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Research Article

# Household living arrangements and disparities in hardship

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# Household living arrangements and disparities in hardship

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# Abstract

#### BACKGROUND

Experiences of hardship, such as trouble paying bills and food insecurity, vary considerably across different household living arrangements, with relatively low levels among married-couple households.

#### **OBJECTIVE**

We examine the extent to which disparities across household types can be explained by differences in income, non-income resources such as wealth, demographic characteristics, and socioeconomic characteristics such as education.

#### METHODS

We used 2021 data from the Survey of Income and Program Participation and OLS regression and decomposition analysis to examine this issue.

#### RESULTS

We confirmed that married-couple households experienced fewer hardships than other household types; single-parent families with children experienced the most hardships. Other household types, such as cohabiting couples and people living alone, fell in between. Among the factors associated with the differences, non-income resources – particularly wealth – played the most significant role, followed by income and then demographic and socioeconomic characteristics.

#### CONCLUSIONS

Our findings suggest that income and especially the wealth-building capacity of different types of households are the most important factors explaining household hardship disparities. Meanwhile, selection into different household types by demographic and socioeconomic characteristics is moderately important.

#### CONTRIBUTION

This study provides new information on why we observe differences in hardship across different types of households, including the important role played by wealth.

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#### 1. Household living arrangements and disparities in hardship

Over the past several decades there has been a notable decline in the percentage of households headed by married couples and a corresponding growth in the diversity of household living arrangements, including an increase in cohabitation, single-parent families, and nonfamily households (Brown 2017; Cherlin 2010; Lesthaeghe 2010). The retreat from marriage has freed people from traditional and sometimes oppressive norms. Nonetheless, some argue that this trend has negative economic repercussions. Married-couple households generally have higher incomes and lower levels of poverty than single-parent households, cohabiting couples, and individuals living alone (Heflin 2016; Heflin and Patnaik 2022; Iceland 2021b; Kearney 2023; Manning 2015; McLanahan and Percheski 2008; Waite and Gallagher 2000; Wilcox 2024).

There has been increasing interest in examining hardship as a key indicator of wellbeing. Hardship measures have the advantage of directly gauging deprivation, such as problems paying bills or living in substandard housing, rather than measuring whether people seemingly have sufficient income to meet basic needs, as most income poverty measures do (Beverly 2001). A relatively small number of studies have examined the link between household living arrangements and hardship; they generally confirm that married-couple households are less likely to experience hardship than other household types (Heflin 2016; Heflin and Patnaik 2022; Mirowsky and Ross 2020; Rodems and Shaefer 2020; Thomas 2022).

Household composition is associated with well-being for several reasons, and we focus specifically on factors that might help explain differences in hardship, including income, non-income resources such as wealth, demographic characteristics, and socioeconomic characteristics. These are all independently associated with hardship and are expected to explain the association between household composition and hardship. More specifically, differences in income and wealth are in part caused by differences in household living arrangements, while demographic and socioeconomic characteristics largely reflect the selection of people into different household types. For instance, when it comes to income, married-couple households often have two earners, which typically put them at an advantage over single-parent families and people living alone (Hao 1996a; Hirschl, Altobelli, and Rank 2003; Kearney 2023; Waite and Gallagher 2000). As expected, previous research has indicated that income is generally negatively associated with hardship, as income helps households meet their economic challenges, though the association between income and hardship is moderate (Iceland Kovach, and Creamer 2021; Iceland and Bauman 2007).

In contrast, sociodemographic characteristics such as education represent the selection of people into different household types. People with bachelor's degrees, for instance, are more likely to get married than people with less than a high school degree.

Married couples also have higher levels of education than cohabiting couples. These differences in education across household types are important because education is negatively correlated with hardship (Härkönen 2018; McLanahan 2004; Wildsmith, Manlove, and Cook 2018).

While previous studies have documented the association between household living arrangements and hardship (Heflin 2016; Heflin and Patnaik 2022; Mirowsky and Ross 2020; Rodems and Shaefer 2020; Thomas 2022), this is the first study to examine the extent to which these four sets of factors explain the relationship between the two, including the relative contribution of each. A better understanding of these mechanisms is important for designing more effective policy solutions to reduce hardship. For example, studies might suggest that income transfers and/or expanding access to homeownership might mitigate hardship disparities across household types. Or, if selection into different household types is most important, targeting inequalities across relevant characteristics (e.g., education or race) might be more effective in reducing hardship disparities.

In short, this study is guided by the following two questions:

- (1) What are the differences in the prevalence of hardship across household types?
- (2) To what extent are these differences explained by income, non-income resources, and demographic and socioeconomic characteristics?

We investigate these questions using 2021 data from the Survey of Income and Program Participation (SIPP), a nationally representative household survey conducted in the United States. These data contain detailed information on household living arrangements, hardships, and other household characteristics. Our analysis includes 14 hardship measures that, based on results from principal components factor analysis, we reduce to four summary measures representing bill-paying hardship, housing hardship, food hardship, and neighborhood problems. We use ordinary least squares regression models to gauge the association between hardship and household living arrangements and use Blinder–Oaxaca decomposition analyses to assess the extent to which differences in income, non-income resources, and demographic and sociodemographic characteristics explain these disparities. In doing so our study offers new insights into the factors driving hardship across different types of households.

## 2. Background

Over the past several decades there has been a substantial shift in household living arrangements in the United States and other developed countries around the world. These demographic changes – sometimes termed the second demographic transition – include a rising age at marriage, a decline in fertility, and an increase in divorce, cohabitation, same-sex unions, and nonmarital childbearing (Cherlin 2010; Lesthaeghe 1995, 2010). There are many explanations for these trends, including increasing individualism; rising living standards and the strengthening of the safety net, which allow people to realize their household preferences; birth control that gives greater influence over fertility; an increase in the economic status of women, which expands women's opportunities outside of marriage; the relative decline in men's wages, which makes marriage less attractive for women; and greater family investments in children, which raises the costs of having children (Cherlin 2009; Lesthaeghe 1995, 2010; McLanahan 2004; Zaidi and Morgan 2017).

As a result of these changes, a much smaller proportion of people live in the traditional married-couple household today than in the past. Conversely, a greater proportion of people live in single-parent and especially nonfamily households. For example, in 1960, 74% of households in the United States were headed by a married couple, compared to about 11% with other family living arrangements (such as single-parent families or siblings living together) and another 15% that were nonfamily households. By 2023 less than half (47%) of households were headed by a married couple, another 17% were other-family households, and 36% were nonfamily households (U.S. Census Bureau 2023c). A significant percentage of people in recent cohorts are staying single (Klineberg 2012; Zhang and Ang 2020).

While living arrangements today likely reflect individuals' preferences shaped by the increased availability of choices compared to the past, there are significant disparities in socioeconomic attainment across household types. For example, the median income of married-couple households in 2022 was \$110,800, about double the median income for female-headed households (\$56,030) and even more relative to the median income among nonfamily households (\$43,440) (U.S. Census Bureau 2023a). In 2017 about 30% of single mothers were poor, compared to 16% of cohabiting couples with children and 8% of married couples with children (Livingston 2018).

In addition to these widely known differences in income and poverty, there has been growing interest in hardship measures. Hardships are consumption-based indicators of well-being and are often thought to be superior to income-based measures (Beverly 2001; National Research Council 1995). Income measures do not always capture the resources families have to meet needs, such as non-cash and near-cash government transfers (e.g., public health insurance and housing subsidies), wealth, and access to credit. Hardship measures also capture specific deprivations, such as food insecurity and trouble paying bills (Beverly 2001; Pilkauskas, Currie, and Garfinkel 2012). Hardship measures are increasingly being used in a wide variety of countries, including in comparative analyses of hardship in Europe (Annink, Gorgievski, and Den Dulk 2016; Dagdeviren, Donoghue, and Meier 2017; Despard et al. 2018; Ginevičius et al. 2024).

Our analysis includes 14 measures of hardship that represent four broad categories of hardship: food hardship, bill-paying hardship, housing hardship, and neighborhood problems. These indicators have been used by previous researchers examining the incidence of hardship (Beverly 2001; Heflin, Sandberg, and Rafail 2009; Heflin 2017; Iceland 2021a; Iceland and Bauman 2007).

Relatively few studies have systematically compared hardship across different types of households. In an examination of hardship among older adults (those aged 60 and over), Heflin and Patnaik (Heflin and Patnaik 2022) found that single male, single female, and other nonfamily households were all more likely to experience food, housing, and utility hardship than married-couple households. Among a sample of low-income families, Thomas (Thomas 2022) found that single women and cohabiting couples were more likely to experience different types of hardships (bill-paying hardship, food hardship, and housing hardship, among other hardships) than were married couples. Studies that did not specifically focus on the association between household structure and hardship found that married-couple households were less likely to report hardship than were single-parent households (Mirowsky and Ross 2020; Rodems and Shaefer 2020).

Why do we see these disparities in hardship across household types? We now turn to this issue.

#### 2.1 Explanations for disparities in hardship by household type

We examine four explanations for observed disparities in hardship across household types, including differences in income; non-income resources, including wealth and health insurance coverage; demographic characteristics, such age and race; and socioeconomic characteristics, such as education. The variables are all expected to be associated with hardship directly and also help explain the association between household type and hardship.

As described below, we consider differences in income and non-income resources to be partially caused by differences in household structure, so they represent factors that help mediate the connection between household structure and hardship. In contrast, demographic and socioeconomic traits (such as race and education) likely reflect factors that might be associated with both household type and hardship, but they don't represent mediators because they often precede household living arrangements (e.g., education) or are otherwise not caused by household status (e.g., age race). These variables thus represent the selection of different groups of people into different household types.

We expect that income might explain differences in experiences of hardship across different types of households because income, after all, is often used as an indicator to determine whether households are struggling to meet basic needs. Specifically, many researchers and government agencies use data on income to measure poverty; households are considered poor if they have incomes below a particular threshold (Iceland 2013; National Academies of Sciences 2023; National Research Council 1995). Nonetheless, hardship measures are distinct from income poverty measures in several respects. Hardship measures have the advantage of directly measuring deprivation, such as problems paying bills or living in substandard housing (Beverly 2001). Measures of poverty and hardship are only moderately correlated, as they tap into different dimensions of well-being, and even some high-income households report hardship (Iceland Kovach, and Creamer 2021; Iceland and Bauman 2007; Mayer and Jencks 1989; Sullivan, Turner, and Danziger 2008). There are also problems with the accuracy of income poverty measures, as income is underreported in household surveys (Czajka and Denmead 2008; Meyer et al. 2019; Meyer and Sullivan 2018), which likely makes them less reflective of actual hardship experiences.

Even so, we would expect that income would help explain some disparities in hardship across household types, as income is obviously important for paying bills, avoiding food insecurity, and living in high-quality housing (National Research Council 1995). As noted above, married-couple households in particular have relatively high levels of income (Livingston 2018; U.S. Census Bureau 2023a). One reason for this income disparity is that married-couple households often have two earners, which typically puts them at an advantage over single-parent families and people living alone. Married couples also can devise a division of labor that maximizes their income and wellbeing (Hao 1996a; Hirschl, Altobelli, and Rank 2003; Kearney 2023; Waite and Gallagher 2000). For example, married partners can support each other economically and take turns investing in education, career advancement, or taking care of children. Married couples might also have broader social and economic networks, providing better job opportunities and financial security (Kearney 2023). They also benefit from economies of scale as compared to people living alone (Hao 1996a; National Research Council 1995). These factors facilitate upward mobility for married couples over the life course and can result in higher Social Security benefits, pensions, other retirement income, and interest income (Britt-Lutter, Dorius, and Lawson 2018; Iceland 2021b; Kapelle and Lersch 2020; Waite 1995). Married couples may also have greater income from these sources compared even to cohabiting couples (who also have two potential earners) because the longevity of marriage might allow them to benefit more from the processes described above (Hao 1996a).

Conversely, single parents often work fewer hours than two parents or people living in nonfamily households, as they often face the challenge of supporting a family on one income and running a household alone, often with modest levels of support (Edin and Lein 1997). Single-parent households might also experience greater hardship than people in nonfamily households or people living alone because they have to support not only themselves but their dependent children as well (Cancian and Reed 2001).

We examine the extent to which non-income resources, including wealth and health insurance coverage, mediate the hardship–household type relationship. These resources are associated with greater income but might have independent effects on hardship. These characteristics are also often causally connected with household type. For example, married-couple households can devise a division of labor that maximizes their savings (Hao 1996a; Hirschl, Altobelli, and Rank 2003; Kearney 2023; Waite and Gallagher 2000). Those who are married may have a greater commitment to each other, which helps in longer-term planning and wealth accumulation (Kearney 2023). Empirical research confirms that married-couple households have higher levels of wealth than cohabiting couples and those who are single (Addo and Ricketts 2019; Hao 1996). Greater wealth is likely related to less material hardship, as wealth can be used to meet various kinds of household emergencies and can help households invest in better housing and neighborhoods (Anderson, Han, and Hisnanick 2021; Conley 2010).

A home is typically the most significant asset for homeowners (Kochhar and Moslimani 2023). Married-couple households are also considerably more likely to own their homes than are single-parent households and people living alone (Goodman and Mayer 2018). Housing-related expenses are lower for many homeowners than for renters, especially for people who no longer pay a mortgage (National Academies of Sciences 2023), and renters generally pay a larger proportion of their income on rent than homeowners pay on a mortgage (Martinez and Mather 2022).

Household living arrangements are also associated with health insurance status. In one study of married couples using data from the SIPP, 32% of respondents had health insurance coverage through their partner's plan (Sohn 2015). Adults who live in families are also more likely have health insurance than those who are unmarried and are living alone (U.S. Census Bureau 2023b). Having health insurance may allow one to better cope with health care emergencies than being uninsured, as insurance reduces the costs of catastrophic care (Batty, Gibbs, and Ippolito 2022).

A third explanation for differences in hardship across types of households involves demographic characteristics of different types of households that are also correlated with hardship, including age, race, nativity, presence of a disabled person in the household, region, and nonmetropolitan status. Unlike income and non-income resources, these are meant to explain not the causal effect of household type on hardship but rather the selection of different demographic groups into different household living arrangements. This selection process could reflect structural constraints or cultural differences across groups. The propensity to marry differs by age, racial/ethnic group, and perhaps other characteristics, such as geographical region (Brown 2017; Raley, Sweeney, and Wondra 2015).

We also note that while one of the mechanisms that produce differences in hardship across demographic groups is income, these characteristics may be associated with hardship in other ways as well. Age is negatively correlated with hardship. Some of this relationship is explained by differences in income and non-income resources, such as homeownership, but young adults also face the challenges of establishing their careers, forming families, raising children, and dealing with greater instability in their lives than do older Americans (Mirowsky and Ross 2020; Siminski and Yerokhin 2012). Young adults may also make worse financial-related choices than more experienced older adults (Siminski and Yerokhin 2012). Age matters for household composition because married couples are typically older than cohabitors and people living with housemates, though the elderly are more likely to live alone than are younger adults (Hemez, Washington, and Kreider 2024; Jeffers, Esteve, and Batyra 2024; Kuperberg 2014).

African Americans and Latinos are at greater risk of hardship than Whites and Asians (Iceland and Sakamoto 2022). Again, some of this association may operate through income and non-income resources, but there are independent factors that could affect hardship, such as discrimination and residential segregation, which make it harder for blacks and Latinos to meet basic needs for a given level of income (Banaji, Fiske, and Massey 2021; Pager and Shepherd 2008). Household types vary by race and ethnicity, as marriage rates are lower for black and Latino households than for Asian and White households (Raley, Sweeney, and Wondra 2015).

We include other demographic factors associated with hardship, though we do not know the extent to which all of these vary across household types. These characteristics include nativity, the presence of someone with a disability in the household, region, and nonmetropolitan status (Drew 2015; Heflin 2016, 2017; Iceland 2021a).

A fourth explanation for differences in hardship involves socioeconomic differences across household types, including education and labor force status. These differences also represent factors that are, for the most part, not expected to be caused by household status. Education, for example, is typically completed in early adulthood and is usually not determined by adult household living arrangements. While labor force participation, such as being unemployed or out of the labor force, can be affected by household status, we still view it mainly as a signal of selection because decisions about work and marriage are increasingly disconnected (Cancian and Reed 2009).

It is important to examine the role of education because previous research has indicated that female heads of households have, on average, lower levels of education than married-couple parents, and this significantly contributes to their lower earnings (Härkönen 2018; Lundberg, Pollak, and Stearns 2016; McLanahan 2004; Wildsmith, Manlove, and Cook 2018). Education may also help households plan for the future, develop helpful networks, and devise strategies to avoid hardship, much in the way education has been linked to better health even beyond its effect on income (Hummer and Hamilton 2019; Ross and Wu 1995). Employment status is also correlated with hardship, as those who are unemployed are more likely to report hardships than those working full-time (Iceland 2021a).

Finally, we may find that income, non-income resources, and demographic and socioeconomic characteristics do not explain the entire association between household type and hardship. Several mechanisms that could explain this connection are not well captured by survey data. For example, being in a committed relationship facilitates task specialization. As Kearney (2023: chapter 3) argues, "The economic approach to thinking about marriage emphasizes that when two people share the responsibilities of running a household and taking care of kids, the whole is greater than the sum of the parts... [This] allow[s] individual spouses to focus their efforts on the tasks they are relatively better at, thus using their time more efficiently." By implication, this specialization can reduce the probability that a household will experience a hardship. While cohabitation could confer the same benefits of marriage, married couple partnerships tend to be more stable than cohabiting ones, which could lead to higher levels of investment in the partnership among the former (Kearney 2023; Musick and Michelmore 2018; Osborne, Manning, and Smock 2007). For similar reasons, married couples report higher relationship quality than cohabitors, especially than those without plans to marry (Brown, Manning, and Payne 2017), and this advantage could increase cooperation and reduce hardship among married partners.

Among other unobserved factors, people who marry may also have more productive social networks, and this is not captured in our survey data (Kearney 2023; Waite 1995). People who marry might have other hard-to-measure characteristics that can also affect hardship, such as better psychological health (Waite 1995) or access to community-level resources if they live in higher-income neighborhoods in the suburbs (Owens 2020). Thus our analysis will shed light on the extent to which our group of covariates explain, and do not explain, the hardship–household type association.

A limitation of this study is that the association between household composition and our mediating mechanisms (income and non-income resources) is not entirely causal. Individuals might wait to get married until they have achieved a level of financial security and stability (Cherlin 2009; Smock and Greenland 2010). People who become single parents are more likely to have grown up in a lower-income single-parent family themselves, so there is the possibility of intergenerational transmission of low socioeconomic status and family status – such as through fewer parental resources and less parental support, though we do control for educational attainment (Dufur and Alexander 2017; Lerman, Price, and Wilcox 2017; McLanahan and Percheski 2008). While we cannot rule out the role of selection, research has indicated that the association between household structure and income and wealth is at least in part, and perhaps in large part, causal (Hao 1996a; Kearney 2023; McLanahan 2004; Waite and Gallagher 2000; Wilcox 2024). We return to this issue in the "Discussion" section.

#### 2.2 Current study

While previous studies have documented differences in poverty and hardship by household composition, we extend this literature by systematically examining the extent to which a variety of household characteristics explain the relationship. Using decomposition methods, we analyze four sets of factors, including income, non-income resources, demographic characteristics, and socioeconomic characteristics. We also compare six types of households: married-couple households, cohabiting households, single-parent households, other family households, nonfamily households, and people living alone. Based on results from principal components analysis (described below), we also examine four types of hardship: food hardship, bill-paying hardship, housing hardship, and neighborhood problems.

We expect to find that married-couple households are the least likely to experience hardship, single-mother households are the most likely to experience hardship, and other household types fall in between (H1), as indicated by previous theoretical and empirical research (Hao 1996a; Hirschl, Altobelli, and Rank 2003; Iceland 2021b; Kearney 2023; Waite and Gallagher 2000). We further expect that differences in income, non-income resources, and demographic and socioeconomic characteristics will all help explain the relationship (H2), though we do not have a specific hypothesis as to which factor is the most consequential. Previous research provides reasons to expect that they are all important, but no study has yet measured their relative importance.

## 3. Data and methods

We use 2021 data from multiple panels of the SIPP (U.S. Census Bureau 2022), a longitudinal survey with panels lasting from three to five years. This survey is one of the relatively few to collect information on experiences with different kinds of hardship. The SIPP typically has overlapping panels to reduce the effects of seam bias. We use data from the 2020, 2021, and 2022 SIPP panels and observations that represent household characteristics as measured in the 2021 calendar year. Our final sample consists of 17,408 households that were present in the survey for the entire 12 months of the 2021 calendar

year. We use the SIPP household weighting variable in this analysis. We use StataNow/SE 18.5 for all analyses.

We analyze four types of hardship based on 14 constituent measures. These measures are based on questions in the SIPP "adult well-being" module, which ask householders if they have experienced various kinds of hardship, such as the inability to pay mortgage or rent, running out of food, plumbing problems, or living in a neighborhood with trash and litter problems. The 14 hardship indicators, including the percentage of households reporting each, are shown in Table 1.

	Percent
Food hardship (2+)	9.7%
Food did not last	11.0%
Did not eat balanced meals	10.7%
Skipped meals	5.6%
Ate less than should	5.7%
Bill-paying hardship (1+)	8.5%
Did not pay utility bill	6.4%
Did not pay mortgage/rent	5.2%
Housing hardship (1+)	17.4%
Insect, pest problems	10.2%
Plumbing problems	6.7%
Cracks in wall	6.7%
Holes in floor	1.6%
Neighborhood hardship (2+)	8.8%
Noise problems	15.1%
Trash, litter	9.0%
Stay at home out of fear	9.9%
Neighborhood is unsafe	5.1%
N	17,408

#### Table 1:Prevalence of hardship and types of households, 2021

Source: 2020-2022 SIPP panels.

We summarized these hardships based on results from principal components factor analysis (using Stata command *factor*, *pcf*). Specifically, this analysis yielded four factors with Eigenvalues surpassing 1 (a common minimum threshold). Based on previous

literature (Heflin 2017; Iceland 2021a; Iceland and Sakamoto 2022), we categorized these as representing four hardships: bill-paying hardship, food hardship, housing hardship, and neighborhood problems. The results of the factor analysis are shown in Table A-1 in the appendix. We used the standardized factor scores (mean = 0, standard deviation = 1) from this factor analysis as the dependent variables in our models. Table 1 also shows the percentage of households experiencing each summary hardship indicator (e.g., food hardship) if they answer affirmatively to a certain number of questions based on how previous studies measured such hardships (Iceland 2021a; Iceland and Sakamoto 2022) and yielding percentages that somewhat approximate poverty rates. For example, 9.7% of households experienced a food hardship, defined as responding affirmatively to at least two of the four food-related hardship questions.

Our main independent variable is household living arrangements. We defined it using six categories: (1) married-couple households with and without children; (2) single mother–headed households with children; (3) cohabiting couples with and without children; (4) other families (such as single father–headed households or siblings living together); (5) persons living alone; (6) people living with nonrelatives, such as housemates. We conducted additional analyses where we distinguished between married couples with and without children and cohabiting couples with and without children. Doing so did not change our conclusions, though fewer differences across household types were statistically significant, perhaps in part due to the smaller size of the reference group (married-couple families with children as opposed to all married-couple families). The results of our decomposition with the expanded number of household types are shown in Table A-2.

We included groups of control variables and analyzed the extent to which they explained the hardship-to-household composition relationship. The first was the incometo-poverty ratio. This is the ratio of household income to the poverty threshold of a household of its given size and composition. The advantage of using this ratio rather than household income alone is that it considers that larger households generally require more income to meet their needs than smaller ones. We recoded this into a variable with five categories, since the association between income and hardship may not be linear. The second group of variables was non-income household resources that may serve to reduce hardship. This group included net worth, defined as assets minus debt,<sup>3</sup> and whether the householder had health insurance.<sup>4</sup>

The third group of variables represented the demographic composition of the household. This included the race/ethnicity of the householder, defined as non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, non-Hispanic other race, or Hispanic; nativity status of the householder (native born or not); age of the householder, with categories for under 25, 25–34, 35–44, 45–54, 55–64, and 65 and over; whether the household was in a nonmetropolitan area; region, with categories for Northeast, Midwest, South, and West; and whether the household included a disabled individual.

The fourth group of variables was the socioeconomic status of the household. These variables included education of the householder, with categories for less than high school, high school diploma, some college, or a bachelor's degree or more; and employment status of householder, with categories for employed full-time, employed part-time, unemployed, and out of the labor force. The means for all independent variables are shown in Table 2.

<sup>&</sup>lt;sup>3</sup> We also ran models where we used three variables – homeownership, assets, and debt – instead of the single net worth variable. Assets and debt were positively correlated with each other, suggesting that wealthier households often borrow more, such as by having larger home loans. Assets and homeownership were also positively correlated. When assets and homeownership were entered as separate variables in our regression models, homeownership often had the most significant association with hardship, consistent with the fact that among homeowners, one's home is typically the largest asset. In some regressions, the coefficient for homeownership or assets flipped when they were both included, suggestive of multicollinearity. Thus we show results with the single net worth variable.

<sup>&</sup>lt;sup>4</sup> We also ran analyses with additional indicators of non-income benefits, including Supplemental Nutritional Assistance Program (SNAP) benefits, housing subsidies, energy assistance, the Earned Income Tax Credit, free or reduced-price school lunches, or nutrition assistance for women and children (WIC). However, we decided to omit these as indicators of non-income resources because these were, when statistically significant, generally associated with more hardship. This likely indicates that households that apply for and receive these benefits are struggling, and this selection into receipt likely outweighs the benefits households receive from these programs.

	Mean	Range
Household type		0
Married couple	45.7	0-100
Female-headed with children	6.8	0–100
Cohabiting couple	5.5	0–100
Other family	7.7	0–100
Single person	32.0	0–100
Person living with nonrelatives	2.5	0–100
Income-to-poverty ratio		
Below 100%	11.8	0–100
100–199%	15.3	0–100
200–299%	14.4	0–100
300-499%	23.0	0–100
Above 500%	35.5	0–100
Age		
Under 25	4.1	0–100
25–34	15.0	0–100
35–44	16.9	0–100
45–54	16.5	0–100
55–64	18.8	0–100
65+	28.7	0–100
Race/Ethnicity		
Non-Hispanic White	65.3	0–100
Non-Hispanic Black	12.7	0–100
Non-Hispanic Asian	5.5	0–100
Non-Hispanic other	14.5	0–100
Hispanic	2.0	0–100
Native born	85.9	0–100
Education		
Less than high school	8.3	0–100
High school	24.6	0–100
Some college	27.4	0–100
BA+	39.7	0–100
Labor force status		
Unemployed	1.7	0–100
Full-time employed	48.7	0–100
Part-time employed	12.8	0–100
Out of labor force	36.8	0–100
Disabled person present	26.6	0–100
Nonmetropolitan area	19.3	0–100
Region		
West	22.7	0–100
Midwest	21.4	0–100
Northeast	17.4	0–100
South	38.6	0–100
Has health insurance (householder)	90.0	0–100
Total net worth (1,000s)	657	-1,651-33,997
Ν	17,408	

## Table 2:Descriptive statistics

Source: 2020-2022 SIPP panels.

#### 4. Analytical strategy

We began with a descriptive look at patterns of hardship by household living arrangements. We then ran OLS regressions to examine the link between hardship factor scores and household types. We then added the income-to-poverty ratio, non-income resources, demographic characteristics, and socioeconomic characteristics to see if they helped explain the link. We ended with a Blinder–Oaxaca decomposition for linear regression (Blinder 1973; Oaxaca 1973) developed for Stata (Jann 2008). This decomposition method allowed us to estimate the role of each of the four types of characteristics in explaining differences in hardship by household type versus what remains unexplained. The decomposition can be written as:

$$E(Y_1) - E(Y_0) = \{ E(X_1) - E(X_0) \} \beta_1 + E(X_0)(\beta_1 - \beta_0) \},$$
(1)

where  $E(Y_1) - E(Y_0)$  is the difference in the expected outcome (hardship) between household type 1 and household type 0, **X** is a vector containing the predictors of hardship, and  $\beta$  contains the slope of parameters and the intercept. The first component on the right side of the equation, { $E(X_1) - E(X_0)$ } $\beta_1$ , refers to the part of the differential that is due to differences in the composition (or endowments), including the income-topoverty ratio, non-income resources, and demographic and socioeconomic characteristics between two household types. The second component, { $E(X_0)(\beta_1-\beta_0)$ , is the contribution of differences in the coefficients and intercepts, or returns to household characteristics by household type, which we treat as differences that cannot be explained by differences in the characteristics themselves. The coefficients (returns) for each group of variables in the decomposition tended to not vary much by household type. These results are shown in Table A-3. We used pooled regression coefficients from a weighted sample that included households of the two household types being compared and applied them to the mean of both groups (Oaxaca and Ransom 1994).<sup>5</sup>

#### 5. Results

Table 3 shows the percentage of households experiencing each hardship using summary hardship indicators and the factor scores for each hardship produced by the principal component factor analysis described above, where hardship levels for each of the four factors are standardized with a mean of 0 and a standard deviation of 1. The factor scores

<sup>&</sup>lt;sup>5</sup> We also ran threefold decompositions with an interaction term that captured the joint effect of changes in both composition and returns to these characteristics, but this interaction was not significant or substantively meaningful in most specifications.

are the main dependent variables in the regression and decomposition analyses. According to the factor scores in Table 3, married-couple households consistently had hardship scores well below the mean, single people living alone had lower-than-average hardship for two of the four hardships, and all other household types had scores above the weighted average, with female-headed households with children experiencing the most hardship in three of the four dimensions.

		Hardship factor score	Percent with hardship
Food hards	nip (2+)		
Marrie	ed couple	-0.135	5.8%
Fema	e head with children	0.273	19.9%
Cohal	biting couple	0.040	11.5%
Other	family	0.071	12.2%
Single	person	0.100	12.1%
Unrela	ated people living together	-0.015	10.4%
Bill-paying h	ardship (1+)		
Marrie	d couple	-0.057	5.6%
Fema	e head with children	0.609	25.5%
Cohal	biting couple	0.017	8.7%
Other	family	0.104	11.3%
Single	person	-0.025	8.4%
Unrela	ated people living together	0.046	9.3%
Housing ha	dship (1+)		
Marrie	d couple	-0.064	13.9%
Fema	e head with children	0.062	25.1%
Cohal	biting couple	0.060	21.5%
Other	family	0.141	23.8%
Single	person	-0.004	18.0%
Unrela	ated people living together	0.090	23.4%
Neighborho	od hardship (2+)		
Marrie	d couple	-0.107	6.0%
Fema	e head with children	0.169	16.2%
Cohal	biting couple	0.099	11.9%
Other	family	0.040	10.5%
Single	person	0.043	10.3%
Unrela	ated people living together	0.067	10.9%

#### Table 3:Hardships by household type, 2021

Source: 2020, 2021, and 2022 SIPP panels.

Table 4 shows OLS regressions with the hardship factor scores as the dependent variables. For each hardship, we show one model with household type alone and a second with all the independent variables. The bivariate models generally reproduced the associations shown in Table 3. In the full models, we see that the income-to-poverty ratio had a strong association with the food and bill-paying hardships and little association

with the housing and neighborhood hardships. Among the sociodemographic factors, education had a strong association with the food hardship but a weak association with the other hardships. African Americans were more likely to report two of the four hardships (neighborhood and bill-paying hardships) and were slightly less likely to report housing hardship net of other factors. Employment status had a strong association with three of the four hardships (housing hardship excepted), with unemployment generally associated with greater hardship. Having a disabled person in the household had a strong and positive association with all hardships. Of the non-income resources, having health insurance had little association with all hardships, while net worth had a strong negative association with all hardships.

	Food hardship Bill-paying hardship					p		
	Hous	sehold type	F	ull model	Hou	sehold type	F	ull model
	b	C.I.	b	C.I.	b	C.I.	b	C.I.
Household type								
Married couple (omitted)								
Female head with children	0.41	0.31, 0.51	0.05	-0.04, 0.15	0.67	0.53, 0.8	0.39	0.26, 0.52
Cohabiting couple	0.17	0.09, 0.26	0.05	-0.03, 0.13	0.07	-0.01, 0.15	0.00	-0.08, 0.08
Other family	0.21	0.13, 0.28	0.00	-0.07, 0.08	0.16	0.06, 0.26	0.03	-0.07, 0.12
Single person	0.24	0.19, 0.28	0.06	0.03, 0.1	0.03	-0.01, 0.07	-0.06	-0.1, -0.02
Unrelated people living together	0.12	0.01, 0.24	-0.06	-0.19, 0.06	0.10	-0.03, 0.24	0.04	-0.09, 0.17
Income-to-poverty ratio								
Below 100% (omitted)								
100–199%			-0.07	-0.16, 0.03			-0.06	-0.17, 0.04
200–299%			-0.17	-0.26, -0.08			-0.13	-0.23, -0.04
300-499%			-0.26	-0.34, -0.18			-0.11	-0.21, -0.02
Above 500%			-0.27	-0.35, -0.19			-0.16	-0.25, -0.07
Age								
Under 25 (omitted)								
25–34			0.04	-0.09, 0.16			0.23	0.12, 0.33
35–44			0.04	-0.09, 0.16			0.32	0.21, 0.43
45–54			0.06	-0.07, 0.18			0.35	0.24, 0.47
55–64			0.05	-0.08, 0.17			0.24	0.14, 0.35
65+			-0.13	-0.25, -0.01			0.18	0.07, 0.28
Race								
Non-Hispanic White (omitted)								
Non-Hispanic Black			0.00	-0.07, 0.07			0.21	0.13, 0.3
Non-Hispanic Asian			-0.02	-0.09, 0.05			-0.03	-0.1, 0.04
Non-Hispanic other			0.00	-0.06, 0.06			0.12	0.05, 0.18
Hispanic			0.10	-0.03, 0.23			0.15	0.02, 0.27
Native born			-0.04	-0.09, 0.02			0.00	-0.06, 0.07
Disabled person present			0.24	0.2, 0.29			0.07	0.02, 0.12
Education								
Less than high school (omitted)								
High school			-0.13	-0.21, -0.04			0.00	-0.09, 0.1
Some college			-0.12	-0.21, -0.03			0.07	-0.03, 0.16
BA+			-0.22	-0.3, -0.13			0.00	-0.1, 0.09

#### Table 4a: OLS regression with hardship factors, 2021 (Panel A)

		Food h	ardship		Bill-paying hardship				
	Hous	sehold type	F	ull model	Hou	Household type		Full model	
	b	C.I.	b	C.I.	b	C.I.	b	C.I.	
Labor force status									
Unemployed (omitted)									
Full-time employed			-0.48	-0.7, -0.27			-0.41	-0.63, -0.18	
Part-time employed			-0.38	-0.61, -0.16			-0.32	-0.55, -0.08	
Out of labor force			-0.41	-0.63, -0.19			-0.39	-0.61, -0.16	
Nonmetropolitan area			0.02	-0.03, 0.07			-0.06	-0.11, -0.02	
Region									
West (omitted)									
Midwest			0.04	-0.01, 0.08			-0.03	-0.08, 0.02	
Northeast			-0.02	-0.07, 0.03			0.08	0.02, 0.14	
South			0.05	0.01, 0.09			-0.04	-0.08, 0	
Has health insurance (householder) Total household net worth			-0.06	-0.14, 0.02			-0.08	-0.17, 0	
(quantile)									
1st quantile (omitted)									
2nd quantile			-0.25	-0.32, -0.18			-0.18	-0.25, -0.1	
3rd quantile			-0.38	-0.45, -0.32			-0.24	-0.31, -0.17	
4th quantile			-0.41	-0.47, -0.34			-0.30	-0.37, -0.22	
5th quantile			-0.37	-0.44, -0.31			-0.28	-0.36, -0.21	
Constant	-0.14	-0.15, -0.12	1.02	0.74, 1.29	-0.06	-0.08, -0.04	0.45	0.18, 0.73	
Observations	17408		17408		17408		17408		

## Table 4a: (Continued)

## Table 4b: OLS regression with hardship factors, 2021 (Panel B)

		Housing	g hardship	1	Neighborhood hardship				
	Hous	ehold type	Fu	ull model	Hous	sehold type	F	ull model	
	b	C.I.	b	C.I.	b	C.I.	b	C.I.	
Household type									
Married couple (omitted)									
Female head with children	0.13	0.04, 0.21	0.06	-0.04, 0.15	0.28	0.19, 0.36	0.10	0.01, 0.19	
Cohabiting couple	0.12	0.05, 0.2	0.08	0, 0.16	0.21	0.12, 0.29	0.13	0.04, 0.22	
Other family	0.20	0.13, 0.28	0.14	0.06, 0.21	0.15	0.08, 0.21	0.04	-0.02, 0.11	
Single person	0.06	0.02, 0.1	0.02	-0.02, 0.06	0.15	0.11, 0.19	0.08	0.04, 0.12	
Unrelated people living together	0.15	0.04, 0.27	0.09	-0.03, 0.21	0.17	0.05, 0.29	0.05	-0.08, 0.17	
Income-to-poverty ratio									
Below 100% (omitted)									
100–199%			-0.01	-0.09, 0.07			-0.05	-0.12, 0.03	
200–299%			-0.03	-0.11, 0.05			-0.02	-0.1, 0.07	
300-499%			-0.05	-0.13, 0.02			-0.05	-0.13, 0.03	
Above 500%			-0.02	-0.1, 0.05			-0.06	-0.14, 0.02	
Age									
Under 25 (omitted)									
25–34			-0.02	-0.15, 0.1			-0.01	-0.14, 0.12	
35–44			-0.01	-0.14, 0.12			0.00	-0.13, 0.13	
45–54			0.01	-0.12, 0.15			-0.05	-0.18, 0.08	
55–64			-0.01	-0.14, 0.13			-0.08	-0.21, 0.05	
65+			-0.05	-0.18, 0.08			-0.14	-0.27, -0.01	

		Housing	hardship			Neighborho	ood hards	hip
	Hous	sehold type	Fu	ull model	Hous	sehold type	F	ull model
	b	C.I.	b	C.I.	b	C.I.	b	C.I.
Race								
Non-Hispanic White (omitted)								
Non-Hispanic Black			-0.08	-0.13, -0.02			0.16	0.09, 0.23
Non-Hispanic Asian			0.01	-0.05, 0.08			0.09	0.01, 0.16
Non-Hispanic other			0.05	-0.01, 0.11			0.13	0.07, 0.2
Hispanic			0.11	-0.01, 0.23			0.01	-0.1, 0.12
Native born			0.07	0.02, 0.13			0.10	0.04, 0.15
Disabled person present			0.17	0.13, 0.22			0.14	0.1, 0.19
Education								
Less than high school (omitted)								
High school			-0.07	-0.16, 0.02			-0.08	-0.16, 0
Some college			-0.05	-0.14, 0.04			-0.08	-0.16, 0
BA+			-0.06	-0.15, 0.03			-0.08	-0.16, 0
Labor force status								
Unemployed (omitted)								
Full-time employed			-0.14	-0.34, 0.05			-0.34	-0.52, -0.15
Part-time employed			-0.13	-0.33, 0.07			-0.29	-0.49, -0.1
Out of labor force			-0.12	-0.32, 0.08			-0.27	-0.46, -0.08
Nonmetropolitan area			0.08	0.03, 0.13			-0.12	-0.16, -0.08
Region								
West (omitted)								
Midwest			-0.01	-0.06, 0.04			-0.14	-0.19, -0.09
Northeast			0.03	-0.02, 0.08			-0.01	-0.07, 0.04
South			0.05	0.01, 0.09			-0.16	-0.2, -0.12
Has health insurance			-0.03	-01004			0.04	-0.03 0.11
(householder)			0.00	0.1, 0.01			0.01	0.00, 0.11
(quantile)								
1st quantile (omitted)								
2 <sup>nd</sup> quantile			0.00	-0.06. 0.07			-0.11	-0.170.05
3rd guantile			-0.09	-0.15, -0.03			-0.14	-0.2, -0.08
4 <sup>th</sup> guantile			-0.09	-0.16, -0.03			-0.16	-0.220.1
5 <sup>th</sup> quantile			-0.11	-0.18, -0.05			-0.20	-0.26, -0.13
Constant	-0.06	-0.08, -0.04	0.14	-0.13, 0.4	-0.11	-0.13, -0.09	0.45	0.21, 0.68
Observations	17,408	,	17,408		17,408	Č.	17,408	

#### Table 4b:(Continued)

Once all the independent variables are added to the models, the relationships between household type and hardships were reduced, though to varying degrees. For example, in terms of food hardship, female-headed households had hardship scores 0.41 points higher than married-couple households in Model 1. This coefficient fell to 0.05 in Model 2 with all controls, with the confidence interval including 0. The difference between female-headed households and married-couple households was reduced with the addition of controls for the other three hardships as well, though with the confidence interval not overlapping with 0 in two of the models. Differences between cohabiting couples and married-couple households were minor in three of the four models after controls. (Neighborhood hardship was the exception.) With the addition of control

variables, differences with married couples were also minor for three of the four hardships for other-family households (all but the housing hardship), one of the four hardships for single people (the housing hardship), and all the hardships for people living with nonrelatives. Thus our findings generally show that married-couple families experienced the fewest hardships and that the covariates helped explained part and often most of the relationship, though to varying degrees depending on the households being compared and the hardship considered.

Finally, Table 5 displays the set of characteristics that played the largest role in explaining the link between household type and the four hardships. For simplicity, we used married-couple households as the reference household type for the comparisons. We show comparisons where the bivariate differences in hardship are statistically significant. Starting with food hardship, we see that the factor score for married-couple households was -0.14. For female-headed households it was 0.27. This represents a 0.41-point difference between the two household types. All covariates added to the model explained 74.0% of the association.<sup>6</sup> Of the four sets of factors shown, non-income resources explained the largest percentage of the difference (38.6% net of other factors), followed by the income-to-poverty ratio (26.6%) and SES (9.9%). Non-income resources played the largest role in explaining differences between single-mother households and marriedcouple households for all other hardships as well. Further analysis (not shown) indicated that wealth (rather than health insurance) was by far the key non-income resource that explained differences in hardship across household types. The income-to-poverty ratio played an important role in explaining differences in food- and bill-paying hardships between married-couple households and single-parent households, but it played a negligible role in explaining differences in housing and neighborhood hardships. Demographic characteristics and SES each moderately explained differences in just two of the hardships.

<sup>&</sup>lt;sup>6</sup> The percentage explained in the decomposition is modestly different than in Table 4 because the decompositions included only the two groups being compared, while Table 4 modeled all household types together.

		Food			Bill-paying	
	b	C		b	1.5	C.I.
Female head with children factor score	0.27	0.18	0.37	0.61	0.48	0.73
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04
Difference	0.41	0.31	0.51	0.67	0.54	0.79
Total explained	74.0%	60.5%	87.5%	47.9%	37.8%	57.9%
Difference explained by:						
Poverty ratio	26.6%	17.9%	35.2%	9.8%	3.1%	16.6%
Demographic characteristics	-1.1%	-9.2%	7.1%	10.2%	3.9%	16.4%
SES	9.9%	6.1%	13.6%	4.8%	2.0%	7.5%
Non-income	38.6%	29.0%	48.2%	23.1%	15.8%	30.4%
Cohabiting-couple factor score	0.04	-0.04	0.12	0.02	-0.06	0.09
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04
Difference	0.17	0.09	0.26	0.07	-0.01	0.15
Total explained	57.4%	37.8%	77.0%	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	4.2%	0.0%	8.4%	N/A	N/A	N/A
Demographic characteristics	3.6%	-10.9%	18.2%	N/A	N/A	N/A
SES	7.5%	1.0%	14.0%	N/A	N/A	N/A
Non-income	42.0%	28.7%	55.4%	N/A	N/A	N/A
Other family factor score	0.07	0.00	0.14	0.10	0.01	0.19
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04
Difference	0.21	0.13	0.28	0.16	0.07	0.25
Total explained	81.3%	66.7%	95.9%	96.3%	74.2%	118.4%
Difference explained by:						
Poverty ratio	17.6%	11.1%	24.2%	18.3%	8.8%	27.7%
Demographic characteristics	11.8%	3.1%	20.5%	25.2%	9.8%	40.6%
SES	15.6%	9.1%	22.0%	5.8%	-4.1%	15.8%
Non-income	36.3%	26.6%	46.0%	47.0%	32.1%	61.9%
Single-person factor score	0.10	0.06	0.14	-0.02	-0.06	0.01
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04
Difference	0.24	0.20	0.28	0.03	0.00	0.07
Total explained	71.4%	61.1%	81.8%	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	27.6%	20.4%	34.8%	N/A	N/A	N/A
Demographic characteristics	-6.1%	-12.3%	0.2%	N/A	N/A	N/A
SES	9.1%	5.2%	13.0%	N/A	N/A	N/A
Non-income	40.8%	33.1%	48.5%	N/A	N/A	N/A
Unrelated people factor score	-0.01	-0.13	0.10	0.05	-0.08	0.17
Married-couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04
Difference	0.12	0.01	0.23	0.10	-0.02	0.23
Total explained	78.3%	31.7%	124.9%	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	25.6%	13.2%	37.9%	N/A	N/A	N/A
Demographic characteristics	-28.2%	-69.7%	13.2%	N/A	N/A	N/A
SES	6.8%	-2.1%	15.7%	N/A	N/A	N/A
Non-income	74.2%	49.8%	98.6%	N/A	N/A	N/A

# Table 5a:Decomposition of differences in hardship, by household and hardship<br/>type (married couple as reference household) (Panel A)

# Table 5b:Decomposition of differences in hardship, by household and hardship<br/>type (married couple as reference household) (Panel B)

	Housing				Neighborhood		
	b	Č	C.I.	b	C	.1.	
Female head with children factor score	0.06	-0.02	0.15	0.17	0.08	0.25	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.13	0.04	0.21	0.28	0.19	0.36	
Total explained	65.2%	27.4%	102.9%	61.0%	43.7%	78.3%	
Difference explained by:							
Poverty ratio	-12.3%	-41.7%	17.2%	-0.3%	-11.8%	11.1%	
Demographic characteristics	7.6%	-17.1%	32.4%	23.9%	11.8%	36.0%	
SES	14.5%	1.0%	28.1%	4.9%	-1.3%	11.1%	
Non-income	55.2%	23.4%	87.0%	32.5%	18.8%	46.2%	
Cohabiting-couple factor score	0.06	-0.02	0.13	0.10	0.01	0.18	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.12	0.05	0.20	0.21	0.12	0.29	
Total explained	67.3%	40.4%	94.1%	34.9%	19.3%	50.4%	
Difference explained by:							
Poverty ratio	-0.8%	-4.3%	2.8%	1.0%	-1.1%	3.1%	
Demographic characteristics	24.3%	-1.7%	50.3%	19.2%	3.4%	34.9%	
SES	6.8%	-2.4%	15.9%	-5.2%	-10.6%	0.2%	
Non-income	36.9%	17.9%	56.0%	19.8%	8.4%	31.3%	
Other family factor score	0.14	0.07	0.21	0.04	-0.02	0.10	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.20	0.13	0.28	0.15	0.08	0.21	
Total explained	36.4%	23.2%	49.6%	67.3%	50.6%	84.0%	
Difference explained by:							
Poverty ratio	-0.2%	-7.8%	7.4%	3.8%	-4.8%	12.5%	
Demographic characteristics	10.6%	1.4%	19.8%	24.4%	12.0%	36.8%	
SES	7.9%	0.6%	15.1%	11.4%	2.8%	20.0%	
Non-income	18.1%	8.2%	28.0%	27.7%	14.4%	40.9%	
Single-person factor score	0.00	-0.03	0.03	0.04	0.01	0.08	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.06	0.02	0.10	0.15	0.11	0.19	
Total explained	66.6%	31.5%	101.7%	43.5%	28.3%	58.6%	
Difference explained by:							
Poverty ratio	8.8%	-20.5%	38.1%	7.6%	-3.4%	18.6%	
Demographic characteristics	-4.7%	-29.2%	19.8%	-1.3%	-11.7%	9.1%	
SES	9.6%	-6.5%	25.8%	7.8%	1.8%	13.7%	
Non-income	52.9%	23.2%	82.7%	29.4%	17.8%	41.0%	
Unrelated people factor score	0.09	-0.02	0.20	0.07	-0.05	0.18	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.15	0.05	0.26	0.17	0.06	0.29	
Total explained	58.4%	12.2%	104.6%	55.8%	22.8%	88.7%	
Difference explained by:							
Poverty ratio	-4.4%	-13.0%	4.1%	-1.2%	-7.8%	5.4%	
Demographic characteristics	22.4%	-25.9%	70.8%	20.8%	-13.1%	54.6%	
SES	0.5%	-6.7%	7.8%	2.7%	-3.0%	8.3%	
Non-income	39.9%	21.3%	58.4%	33.5%	17.8%	49.3%	

Across household type and hardship comparisons, the total percentage of the difference in hardship explained by the variables in the full models was typically in the 40%–80% range. For example, the variables explained 57.4% of the difference in food hardship between married-couple families and cohabiting couples and 43.5% of the difference in neighborhood hardship between married-couple households and single-person households.

Figure 1a–d illustrates the contributions of each of the sets of characteristics in explaining hardships differences between married couples and the other household types. We see that non-income resources consistently played the largest role in explaining differences in hardships. The income-to-poverty ratio played the next most important role for food hardship and a significant role for bill-paying hardship, though it played little role in explaining differences in housing and neighborhood hardships. Demographic and sociodemographic characteristics were moderately important only in some comparisons. For instance, demographic characteristics played a significant role in explaining the differences between married-couple households and other family households across all four hardships. Demographic characteristics were also significant for two hardships among female-headed households and one hardship for cohabiting couples, but they did not account for any differences in hardships for either of the non-family households.

Figure 1a: Food hardship – percentage of difference explained (Married-couple household is the reference group)







Figure 1c: Housing hardship – percentage of difference explained (marriedcouple household is the reference group)







#### 6. Discussion

Millions of Americans struggle to meet basic needs. Nonetheless, experiences of hardship vary considerably across households, with married couples reporting fewer hardships than other household types. Using 2021 data collected from multiple panels of the SIPP and from OLS regression and Blinder–Oaxaca demographic decomposition analyses, we examined disparities in four types of hardship – food hardship, neighborhood problems, housing hardship, and bill-paying hardship – across six types of households: married couples, female-headed households with children, cohabiting couples, other family households, people living alone, and people living with nonrelatives.

We further examined what set of household characteristics helped explain these differences, focusing on whether they were attributable to differences in income alone, non-income resources such as wealth and health insurance, demographic characteristics of households such as age and race, or socioeconomic characteristics such as education. Differences in income and wealth are partially caused by differences in household structure, so they represent factors that help mediate the connection between household structure and hardship (Kearney 2023; Waite and Gallagher 2000; Wilcox 2024). In contrast, demographic and socioeconomic factors (such as race and education) reflect factors that might be associated with both household type and hardship, but they most

likely represent the selection of different groups of people into different types of households.

Our findings confirmed that married-couple households experienced the fewest hardships and female-headed households experienced the most, with other household types somewhere in between. The findings support previous research indicating that marriage confers economic benefits to households (Kearney 2023; Waite and Gallagher 2000; Wilcox 2024). The characteristics that most consistently played a role in explaining disparities in hardship were non-income resources, specifically wealth. It often explained between about 30% and 50% of the difference in hardship across household types.

Next, income played an important role in explaining differences in food and billpaying hardship (sometimes 10%–25% of the difference) but no role in explaining differences in housing and neighborhood hardship. Demographic and to a lesser extent socioeconomic characteristics helped explain differences in some hardships across some household types. When substantively significant, their roles were no more than moderate.

While a few previous studies have documented differences in hardship across household types (Heflin 2016; Heflin and Patnaik 2022; Mirowsky and Ross 2020; Rodems and Shaefer 2020; Thomas 2022), our study built on this work by providing more information as to why. We found that non-income resources, followed by income, played the largest roles in explaining differences between married couples and other household types. These characteristics are partially shaped by household type. Married couples are more likely to accrue wealth than other households because they can formulate strategies to maximize their income and savings, such as by having both partners work or devising an efficient division of labor (Hao 1996b; Hirschl, Altobelli, and Rank 2003; Iceland 2021b; National Research Council 1995; Waite and Gallagher 2000). Those who are married may have a greater commitment to each other than cohabiting couples, which helps in longer-term planning and wealth accumulation (Kearney 2023; Wilcox and Hawkins 2024), though it is important to note that for many couples, marriage functions mainly as a formality that does not in itself confer extra benefits.

Income reduces hardship by providing more resources to meet basic needs. Married couples have high incomes for the reasons described above: Two people are available to earn income, and they can devise a division of labor to maximize household income and well-being (Hao 1996b; Hirschl, Altobelli, and Rank 2003; Iceland 2021b; National Research Council 1995; Waite and Gallagher 2000). Income helped explain differences in the experience of food and bill-paying hardship by household type. These hardships are more likely to be affected by short-term shortfalls in income than are housing and neighborhood hardships (Iceland and Bauman 2007). Housing and neighborhood hardships are more likely affected by longer-term income, since, for example,

experiencing a two-month dip in income typically does not affect the quality of one's house or neighborhood.

Demographic and socioeconomic characteristics also influenced why married couples experienced fewer hardships in some instances, which indicates that selection into marriage helped explain some hardship disparities, especially when compared to other family households. For example, more educated householders were less likely to experience food hardship, and married-couple households had higher levels of education than cohabiting-couple households and female-headed households with children. Demographic characteristics played little role in explaining differences in hardship between married-couple households and nonfamily households. This suggests that disadvantaged groups are not overrepresented among nonfamily households, which include people living alone and people living with housemates.

The difference in hardship across household types remained in some instances even after controlling for income, demographic characteristics, and non-income resources. This indicates that, at least for some of the comparisons, married people differed in unobserved ways. This can be a function of unobserved selection into household types, as people with better psychological health might be positively selected into marriage (Waite 1995) and better mental health is negatively associated with hardship (Heflin and Iceland 2009). However, marriage can causally confer economic benefits that reduce hardship in other ways. Among these, being in a committed married relationship facilitates task specialization. Such specialization allows individuals in couples to focus their efforts on the tasks they are relatively better at, which allows them to use their time more effectively and efficiently (Kearney 2023). While cohabitation could confer the same benefits as marriage, married-couple partnerships tend to be more stable than cohabiting ones, which could lead to higher levels of investment in the partnership (Kearney 2023; Musick and Michelmore 2018; Osborne, Manning, and Smock 2007). Married couples may also have more social support and access to more community-level resources (Kearney 2023; Owens 2020; Waite 1995; Wilcox and Hawkins 2024). Finally, people who marry might have other hard-to-measure characteristics that can also affect hardship, such as better health. Not only does better health reflect selection into marriage, but married couples have more support to help them recover from medical treatment or illness (Martinuk 2016; Waite and Gallagher 2000).

Our study is not without limitations. Our analyses present a snapshot of hardship at one point in time and are not causal. There is the perennial question about the extent to which the apparent benefits of marriage represent the selection of wealthier and healthier people into marriage or the causal effects of marriage. We recognize that people with advantaged characteristics often select into marriage (Cherlin 2010; Siassi 2019), and this likely helps explain lower levels of hardship among married-couple households. With our cross-sectional data we cannot quantify the magnitude of selection at work, so the implications of our analysis must be seen as suggestive rather than conclusive. We at least controlled for many of the characteristics associated with selection (e.g., race and education). While other unobserved factors might account for our finding that married couples experience fewer hardships, previous research indicates that marriage has a causal positive impact on a variety of economic and health outcomes (Kearney 2023; Waite 1995; Wilcox 2024). For example, having children outside of marriage can be especially challenging, even with government income transfers (Edin and Lein 1997; McLanahan et al. 2013).

A second limitation of our analysis is that the data may contain errors in reports of income and wealth. For example, households tend to underreport income in household surveys (Czajka and Denmead 2008; Meyer et al. 2021; Meyer and Sullivan 2012); the same is true for wealth (Juster, Smith, and Stafford 1999), and this could understate the association of income and wealth with hardship. However, it is not clear if this underreporting would be more serious among some households than others, and it thus may have little effect on our findings regarding disparities in hardship across households. Future work could do more to validate the measures of income and wealth in the latest panels of the SIPP, such as by matching them to administrative data.

#### 7. Policy implications

The high income- and wealth-generating capacity of married couples can be thought of as representing the "penalty" of living in other types of households. This penalty can potentially be ameliorated by policy. For example, cash transfers can reduce the poverty – and by extension hardships – experienced by single-parent families (Brady, Finnigan, and Hübgen 2017). Our findings suggest that policies that facilitate wealth accumulation, such as homeownership, could also help reduce hardship. One's home is typically the largest asset among homeowners (Kochhar and Moslimani 2023). One approach is to reduce regulatory barriers to home construction, such as by incentivizing the construction of lower-cost condominiums and townhouses (Dawkins, Jeon, and Knaap 2017). Also in this vein, a growing YIMBY ("yes in my backyard") movement in many cities across the United States encourages more home construction to make housing more available and affordable, with the aim of helping low- and middle-income people meet their basic needs in cities with high housing prices (Holleran 2021; Semuels 2017). These efforts might help individuals achieve the "American dream" of homeownership and also reduce hardship.

Nonetheless, it is important to note that differences in hardship across household types were not driven just by differences in homeownership or income. For example, our findings suggest that income transfers have only a moderate impact on reducing food and bill-paying hardship disparities by household type and no effect on housing and neighborhood disparities. Facilitating homeownership likewise would help reduce disparities in some hardships but not all of them. Thus it's important to recognize the limitations of policies that try to equalize income and wealth across household types.

The implication is that greater consideration needs to be given to addressing specific hardships that households face, including, as highlighted in our analysis, trouble paying bills, food insecurity, and housing and neighborhood hardships. These outcomes are all of intrinsic importance, unlike income, which we can consider instrumentally important because of the things it can potentially buy, such as food, clothing, and shelter (Sen 1999).

Another approach to reducing hardship disparities would be to encourage marriage, because marriage confers benefits for families and their children. However, marriage promotion policies such as the Healthy Marriage Initiative, launched by the Bush administration in 2001 – which provided federal funding for voluntary programs run by local and state governments and community organizations to promote marriage among low-income couples with children – were found to be of limited benefit (Kearney 2023).

Recent research suggests other, related approaches. Kearney (2023), for example, offers several proposals that are worthy of consideration to address the structural and cultural challenges in promoting marriage and helping all struggling households: work to restore and foster a norm of two-parent homes for children, improve the economic position of men with low levels of education, invest in initiatives that strengthen families and provide low-income families more support, and strengthen the safety net for all families, regardless of their structure. The first two proposals seek to promote marriage, while the latter two aim to help all struggling families. These strategies offer a politically moderate approach that could gain bipartisan support and serve to reduce hardship among all US households. Future research should assess the extent to which these specific strategies help reduce hardship, including disparities across different household types.

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# Appendix

Scale	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Bill-paying	Did not pay utility bill ( $0 = paid - 1 = did not pay$ )	-0.078	-0.049	-0.010	0.596
hardship	Did not pay mortgage/rent (0 = paid - 1 = did not pay)	-0.101	-0.046	-0.054	0.639
	Food did not last (0 = lasted – 1 = did not last)	0.300	-0.036	-0.035	-0.035
Food bordship	Did not eat balanced meals ( $0 = ate - 1 = did not eat$ )	0.316	-0.030	-0.042	-0.071
Food hardship	Skipped meals ( $0 = no - 1 = yes$ )	0.324	-0.040	-0.035	-0.090
	Ate less than should $(0 = no - 1 = yes)$	0.325	-0.035	-0.040	-0.071
	Insect, pest problems ( $0 = no - 1 = yes$ )	-0.029	0.050	0.317	0.000
Llouging	Plumbing problems ( $0 = no - 1 = yes$ )	-0.043	0.012	0.315	0.034
Housing	Cracks in wall $(0 = no - 1 = yes)$	-0.034	-0.056	0.455	-0.012
	Holes in floor $(0 = no - 1 = yes)$	-0.010	-0.132	0.461	-0.057
Neighborhood	Noise problems $(0 = no - 1 = yes)$	-0.041	0.374	-0.027	-0.008
problems	Trash, litter ( $0 = no - 1 = yes$ )	-0.045	0.393	-0.010	0.002
	Stay at home out of fear $(0 = no - 1 = yes)$	0.007	0.350	-0.081	-0.036
	Neighborhood is unsafe $(0 = no - 1 = yes)$	-0.002	0.412	-0.097	-0.047
	Eigenvalues (% variation explained)	3.80 (47.4%)	1.78 (22.2%)	1.30 (16.2%)	1.13 (14.1%)

Table A-1: Principal components analysis of household hardship measures

# Table A-2a: Decompositions of differences in hardship, by household and hardship type, separating married- and cohabiting-couple households with and without children

		Food			Bill-Paying	
	b	lower C.I.	upper C.I.	b	lower C.I.	upper C.I.
Married couple without children factor score	-0.15	-0.17	-0.13	-0.11	-0.13	-0.09
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	-0.04	-0.07	0.00	-0.14	-0.18	-0.09
Total explained Difference explained by:	198.7%	108.9%	288.4%	27.7%	2.9%	52.6%
Poverty ratio	44.9%	25.0%	64.9%	4.1%	-1.0%	9.2%
Demographic characteristics	78.0%	-17.8%	173.7%	8.8%	-18.5%	36.2%
SES	13.5%	-28.2%	55.2%	-6.8%	-20.0%	6.4%
Non-income	62.2%	35.4%	89.1%	21.6%	13.2%	30.0%
Female head with children factor score	0.27	0.18	0.37	0.61	0.48	0.73
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	0.39	0.28	0.49	0.58	0.45	0.71
Total explained Difference explained by:	69.4%	52.2%	86.6%	56.9%	41.9%	72.0%
Poverty ratio	29.3%	16.4%	42.1%	10.6%	-1.2%	22.3%
Demographic characteristics	-4.1%	-15.3%	7.2%	7.5%	-1.9%	16.9%
SES	10.4%	3.3%	17.4%	10.1%	3.5%	16.8%
Non-income	33.8%	21.0%	46.6%	28.8%	16.8%	40.7%

#### Table A-2a: (Continued)

	Food			Bill-Paying		
	b	lower C.I.	upper C.I.	b	lower C.I.	upper C.I.
Cohabiting couple with children factor score	0.15	-0.06	0.37	0.19	-0.05	0.42
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	0.27	0.05	0.49	0.16	-0.08	0.39
Total explained	56.5%	28.0%	85.0%	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	16.3%	4.7%	28.0%	N/A	N/A	N/A
Demographic characteristics	5.2%	-11.4%	21.8%	N/A	N/A	N/A
SES	15.3%	1.8%	28.9%	N/A	N/A	N/A
Non-income	19.7%	2.1%	37.2%	N/A	N/A	N/A
Cohabiting couple without children factor score	0.02	-0.07	0.10	-0.02	-0.10	0.06
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	0.13	0.04	0.22	-0.05	-0.14	0.04
Total explained	34.0%	-6.2%	74.2%	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	-9.9%	-18.0%	-1.7%	N/A	N/A	N/A
Demographic characteristics	3.4%	-30.8%	37.6%	N/A	N/A	N/A
SES	7.9%	-2.5%	18.3%	N/A	N/A	N/A
Non-income	32.6%	14.2%	50.9%	N/A	N/A	N/A
Other family factor score	0.07	0.00	0.14	0.10	0.01	0.19
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	0.18	0.10	0.26	0.07	-0.02	0.17
Total explained	67.7%	39.8%	95.6%	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	15.7%	7.4%	24.1%	N/A	N/A	N/A
Demographic characteristics	3.8%	-25.0%	32.6%	N/A	N/A	N/A
SES	19.9%	2.3%	37.6%	N/A	N/A	N/A
Non-income	28.2%	16.6%	39.8%	N/A	N/A	N/A
Single person factor score	0.10	0.06	0.14	-0.02	-0.06	0.01
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	0.21	0.16	0.26	-0.05	-0.10	0.00
Total explained	47.9%	27.2%	68.7%	-60.6%	-147.1%	25.9%
Difference explained by:						
Poverty ratio	25.6%	16.6%	34.5%	-42.4%	-76.1%	-8.8%
Demographic characteristics	-29.6%	-51.8%	-7.4%	61.7%	-27.4%	150.7%
SES	16.9%	4.3%	29.5%	14.6%	-38.6%	67.8%
Non-income	35.0%	26.2%	43.8%	-94.4%	-130.8%	-58.0%
Unrelated people living together factor score	-0.01	-0.13	0.10	0.05	-0.08	0.17
Married couple with children factor score (ref.)	-0.11	-0.15	-0.08	0.03	-0.01	0.07
Difference	0.10	-0.02	0.21	0.02	-0.11	0.15
Total explained	N/A	N/A	N/A	N/A	N/A	N/A
Difference explained by:						
Poverty ratio	N/A	N/A	N/A	N/A	N/A	N/A
Demographic characteristics	N/A	N/A	N/A	N/A	N/A	N/A
SES	N/A	N/A	N/A	N/A	N/A	N/A
Non-income	N/A	N/A	N/A	N/A	N/A	N/A

# Table A-2b: Decompositions of differences in hardship, by household and hardship type, separating married- and cohabiting-couple households with and without children

		Housing			Neighborhood		
	b	lower C.I.	upper C.I.	b	lower C.I.	upper C.I.	
Married couple without children factor score	-0.09	-0.11	-0.06	-0.11	-0.13	-0.08	
Married couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07	
Difference	-0.06	-0.10	-0.01	0.00	-0.04	0.04	
Total explained	8.6%	-56.9%	74.0%	N/A	N/A	N/A	
Difference explained by:							
Poverty ratio	-8.8%	-21.8%	4.2%	N/A	N/A	N/A	
Demographic characteristics	-8.0%	-82.9%	66.9%	N/A	N/A	N/A	
SES	-1.8%	-34.9%	31.3%	N/A	N/A	N/A	
Non-income	27.1%	10.2%	44.1%	N/A	N/A	N/A	
Female head with children factor score	0.06	-0.02	0.15	0.17	0.08	0.25	
Married couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07	
Difference	0.09	0.00	0.18	0.28	0.18	0.37	
Total explained	N/A	N/A	N/A	61.6%	40.4%	82.8%	
Difference explained by:							
Poverty ratio	N/A	N/A	N/A	0.2%	-16.5%	16.9%	
Demographic characteristics	N/A	N/A	N/A	13.5%	-1.0%	28.0%	
SES	N/A	N/A	N/A	19.1%	8.6%	29.7%	
Non-income	N/A	N/A	N/A	28.8%	11.2%	46.3%	
Cohabiting couple with children factor score	0.06	-0.13	0.25	-0.10	-0.27	0.06	
Married couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07	
Difference	0.09	-0.11	0.28	0.00	-0.16	0.17	
Total explained	N/A	N/A	N/A	N/A	N/A	N/A	
Difference explained by:							
Poverty ratio	N/A	N/A	N/A	N/A	N/A	N/A	
Demographic characteristics	N/A	N/A	N/A	N/A	N/A	N/A	
SES	N/A	N/A	N/A	N/A	N/A	N/A	
Non-income	N/A	N/A	N/A	N/A	N/A	N/A	
Cohabiting couple without children factor score	0.06	-0.02	0.14	0.14	0.04	0.23	
Married couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07	
Difference	0.09	0.00	0.18	0.25	0.14	0.35	
Total explained	N/A	N/A	N/A	23.8%	0.4%	47.2%	
Difference explained by:							
Poverty ratio	N/A	N/A	N/A	-1.3%	-4.5%	1.9%	
Demographic characteristics	N/A	N/A	N/A	6.6%	-14.3%	27.5%	
SES	N/A	N/A	N/A	5.5%	0.5%	10.6%	
Non-income	N/A	N/A	N/A	12.9%	2.1%	23.8%	
Other family factor score	0.14	0.07	0.21	0.04	-0.02	0.10	
Married couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07	
Difference	0.17	0.09	0.25	0.15	0.08	0.22	
Total explained	86.1%	52.1%	120.1%	68.8%	35.9%	101.8%	
Difference explained by:							
Poverty ratio	8.0%	-1.9%	18.0%	3.2%	-6.6%	13.1%	
Demographic characteristics	56.8%	20.2%	93.3%	18.5%	-13.8%	50.9%	
SES	8.3%	-13.3%	29.8%	26.6%	6.2%	47.0%	
Non-income	13.1%	0.0%	26.1%	20.4%	6.1%	34.8%	

#### Table A-2b: (Continued)

	Housing			Neighborhood		
	b	lower C.I.	upper C.I.	b	lower C.I.	upper C.I.
Single-person factor score	0.00	-0.03	0.03	0.04	0.01	0.08
Married-couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07
Difference	0.02	-0.02	0.07	0.15	0.10	0.20
Total explained	N/A	N/A	N/A	11.8%	-17.7%	41.2%
Difference explained by:						
Poverty ratio	N/A	N/A	N/A	9.4%	-2.7%	21.5%
Demographic characteristics	N/A	N/A	N/A	-31.8%	-62.0%	-1.5%
SES	N/A	N/A	N/A	14.5%	-2.6%	31.5%
Non-income	N/A	N/A	N/A	19.6%	8.1%	31.2%
Unrelated people living together factor score	0.09	-0.02	0.20	0.07	-0.05	0.18
Married couple with children factor score (ref.)	-0.03	-0.06	0.01	-0.11	-0.14	-0.07
Difference	0.12	0.00	0.23	0.17	0.05	0.29
Total explained	79.1%	-14.3%	172.6%	71.1%	20.7%	121.5%
Difference explained by:						
Poverty ratio	2.7%	-10.5%	16.0%	-2.9%	-11.4%	5.6%
Demographic characteristics	20.9%	-79.4%	121.3%	21.5%	-30.9%	73.9%
SES	5.9%	-14.5%	26.3%	19.0%	5.8%	32.1%
Non-income	49.6%	20.6%	78.7%	33.5%	14.1%	53.0%

# Table A-3a:Decompositions of differences in hardship, by household and<br/>hardship type (married-couple household as reference household),<br/>with both explained and unexplained differences

		Food			Bill-paying		
	b	C.I.		b	b C.I		
Female head with children factor score	0.27	0.18	0.37	0.61	0.48	0.73	
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04	
Difference	0.41	0.31	0.51	0.67	0.54	0.79	
Total explained Difference explained by:	74.0%	60.5%	87.5%	47.9%	37.8%	57.9%	
Poverty ratio	26.6%	17.9%	35.2%	9.8%	3.1%	16.6%	
Demographic characteristics	-1.1%	-9.2%	7.1%	10.2%	3.9%	16.4%	
SES	9.9%	6.1%	13.6%	4.8%	2.0%	7.5%	
Non-income	38.6%	29.0%	48.2%	23.1%	15.8%	30.4%	
Total unexplained	26.0%	2.7%	49.3%	52.1%	32.2%	72.0%	
Difference unexplained by:							
Poverty ratio	1.2%	-4.8%	7.2%	-2.5%	-8.4%	3.4%	
Demographic characteristics	15.4%	-54.2%	85.0%	-40.5%	-96.5%	15.5%	
SES	-7.0%	-48.2%	34.2%	-17.4%	-45.5%	10.6%	
Non-income	59.2%	-10.0%	128.5%	64.7%	17.3%	112.1%	
Cohabiting couple factor score	0.04	-0.04	0.12	0.02	-0.06	0.09	
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04	
Difference	0.17	0.09	0.26	0.07	-0.01	0.15	
Total explained Difference explained by:	57.4%	37.8%	77.0%	N/A	N/A	N/A	
Poverty ratio	4.2%	0.0%	8.4%	N/A	N/A	N/A	
Demographic characteristics	3.6%	-10.9%	18.2%	N/A	N/A	N/A	
SES	7.5%	1.0%	14.0%	N/A	N/A	N/A	
Non-income	42.0%	28.7%	55.4%	N/A	N/A	N/A	
Total unexplained	42.6%	-1.9%	87.1%	N/A	N/A	N/A	

# Table A-3a: (Continued)

		Food			Bill-paying			
	b	C	.I.	b	C.	Ι.		
Cohabiting couple factor score (continued)		-		-				
Difference unexplained by:								
Poverty ratio	-16.4%	-61.8%	28.9%	N/A	N/A	N/A		
Demographic characteristics	124.6%	-11.1%	260.4%	N/A	N/A	N/A		
SES	-36.2%	-177.2%	104.7%	N/A	N/A	N/A		
Non-income	-22.6%	-149.0%	103.7%	N/A	N/A	N/A		
Other family factor score	0.07	0	0.14	0.1	0.01	0.19		
Married couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04		
Difference	0.21	0.13	0.28	0.16	0.07	0.25		
Total explained	81.3%	66.7%	95.9%	96.3%	74.2%	118.4%		
Difference explained by:								
Poverty ratio	17.6%	11.1%	24.2%	18.3%	8.8%	27.7%		
Demographic characteristics	11.8%	3.1%	20.5%	25.2%	9.8%	40.6%		
SES	15.6%	9.1%	22.0%	5.8%	-4.1%	15.8%		
Non-income	36.3%	26.6%	46.0%	47.0%	32.1%	61.9%		
Total unexplained	158.1%	-135.5%	451.7%	3.7%	-47.5%	54.9%		
Difference unexplained by:								
Poverty ratio	8.5%	-9.2%	26.3%	-1.9%	-27.2%	23.4%		
Demographic characteristics	11.1%	-95.8%	118.1%	35.3%	-118.1%	188.6%		
SES	-43.6%	-125.4%	38.3%	-14.9%	-115.9%	86.2%		
Non-income	36.2%	-59.7%	132.0%	94.0%	-60.2%	248.2%		
Single-person factor score	0.1	0.06	0.14	-0.02	-0.06	0.01		
Married-couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04		
Difference	0.24	0.2	0.28	0.03	0	0.07		
Total explained Difference explained by:	71.4%	61.1%	81.8%	N/A	N/A	N/A		
Poverty ratio	27.6%	20.4%	34.8%	N/A	N/A	N/A		
Demographic characteristics	-6.1%	-12.3%	0.2%	N/A	N/A	N/A		
SES	9.1%	5.2%	13.0%	N/A	N/A	N/A		
Non-income	40.8%	33.1%	48.5%	N/A	N/A	N/A		
Total unexplained	-471.1%	-203.6%	-738.6%	N/A	N/A	N/A		
Difference unexplained by:								
Poverty ratio	-1.9%	-10.5%	6.6%	N/A	N/A	N/A		
Demographic characteristics	91.5%	38.0%	144.9%	N/A	N/A	N/A		
SES	-37.0%	-87.1%	13.2%	N/A	N/A	N/A		
Non-income	-87.5%	-162.5%	-12.5%	N/A	N/A	N/A		
Unrelated people living together factor score	-0.01	-0.13	0.1	0.05	-0.08	0.17		
Married-couple factor score (ref.)	-0.14	-0.15	-0.12	-0.06	-0.08	-0.04		
Difference	0.12	0.01	0.23	0.1	-0.02	0.23		
Total explained	78.3%	31.7%	124.9%	N/A	N/A	N/A		
Poverty ratio	25.6%	13.2%	37.9%	N/A	Ν/Δ	N/A		
Demographic characteristics	-28.2%	-69.7%	13.2%	N/A	N/A	N/A		
SES	6.8%	-2.1%	15.7%	N/A	N/A	N/A		
Non-income	74.2%	19.8%	98.6%	N/A	N/A	N/A		
Total unexplained	-76.8%	290.3%	-443.8%	N/A	N/A	N/A		
Difference unexplained by:	-10.076	200.070		11/17	11/17			
Poverty ratio	1.0%	-46 4%	48 4%	N/A	N/A	N/A		
Demographic characteristics	-59.0%	-362.5%	244.5%	N/A	N/A	N/A		
SES	196.4%	32.0%	360.7%	N/A	N/A	N/A		
Non-income	-25.5%	-265 1%	214 2%	N/A	N/A	N/A		

# Table A-3b: Decompositions of differences in hardship, by household and<br/>hardship type (married-couple household as reference household),<br/>with both explained and unexplained differences

		Housing			Neighborhood			
	b	C.	.1.	b	C	.1.		
Female head with children factor score	0.06	-0.02	0.15	0.17	0.08	0.25		
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09		
Difference	0.13	0.04	0.21	0.28	0.19	0.36		
Total explained	65.2%	27.4%	102.9%	61.0%	43.7%	78.3%		
Difference explained by:								
Poverty ratio	-12.3%	-41.7%	17.2%	-0.3%	-11.8%	11.1%		
Demographic characteristics	7.6%	-17.1%	32.4%	23.9%	11.8%	36.0%		
SES	14.5%	1.0%	28.1%	4.9%	-1.3%	11.1%		
Non-income	55.2%	23.4%	87.0%	32.5%	18.8%	46.2%		
Total unexplained	34.8%	-41.3%	111.0%	39.0%	6.3%	71.7%		
Difference unexplained by:								
Poverty ratio	3.4%	-17.0%	23.8%	1.2%	-8.9%	11.3%		
Demographic characteristics	42.3%	-176.3%	260.8%	24.5%	-74.8%	123.7%		
SES	78.3%	-46.2%	202.7%	-63.0%	-114.3%	-11.7%		
Non-income	-38.4%	-240.9%	164.1%	-8.6%	-106.6%	89.4%		
Cohabiting-couple factor score	0.06	-0.02	0.13	0.1	0.01	0.18		
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09		
Difference	0.12	0.05	0.2	0.21	0.12	0.29		
Total explained	67.3%	40.4%	94.1%	34.9%	19.3%	50.4%		
Difference explained by:								
Poverty ratio	-0.8%	-4.3%	2.8%	1.0%	-1.1%	3.1%		
Demographic characteristics	24.3%	-1.7%	50.3%	19.2%	3.4%	34.9%		
SES	6.8%	-2.4%	15.9%	-5.2%	-10.6%	0.2%		
Non-income	36.9%	17.9%	56.0%	19.8%	8.4%	31.3%		
Total unexplained	32.7%	-34.0%	99.5%	65.1%	23.2%	107.1%		
Difference unexplained by:								
Poverty ratio	-65.2%	-134.8%	4.4%	-9.7%	-45.8%	26.4%		
Demographic characteristics	93.4%	-115.8%	302.5%	-46.9%	-194.2%	100.3%		
SES	150.5%	11.6%	289.4%	35.5%	-38.7%	109.6%		
Non-income	21.1%	-132.4%	174.6%	46.9%	-51.1%	144.9%		
Other family factor score	0.14	0.07	0.21	0.04	-0.02	0.1		
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09		
Difference	0.2	0.13	0.28	0.15	0.08	0.21		
Total explained	36.4%	23.2%	49.6%	67.3%	50.6%	84.0%		
Difference explained by:								
Poverty ratio	-0.2%	-7.8%	7.4%	3.8%	-4.8%	12.5%		
Demographic characteristics	10.6%	1.4%	19.8%	24.4%	12.0%	36.8%		
SES	7.9%	0.6%	15.1%	11.4%	2.8%	20.0%		
Non-income	18.1%	8.2%	28.0%	27.7%	14.4%	40.9%		
Total unexplained	63.6%	25.9%	101.3%	32.7%	-12.7%	78.1%		
Difference unexplained by:								
Poverty ratio	-10.1%	-27.6%	7.5%	-21.9%	-43.9%	0.0%		
Demographic characteristics	100.6%	-33.0%	234.1%	126.9%	-19.2%	273.0%		
SES	42.8%	-42.1%	127.7%	-57.2%	-160.8%	46.4%		
Non-income	-119.9%	-232.6%	-7.2%	-43.0%	-178.6%	92.6%		

## Table A-3b: (Continued)

	Housing				Neighborhood		
	b C.I.		Ι.	b	C	.I.	
Single-person factor score	0	-0.03	0.03	0.04	0.01	0.08	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.06	0.02	0.1	0.15	0.11	0.19	
Total explained	66.6%	31.5%	101.7%	43.5%	28.3%	58.6%	
Difference explained by:							
Poverty ratio	8.8%	-20.5%	38.1%	7.6%	-3.4%	18.6%	
Demographic characteristics	-4.7%	-29.2%	19.8%	-1.3%	-11.7%	9.1%	
SES	9.6%	-6.5%	25.8%	7.8%	1.8%	13.7%	
Non-income	52.9%	23.2%	82.7%	29.4%	17.8%	41.0%	
Total unexplained	33.4%	-33.5%	100.3%	56.5%	29.1%	83.9%	
Difference unexplained by:							
Poverty ratio	-15.8%	-49.1%	17.6%	-14.3%	-27.2%	-1.4%	
Demographic characteristics	203.5%	-32.9%	439.9%	4.8%	-86.6%	96.2%	
SES	105.6%	-95.1%	306.4%	-73.2%	-144.9%	-1.4%	
Non-income	46.6%	-197.7%	290.9%	-57.9%	-156.2%	40.4%	
Unrelated people living together factor score	0.09	-0.02	0.2	0.07	-0.05	0.18	
Married-couple factor score (ref.)	-0.06	-0.08	-0.04	-0.11	-0.13	-0.09	
Difference	0.15	0.05	0.26	0.17	0.06	0.29	
Total explained	58.4%	12.2%	104.6%	55.8%	22.8%	88.7%	
Difference explained by:							
Poverty ratio	-4.4%	-13.0%	4.1%	-1.2%	-7.8%	5.4%	
Demographic characteristics	22.4%	-25.9%	70.8%	20.8%	-13.1%	54.6%	
SES	0.5%	-6.7%	7.8%	2.7%	-3.0%	8.3%	
Non-income	39.9%	21.3%	58.4%	33.5%	17.8%	49.3%	
Total unexplained	41.6%	-48.4%	131.6%	44.2%	-29.2%	117.7%	
Difference unexplained by:							
Poverty ratio	30.1%	-9.2%	69.4%	12.7%	-29.7%	55.1%	
Demographic characteristics	-180.1%	-418.6%	58.4%	43.7%	-137.3%	224.7%	
SES	171.1%	42.0%	300.3%	-46.0%	-222.2%	130.3%	
Non-income	25.4%	-159.6%	210.4%	68.6%	-72.4%	209.6%	

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