on average, but they do not account for other types of spending or unpaid labor that may be exchanged within households (Reichenberger, 2012). However, other types of spending within the household are less collective spending for the household, so assessing rent and utilities assesses expenses that all members of the household benefit from. Research on families in extreme poverty has found that contributions to the household may not be through cash, but rather from the contribution of non-cash social welfare benefits. For example, food stamps could be traded in exchange for rent (Edin and Shaefer,

2015). In terms of unpaid work, we know the number of respondents who report they are not working because of care responsibilities is low (Dalirazar, 2007). Contributions to household expenses were significantly lower in households in which the primary family had a young child, lower contributions may be due to an exchange of unpaid care, though this is not testable. However, given Hispanic and Asians primary families were much more likely to have young children, this suggests the inclusion of unpaid care work for young children would likely increase racial and ethnic differences found in this study given these racial groups already had the largest contributions to household expenses. In terms of other unpaid work within the household, it is difficult to assess these although qualitative work suggests that adult children in extended families perform relatively few household chores (Sassler et al. 2008), but how this dynamic might differ by kin relationship and across racial/ethnic subgroups is unknown. The inclusion of in-kind support could change the results in some important ways especially for blacks, given previous research has indicated high levels of informal support among blacks.

A second limitation is that this study only captures income from one point in time.

Reciprocity may play out over an extended period. For instance, a family member may not contribute while looking for a job, but once employed, may start contributing. Alternatively, families may have moved in with their family as a safety-net when they had low incomes and despite new incomes the economic organization has not been reassessed. A third limitation may stem from the reporting protocol used in the SIPP. The reference person's reports may be biased towards his/her own contributions. In a majority of households, the reference person is the owner

or renter of record, in about 12 percent of the sample the head of the family is not interviewed.

Amounts of contributions likely vary by who is reporting, however the reporter in the household does not vary by race/ethnicity. In supplemental analysis, non-interviewed respondents have slightly lower reports of contributing, but including interview status does not change key results.

Despite these limitations, this study offers new insights into the economic organization of extended family households. By analyzing not only the income of different household members, but also their economic contributions to key household expenditures, this study improves upon prior research. Not only are incomes not equal in extended family households (Kahn et al., 2009; Cohen and Casper, 2002), economic contributions are far more unequal than actual income. Shared living arrangements are in line with altruistic views of household economics since assistance to family occurs with little economic pooling of resources or monetary exchange (Becker, 1981). This is an important distinction, especially given the findings that having income in not synonymous with contributing income. A majority of our knowledge on the contributions of auxiliary household members has come from qualitative studies and has focused on the contributions of adult children returning to the parental home (Sassler et al., 2008; Newman, 2012). Using nationally representative data, the current study allows a more accurate picture to emerge of how these households are organized at the national level and, further, can identify differences not only across race/ethnicity, but also across different types of extended family households. Most families who live together appear to be able to afford to live independently;

however, this is less the case for Hispanics, suggesting structural differences in addition to cultural differences in sorting families into shared living arrangements.

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Table 1: Household Characteristics by Economic Organization

	Mutual Support Household (19%)	Family Safety Net Household (14%)	Unneeded Safety Net Household (67%)
Poor Households	7.9	52.9	3.1
Household Income Quartile			
1st (Low Income)	16.8	71.5	12.4
2nd	25.8	17.3	25.0
3rd	26.2	8.8	29.5
4th	31.2	2.4	33.1
Family Extension			
Downward	43.2	52.7	60.5
Upward	13.3	13.6	11.5
Horizontal	33.4	21.4	18.3
Multiple	10.1	12.3	9.7
Household Tenure			
Own Home	66.8	59.3	80.9
Household Size	3.5	3.7	3.6
Education of Householder			
Less HS	19.5	32.0	14.7
HS	25.5	32.1	27.8
Some College	35.2	25.9	34.5
College	19.8	10.0	23.0
Race of Householder			
Non-Hispanic White	54.9	40.9	61.2
Non-Hispanic Black	15.2	24.3	16.7
Asian	6.0	4.9	4.6
Hispanic	23.9	29.9	17.5
Nativity of Householder			
Foreign born	24.3	32.2	20.6
N	740	562	2,612

Table 2: Means and Proportions of Family Characteristics by Race and Family Type

		lispanic		lispanic					
	W	hite	Bl	Black		sian	Hispanic		
	Primary	Auxiliary	Primary	Auxiliary	Primary	Auxiliary	Primary	Auxiliary	
Contribute Any Rent	94.4	13.4	93.9	15.5	91.2	18.8	91.6	21.6	
Proportion of Rent and Utilities									
Contributed	89.7	7.3	87.5	8.5	85.4	11.8	83.6	12.7	
Education									
Less HS	8	12.1	15.9	14.5	8.4	16.5	30.6	29.7	
HS	26	33.2	24.8	36.6	15.9	19.6	24.3	32.2	
Some College	37.3	34.4	42.5	35.1	20.7	25.1	30.8	28.5	
College +	28.7	20.3	16.8	13.8	55	38.8	14.3	9.6	
Young Children Present	3.9	4.6	6.4	8.5	15.1	2.8	17.3	7.8	
Any Member in Poor Health	26.9	20.6	31.2	20.3	22.5	18.6	25.6	20.5	
Married Family Head	51	8.7	31.4	6.9	66.6	30.7	56.2	19.1	
Family Income	\$4,641	\$1,889	\$3,088	\$1,442	\$4,839	\$1,994	\$2,960	\$1,476	
Family Size	2	1.2	1.9	1.3	2.4	1.3	2.6	1.4	
Family Extension									
Downward		68.0		68.0		46.2		49.2	
Upward		12.5		7.4		24.2		14.4	
Horizontal		19.5		24.6		29.6		36.4	
Economic Organization									
Mutual Support	1	18.5		16.5		22.6		22.2	
Safety Net	1	0.2	20.3		1	3.8	23.1		
Unneeded safety net	7	1.3	6	3.2	63.6		54.7		

Number of Families	2,343	2,358	745	800	203	243	623	683
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Notes: All values are weighted.

Table 3: Proportion of Rent and Utilities Contributed Among Auxiliary Families Using Regression and Heckman Selection (N=4,084)

	No Selection							40		
	Model 1		Model 2		Model 3		Model 4		Model 5	
Demographics										
Race of Family Head (Ref=Non-Hispanic White)										
Non-Hispanic Black	1.12	(0.96)	1.69	(0.97)	-0.02	(0.97)	0.25	(1.29)	-0.29	(2.13)
Asian	4.20	(2.39)	3.46	(2.27)	3.78	(2.24)	5.46	(3.00)	-4.18	(3.62)
Hispanic	4.62***	(1.29)	4.38***	(1.25)	3.34**	(1.25)	5.64***	(1.67)	-0.29	(2.80)
Family Extension (Ref=Downward)										
Upward	5.74***	(1.40)	6.19***	(1.56)	6.44***	(1.51)	4.59*	(1.95)	4.49*	(1.95)
Horizontal	7.38***	(1.11)	7.51***	(1.12)	7.19***	(1.11)	7.00***	(1.42)	6.88***	(1.42)
Family Head is Foreign-born	-1.65	(1.37)	-1.88	(1.34)	-2.70*	(1.31)	-2.35	(1.74)	-1.73	(1.71)
Auxiliary Family Characteristics										
Highest Education (Ref=Less HS)										
High School			-0.68	(1.28)	-0.66	(1.26)	-1.29	(1.75)	-1.46	(1.75)
Some College			-0.36	(1.36)	0.86	(1.35)	-0.04	(1.84)	-0.34	(1.84)
College			-1.36	(1.53)	1.31	(1.53)	1.08	(2.05)	0.58	(2.06)
Married Family Head			4.98**	(1.80)	5.09**	(1.78)	5.87**	(2.19)	5.33*	(2.14)
Any Poor Health			3.04**	(1.08)	2.37*	(1.05)	1.53	(1.39)	1.80	(1.38)
Any Young Children			1.40	(1.95)	0.56	(1.89)	2.13	(2.70)	1.85	(2.61)
Employed Family Head			3.66***	(0.93)	2.86**	(0.92)	-0.37	(1.42)	-0.53	(1.42)
Family Income (thousands)			1.02***	(0.29)	1.16***	(0.29)	0.82**	(0.31)	0.35	(0.30)
Characteristics of Primary Family										
Homeowner					-6.41***	(1.13)	-8.16***	(1.50)	-8.35***	(1.50)
Family Income (thousands)					-0.72***	(0.09)	-0.87***	(0.13)	-0.86***	(0.13)
Any Poor Health					0.68	(0.87)	0.66	(1.12)	0.69	(1.10)
Any Young Children					-4.30**	(1.65)	-6.38**	(2.18)	-5.86**	(2.16)

										41
Race by Auxiliary Family Income Interaction										
Black by Auxiliary Family Income									0.13	(0.80)
Asian by Auxiliary Family Income									3.50**	(1.33)
Hispanic by Auxiliary Family Income									2.64*	(1.18)
Constant	5.28***	(0.48)	0.72	(1.33)	8.80***	(1.70)	16.04***	(2.69)	17.65***	(2.70)

Notes: All values are weighted. *p < .05. **p < .01. ***p < .001

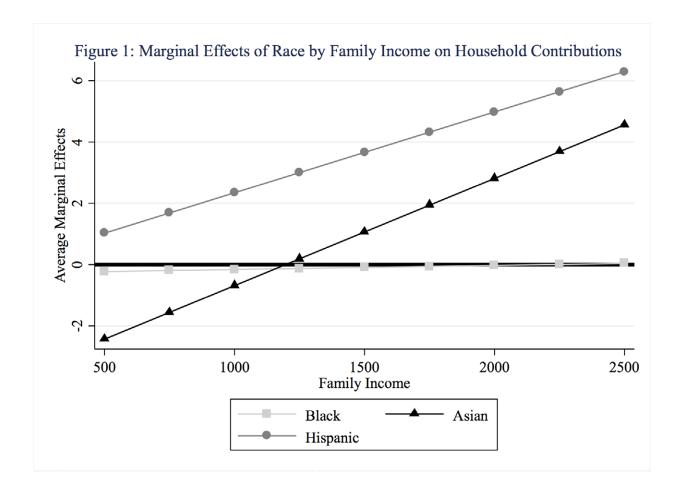


FIGURE 1: PREDICTED MARGINAL EFFECT OF RACE BY FAMILY INCOME ON HOUSEHOLD CONTRIBUTIONS, CALCULATED FROM TABLE 3, MODEL 5.