Moving In, Moving Out:
Household Sharing, the Public Safety Net and Economic Well-being

Laryssa Mykyta
U.S. Census Bureau

ABSTRACT

The recession ending in June 2009 renewed research and media interest in the phenomenon of "doubling up" or household sharing. Changes in household sharing, particularly in the context of economic downturns and a fraying public safety net, are important to understand. In this analysis, I use panel data from the 2008 Survey of Income and Program Participation (SIPP) to examine how transitioning to or from a shared household interacts with the public safety net and affects adult well-being. Preliminary results suggest that household sharing increases resources available to households and individuals in terms of earnings and program benefits. These results suggest that sharing a household alleviates hardship and improves economic well-being.

Introduction

The recession ending in June 2009 renewed research and media interest in the phenomenon of "doubling up" or household sharing. Indeed, the number and percent of adults residing in shared households increased over the course of the recession (Mykyta and Macartney 2011, 2012). As a strategy for stretching thin resources, sharing a household with family members offers an important means of social support (Hareven 1990; Ruggles 1987). Further, there is some evidence that adults in shared households are economically disadvantaged compared to their counterparts who do not share households (Mykyta and Macartney 2012, 2011; Macartney and Mykyta 2012). Yet household poverty rates do not differ significantly between shared households and those that are not shared. Thus, household sharing may be a strategy employed by less advantaged individuals and householders to handle economic uncertainty. Yet, as eligibility for many means-tested assistance programs is based on household resources, changes in household composition due to household sharing may affect eligibility for and the benefits received through these programs. Thus, the effects of household sharing on well-being, particularly in the context of economic downturns and a fraying public safety net, are important to understand. However, to date there has been little empirical attention in the literature to the effects on household and individual well-being of transitions to and from household sharing. This paper adds to the literature by examining the effects of changes in shared household status economic well-being, as measured by income from various sources, poverty status, and program participation.

In this analysis, I use panel data from the 2008 Survey of Income and Program Participation (SIPP) to examine how transitioning to or from a shared household interacts with the public safety net and affects economic well-being.[1] I broadly define a shared household as a household that includes at least one additional adult – that is, an adult aged 18 years or older who is not enrolled in school and is neither

[1] The estimates in this paper are based on responses from a sample of the population. As with all surveys, estimates may vary from the actual values because of sampling variation and other factors. All comparisons made in this paper have undergone statistical testing and are significant at the 95-percent confidence level unless otherwise noted. For information on confidentiality protection, sampling error, non-sampling error, and definitions see http://www.census.gov/sipp/sourceac/S&A08_W1toW11(S&A-16).pdf.

the householder nor the spouse or unmarried partner of the householder. A resident of a shared household is any person, aged 18 years or older, that lives in a doubled-up household. These categories were created for this analysis and do not constitute an official definition of shared households.

Specifically, I address the following questions:

(1) How is household sharing associated with economic well-being, as measured in terms of total income, earned income and transfer income and poverty status (e.g. income from government assistance programs such as TANF or SNAP, the food stamp program or unemployment insurance)?
(2) How do transitions into and out of household sharing affect household and personal resources, in terms of total income, earned income, and transfer income and poverty status?

I expect that transitioning into a shared household will increase household total and earned income. Shared households by definition include more adult members, each of whom bring resources into the household. In contrast, transitioning out of a shared household may thus reduce household total and earned income, although adults leaving a shared household to establish their own household may have higher personal income than those that transition into shared households. However, the effect of sharing a household on means-tested transfers are more ambiguous. On the one hand, adults sharing households may be more likely to be economically disadvantaged than their counterparts (Mykyta and Macartney 2012, 2011). If this is the case, then they may be more likely to be eligible for means-tested benefits, such as food stamps. However, to the extent that eligibility is determined by household resources, the higher combined resources of shared households may reduce the eligibility for benefits. The effect of household sharing on poverty status is also ambiguous, since poverty is determined by both income and family composition.

Data and Methods:

In this analysis, I use data from the U.S. Census Bureau's 2008 Panel of the Survey of Income and Program Participation. The Survey of Income and Program Participation (SIPP) is a panel survey based on a nationally representative sample of the civilian, non-institutionalized population and includes approximately 50,000 eligible households. All adults in sampled households are interviewed once every four months for a period of twenty-four to forty-eight months. As a result of its longitudinal design, the SIPP is particularly appropriate for studying transitions, including transitions in living arrangements. The four month recall period enables researchers to capture transitions that are relatively short term, as well as changes of longer duration. Further, the SIPP follows original sample members throughout each panel, even if they leave the household. The SIPP also interviews any individuals residing with original sample members in their new household or in the original sampled household at subsequent waves. These individuals remain in SIPP as long as they reside with an original sample member. Thus, using SIPP, I am able to follow households and adults over time and examine the dynamics of household composition. In this analysis, I will use data from Waves 1 through 13 of the 2008 SIPP Panel survey. These data were collected between August 2008 and November 2012, and include information on household composition from May 2008 through November 2012. For the household analysis, the analytic sample includes all householders from original sample households interviewed at Wave 1 of the Panel who were followed through Wave 13 and remained householders; for the person analysis, the sample includes all persons, who were present at the time of the Wave 1 interview and who were followed through Wave 13 of the 2008 SIPP Panel.

The preliminary analysis reported here is based on an analysis of changes in household sharing on economic well-being among adults aged 18 years and older who were interviewed in Waves 1 through 10 of the 2008 SIPP Panel. In the proposed paper, I will extend the analysis through Wave 13. In addition, I will examine how living in a shared household affects the economic well-being of children as well as adults. The sample for the preliminary analysis includes 25,425 households (1,005,789 household-month observations) and 45,183 adults (for a total of 1,748,608 person-month observations). When weighted, these figures represent roughly 221 million adults and 116 million households.

Defining Shared Households and Additional Adults

For the purposes of this analysis, I define shared households as households in which there is at least one additional adult, that is at least one person aged 18 years and older who is not enrolled in school and who is neither the householder nor the spouse or unmarried partner of the householder. A resident of a shared household includes any person aged 18 years and older who lives in a shared household. Thus, residents of shared households include adults who are the householder, spouse or unmarried partner of the householder, as well as additional adults residing in the household. I exclude the group quarters population since I am primarily interested in individuals living in households. The measure of shared households focuses on "additional adults" (ages 18 and older) because minor children are typically considered dependents.

It should be noted that the transitions in shared household status do not necessarily imply that the adult is moving into or out of the household. Transitions in household status may occur in one of two ways: (1) the adult may move into or out of a household that is a shared household; (2) the household itself may become a shared household, or may exit shared household status. With respect to the household changing status, an individual may be a member of a household that did not have an additional adult in time t, and gains an additional adult in time t+1. That original household member would then enter into shared housing, even though he or she already resided in the household.

Examining the Economic Well-being of Adults Residing in Shared Households

In order to examine the effects of household sharing on economic well-being, I estimate three sets of random- and fixed-effect regression models to gauge how changes in shared household and additional adult status are associated with changes in economic well-being among persons. Two models are estimated for each outcome to examine the effects of (1) transitions to shared household (or additional adult) status for those who were not residing in a shared household (or who were not an additional adult) at Wave 1; and (2) transitions from shared household (or additional adult status) for those who were residing in a shared household (or were an additional adult) at Wave 1. Models examining the effects on well being of transitions in additional adult status are estimated only for those individuals who were aged 18 and older at the time of the first survey wave.

All models are estimated at the household level and at the person level. The household level models reflect the experiences of the householder; the person level model reflect the characteristics of all persons in the sample. Householders may take in additional adults because they have the resources to do so, or because they are in need of the resources brought by additional household members. Similarly, additional adults may enter a household in order to receive support or to provide assistance to a householder who needs more support. Analyzing transitions for householders and adults separately may shed light on any differences in the effects of household sharing on the well-being of householders compared to other household members.

I also stratify my models by age, in order to explore differences in the effects on economic well-being on household sharing for children (Less than 18 years), young adults (18 to 34 years), adults (35 to 64 years) and older adults (65 years and older).

For these regressions, our dependent variables include the following income measures: (1) household total income, (2) household earned income, (3) household transfer income, (4) personal total income, (5) personal earned income, (6) personal transfer income. I also examine income received by the household and the adult from the following sources: (1) TANF; (2) Food stamps; (3) any non-cash benefits (including food stamps, WIC, Medicaid, public housing subsidies, government energy assistance or free or reduced price school lunch or breakfast); and (4) Unemployment compensation. In addition, I also include a dichotomous measure of poverty status as a dependent variable.

To answer the first research question, I estimate a set random effects regression models on the pooled data, controlling for the individual socio-demographic characteristics.[2] Standard errors were adjusted for clustering by person and for sample design effects. These models provide estimates of the association between sharing a household or being an additional adult and measures of economic well-being.

To analyze how changes in shared household (or additional adult) status affect *changes* in economic well-being, I estimate fixed effects regression models control for unobserved characteristics of individuals and use only within-individual variation to predict coefficients. A limitation of fixed effects models is that they do not estimate coefficients for time-invariant characteristics, such as race/ethnicity, sex and nativity.

The fixed-effects models predicting changes in income are specified as follows:

$$I_{it} = \beta_1 H_{it} + \beta_2 U_{it} + \beta_3 Z_{it} + \beta_4 X_i + \text{month}_t + \text{year}_t + \text{state}_{it} + \theta_{it} + \varepsilon_{it}$$

where I_{it} represents the change in income for adult i between time t and $t+n$; H_{it} represents a change in shared household status between time t and $t+n$; U_{it} represents a vector of changes in macroeconomic conditions, including changes in state unemployment rates between t and $t+n$; Z_{it} represents a vector of individual demographic transitions coded as above, including changes in metropolitan residence; labor force status and marital status; and X_i represents a vector of time-varying individual socio-demographic characteristics such as age, educational attainment and disability status. In these models, θ_{it} represents an individual fixed effect controlling for time-invariant characteristics of individuals (such as sex, race and nativity) as well as any unobserved characteristics that might influence both the time-varying predictors and changes in household income. I control for month and year fixed effects to control for seasonal trends or secular trends in household composition as well as differences across states in the likelihood of sharing a household.

Preliminary Results

Preliminary results reported here are based on an analysis of changes in household sharing on economic well-being among adults aged 18 years and older who were interviewed in Waves 1 through 10 of the 2008 SIPP Panel. In the proposed paper, I will extend the analysis through Wave 13. In addition, I will examine how living in a shared household affects the economic well-being of children as well as adults.

Table 1 presents the distribution of adults in our sample by their shared household and additional adult status over the course of the Panel. As shown, 39.5 percent of adults ever shared a household over the course of the panel. Of adults who ever shared a household, 15.9 percent reported sharing a household from Waves 1 through 10; 10.1 percent reported transitioning out of a shared household after Wave 1, and 13.5 percent of adults transitioned into a shared household at some time during the course of the Panel. Further, over the course of the panel, only about 17.8 percent of adults were ever additional adults. Of these, 8.5 percent were additional adults living in someone else's household for the course of the panel, 4.1 percent transitioned out of additional adult status and 5.2 percent transitioned into additional adult status.

Table 2 shows results from models predicting the change in income by source associated with the transitions in shared household and additional adult status. For example, as noted in column C, household

[2] All models control for individual sociodemographic characteristics including sex; race /ethnicity; nativity; marital status, educational attainment, employment status, housing tenure, metropolitan residence, survey month and year. Models for income by source are estimated in Stata 12 using xtreg; models for program participation and poverty status will be estimated in Stata 12 using xtlogit.

total income for adults transitioning into a shared household increases by $869. Columns A and B show results for household models. In these models, personal income refers to the income of the householder or household reference person. Columns C and D show results for all adults transitioning to or from a shared household and Columns E and F reflect the results of adults transitioning to or from additional adult status.

As seen in Table 2 (columns A and B), household income increases when households become shared and is reduced when households transition out of shared household status. This is the case for total household income, earned income and transfer income, as well as household income from food stamps and noncash benefits. This makes some sense. A shared household implies more adults bringing additional resources into the household. However transitioning to or from a shared household was also significantly associated with change in the total personal income of the householder.

Among adults, transitioning to a shared household was also associated with increases in total household income and household income from all sources; transitioning out of a shared household reduced household income from all sources, except TANF. At the same time, total personal income also increased when the adult transitioned to a shared household. Transitioning into or out of shared household status was not significantly associated with changes in personal transfer income or individual TANF receipt. However, transitioning both to AND from shared households was positively associated with an increase (albeit small) in the personal income from food stamps.

As shown in columns E and F, adults transitioning to additional adult status experienced an increase in household income and household earnings, as well as an increase in amount of food stamps and non-cash benefits. Conversely, transitioning out of additional adult status was associated with a decline in household income, earnings and transfers. Those entering additional adult status also had an increase in personal total and earned income. Transitioning into additional adult status was also associated with an increase in food stamp benefits. Transitioning out of additional adult status was associated with decreases in personal total and earned income.

Discussion

In this analysis, I focus on the economic well-being of households and adults after transitioning into and out of shared households. Although there is ample evidence of an increase in shared households during the recent recession, as yet there has been little research focused on understanding the effects of such transitions.

There are many reasons individuals share households. Some adults may be motivated by a desire for companionship, or because family members need support or care. Others may share a household to enjoy public goods. Others may be motivated to share resources. Although our data does not enable us to discern the reason for household sharing, our results suggest that to some extent adults share households in order to combine resources with challenging economic circumstances. Sharing a household alleviates hardship and improves economic well-being

The regression results reported here, although preliminary, further indicate that transitioning to a shared household increases both household and personal income for adults sharing households. This finding is not surprising. Shared households include more adults who bring more resources into the household. Transitioning to a shared household brings more resources both in terms of earned income and in terms of means-tested program benefits. Further, personal resources from earned income and food stamps also increase after transitioning to a shared household (except for householders). This also suggests that those sharing households, including additional adults, do bring resources into the household.

This analysis has several limitations. First, I consider all adults, including those aged 18 to 24 years, in classifying households as shared. Yet, many would expect college-age young adults to reside with their parents. Indeed, research suggests that the transition to adulthood is lengthening, and that the age of homeleaving is increasing. I exclude adults enrolled in school in classifying additional adults to address this concern.

In addition, I focus the preliminary analysis presented here on those individuals who are in the sample through Wave 10 of the panel. Thus, the sample may be more residentially stable than those lost to attrition. If this is the case, it is likely that our analysis underestimates transitions both into but particularly out of households. However, the regression results reported here are not substantively different from results obtained when I do not restrict the sample.

It is possible that incomes increase prior to a transition. Therefore, this analysis demonstrates the association between transitions in household sharing and changes in income and economic well-being, and the results should not be treated as causal.

In this preliminary analysis, I only examine the effect of changes in shared household and additional adult status on income from different sources for adults ages 18 years and older. Yet I plan to extend the analysis by examining additional aspects of well-being, including measures of material hardship, poverty status and program receipt. I also plan to extend the analysis to examine how household sharing affects child well-being.

Finally, although the analysis does not enable me to determine the direction of support or the extent to which household members share pooled resources, the results provide evidence that sharing a household may be a strategy employed to handle economic uncertainty and to make ends meet during times of economic strain.

Table 1: Households and Adults Ages 18 Years and Older by Shared Household and Additional Adult Status

	Percent	S.E.
Adults Ages 18 Years and Older (n=220,827,231)		
Ever in a Shared Household	39.5	0.3
In a Shared Household at Wave 1	26.0	0.3
In a Shared Household at All Waves	15.9	0.3
Transitioned out of a Shared Household	10.1	0.2
Transitioned to a Shared Household after Wave 1	13.5	0.2
Never in a Shared Household	60.5	0.3
Ever an Additional Adult	17.8	0.1
Additional Adult at Wave 1	12.6	0.1
Additional Adult at all Waves	8.5	0.1
Transitioned from being an Additional Adult	4.1	0.1
Transitioned to being an Additional Adult After Wave 1	5.2	0.1
Never an Additional Adult	82.3	0.1

Note: Standard Errors based on replicate weights
For information on confidentiality protection, sampling error, non-sampling error, and definitions see http://www.census.gov/sipp/sourceac/S&A08_W1toW11(S&A-16).pdf.

Source: 2008 Survey of Income and Program Participation, Waves 1 – 10

Table 2. Coefficients from Fixed-Effects Regression Models Predicting Changes in Income of Households and Adults, by Transition in Shared Household and Additional Adult Status

	HOUSEHOLDS				ADULTS							
	(A) Transition into Shared Household		(B) Transition out of Shared Household		(C) Transition into Shared Household		(D) Transition out of Shared Household		(E) Transition to Additional Adult Status		(F) Transition out of Additional Adult Status	
	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
Household Income												
Household Total Income	787.41**	56.39	-1254.31**	64.20	868.52**	49.31	-1,360.53**	59.65	684.66**	89.61	-1,131.97**	104.53
Household Earned Income	694.77**	62.22	-1076.81**	77.04	677.87**	49.14	-1,169.57**	58.96	495.74**	88.03	-946.40**	102.01
Household Transfer Income	14.00**	3.06	-13.55**	4.23	15.80**	2.49	-16.95**	3.96	2.33	4.22	-13.14+	7.09
Household Income from TANF	1.08	0.79	-1.45	1.28	0.98+	0.51	-1.66	1.09	-0.50	1.30	0.06	2.12
Household Income from Food Stamps	11.35**	2.05	-11.42**	2.61	12.67**	1.61	-16.47**	1.95	9.40**	3.34	-8.95*	3.65
Household Income from Noncash Benefits	12.54**	2.10	-13.78**	2.75	13.84**	1.64	-18.49**	2.03	9.96**	3.42	-9.60*	3.81
Household Income from Unemployment Compensation	18.10**	4.91	-19.73**	5.61	19.67**	4.40	-21.69**	3.85	6.45	8.07	-9.80	6.77
Personal Income												
Personal Total Income	-25.22+	13.89	-32.70*	14.64	102.40**	24.35	-78.66**	26.46	434.94**	39.27	-110.91**	31.96
Personal Earned Income	15.26	38.40	-28.99	45.36	72.26**	23.93	-87.58**	26.24	389.62**	38.10	-129.98**	31.90
Personal Transfer Income	-2.08	2.15	2.53	2.14	1.89	1.24	2.73	1.78	-1.08	2.08	2.04	3.35
Personal Income from Food Stamps	0.20	1.33	2.20	1.37	2.10*	0.87	1.71+	1.01	3.49*	1.50	1.99	1.96
Personal Income from TANF	-0.49	0.59	1.32+	0.77	-0.12	0.35	-0.02	0.67	0.72	0.70	0.02	1.36

** $p<0.01$; * $p<0.05$; + $p<0.10$

For information on confidentiality protection, sampling error, non-sampling error, and definitions see http://www.census.gov/sipp/sourceac/S&A08_W1toW11(S&A-16).pdf.

Source: 2008 Survey of Income and Program Participation, Waves 1 – 10