Changing the Face of Poor Lone Mothers: Understanding How Alternative Poverty Definitions
Change the Composition of Lone Mother Families Living in Poverty¹

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¹ For the purposes of this paper, *lone mother families* refer to all families where children identify a mother within a given household but do not identify a father within the same household. Lone mothers under our definition include both householders and non-householders, live in single or complex household settings, and are separated, divorced, widowed, or single-never married. They also include those mothers cohabiting with a partner as long as the partner is not the parent of any of the minor children within the household.

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Short Abstract:

Using the 2011 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC), this paper analyzes how changes in poverty measurement affect the poverty rate of lone mother families. It compares new Supplemental Poverty Measures to official poverty rates within the United States. Lone mother families, defined as those families where the father is absent and children are present, include both families where the mother is the householder, as well as those subfamilies residing in someone else's household (usually the parent(s) or other relative(s)). This paper adds to the literature on lone mother family composition and dynamics by analyzing an expanded definition of lone mother family (one that is not limited to mothers that are householders) and provides critical comparisons of the real impact on poverty rates to changes in poverty definitions for this group. Since the Supplemental Poverty Measure allows for inclusion of alternative sources of income, such as resources from government supported programs focused on alleviating poverty, a decrease in the poverty rate for lone mother families is expected.

Introduction

Researchers have long recognized the vulnerabilities lone mother families face particularly as it relates to poverty (Citro and Michael 1995). However, most of the research to date has centered on female-headed households. While female-headed households generally have fewer household resources and are more economically vulnerable than male-headed households, these analyses fail to capture a significant proportion of lone mothers who are not the householder. In 2011, lone mothers accounted for 27.5 percent of all mothers, and approximately 22.9 percent of lone mothers lived in the households of their parents, uncles, aunts, other relatives and non-relatives in the United States (see Tables 1 and 2). In order to accurately capture and understand the characteristics of all lone mother families, this paper categorizes all families in which a mother and minor children are present in a household but the father is absent as *lone mother families*, regardless of whether the mother is the householder.

We analyze what happens to the poverty status of lone mother families when additional resources from government programs are included as sources of income within a poverty measure. Specifically, we compare lone mother poverty status in the United States under the official poverty measure (OPM) and the Supplemental Poverty Measure (SPM). The OPM compares a resource unit's total cash income to a poverty threshold based on unit size, age of the householder, and number of children. Because the composition of family budgets has changed since the mid-1960s, researchers and poverty experts have attempted to generate alternative poverty measures that more accurately reflect current realities while, at the same time acknowledging federal government programs that provide resources to families in or near poverty. These alternative poverty measures have been under construction for at least the past

two decades (Citro and Michael 1995). The SPM is an alternative measure developed under the guidance of an Inter-Agency Workgroup and reported by the U.S. Census Bureau (Short 2011).

In addition to investigating changes in poverty status of lone mother families under the new poverty measures, this paper expands previous work addressing issues associated with using householder status to identify lone mother families (Clark 1984; Buvinic 1990; Rosenhouse 1994; Buvinic 1997; Snyder and McLaughlin 2004; Heggeness 2010). It does this by identifying all lone mother families (regardless of householder status of the mother) as those family units including a mother with at least one child under age 18 in the household in which the father of the child(ren) is not present. This analysis also compares poverty status for those lone mother families where the mother is the householder to those where she is not.

This paper is unique in that we create a specific dataset of just lone mothers and compare their poverty rates under the alternative measures. The analysis presents a frequently unexamined area in the literature as most poverty researchers focus only on female-headed or lone mother householders.

The paper proceeds as follows. The next section provides a brief historical overview of poverty measurement in the United States. A description of gender and anti-poverty programs in the United States and a discussion of lone mother families, household composition, and poverty follow. Next, we describe the data and methodology used in the analysis. We look to understand the characteristics of lone mother families both in and out of poverty. In addition, we are particularly interested in understanding what happens to lone mother families under the Supplemental Poverty Measure and what characteristics are associated with shifts in poverty status from official to supplemental poverty. The analysis and conclusions end the paper.

Brief History of Poverty Measurement in the United States

Official Poverty Measure

The official poverty thresholds used by the U.S. Census Bureau to calculate poverty estimates, originally developed by Mollie Orshansky (1963) in the 1960s, are comprised of taking the cost of a basket of food for families of various configurations and multiplying them by three. They are updated each year using the Consumer Price Index (CPI) to adjust for inflation. Orshansky developed these thresholds based on a 1955 study that found that households spent one-third of their income on food. The family's cash income compared to the threshold determines the family's poverty status. If their cash income falls below their determined poverty threshold, then they are in poverty for the purposes of the official poverty estimates.

This method of calculating official poverty estimates has been in place since 1969. The Census Bureau publishes a poverty report each year that includes official statistics on poverty rates in the United States from 1959 to the present using this method. Under these thresholds, the poverty rate for the total population for whom poverty is calculated has fluctuated between 11 and 15 percent in the United States over the past four and a half decades (DeNavas-Walt, Proctor, and Smith 2011, 62).

Alternative Poverty Measures

While the official poverty measure does not address shifting household consumption patterns and the added resources of in-kind benefits and cash transfer programs provide to families, alternative definitions of poverty attempt to incorporate these factors into the new poverty measures. In 1995, the National Academy of Sciences (NAS) developed

recommendations for alternative poverty measures (Citro and Michael). The U.S. Census Bureau, in response, produced twelve alternative poverty measures based on the NAS recommendations. The Urban Institute has also developed alternative poverty measures for Minnesota and a handful of other states (Zedlewski, Giannarelli, Wheaton, and Morton 2010). In addition, the Institute for Research on Poverty in Wisconsin and the New York City Center for Economic Opportunity have developed regional alternative poverty measures.³ All of these efforts show the desire and interest for a nationwide alternative measure to poverty; one that accounts for safety net programs, accurate household consumption patterns, and family structures that more closely represent household economies of scale and resource sharing in modern times, such as accounting for the income and resources of cohabiting partners.

Supplemental Poverty Measure

In 2009, the Office of Management and Budget's (OMB) Chief Statistician formed an Interagency Technical Working Group on Developing a Supplemental Poverty Measure. With guidance and suggestions from this group, the Census Bureau, in coordination with the U.S. Department of Labor's Bureau of Labor Statistics (BLS), developed a Supplemental Poverty Measure (SPM) (Bureau of the Census 2010; Short 2011). It differs from the official measure in five dimensions: resource (measurement) unit, poverty threshold, threshold adjustments, updating of thresholds, and resource measure (Short, 3).

The resource unit for the official poverty measure is all individuals related by birth, marriage, or adoption. Individuals who are unrelated to the householder and aged 15 and over make up their own individual unit if they are not grouped with a subfamily that is unrelated to

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³ For more information, see http://www.nyc.gov/html/ceo/html/poverty_research/poverty_research.shtm, accessed on April 19, 2012.

the householder. The resource unit for the Supplemental Poverty Measure includes all individuals related by birth, marriage, or adoption, as well as all cohabiting partners, foster children under age 22 and all unrelated children under age 15. This new resource unit acknowledges the growing trend of cohabitation. It also assumes that unrelated children within the household are part of the household's economic unit by grouping them with the primary family's resource unit.

Poverty thresholds change in important ways under the SPM. As mentioned above, the official poverty thresholds represent the cost of a minimum food basket times three in a given year. Multiple poverty thresholds exist for diverse family sizes, composition, and the age of the householder, and the CPI adjusts the thresholds overtime (Short 2011, 3). The poverty threshold for the SPM, derived from the Consumer Expenditure Survey, acalculates the 33rd percentile of expenditures on food, clothing, shelter, and utilities (FCSU) of consumer units with exactly two children multiplied by 1.2 (Short, 3). The SPM threshold adjusts for family size, composition, geography, and tenure. Geographic adjustments allows for factoring in variations in the cost-of-living into the poverty measure. Finally, instead of adjusting the thresholds by the CPI, a 5-year moving average of expenditures on FSCU adjusts the thresholds annually (Short, 3).

Instead of using pre-tax cash income, the SPM more broadly captures resources coming into the household. It includes cash income from all sources, plus non-cash public assistance transfers and subtracts taxes, work-related expenses, childcare, health expenses, and child support paid. The non-cash public assistance programs included in the SPM resource calculation are the Supplemental Nutritional Assistance Program (SNAP, formerly Food Stamps); the

⁴ More information on the Consumer Expenditure Survey (CE) available at: http://www.bls.gov/cex (accessed on May 11, 2012)

National School Lunch Program; the Supplementary Nutritional Program for Women, Infants, and Children (WIC); housing subsidies; and Low-Income Home Energy Assistance (LIHEAP).

In 2011, the Census Bureau issued a report titled, *The Research SUPPLEMENTAL*POVERTY MEASURE: 2010 (Short 2011). According to the report, the supplemental poverty rate for 2010 is 16.0 percent. This compares to the official poverty rate of 15.1 percent (DeNavas-Walt, Proctor, and Smith 2011). Work on defining and improving the SPM is in progress. The official poverty rate is the official measure of poverty in the United States.

Lone mothers and Anti-Poverty Programs in the United States

Since the 1930s, United States federal government programs like Aid to Families with Dependent Children (AFDC) and Food Stamps have historically acknowledged the vulnerability of children in lone mother families to poverty. These programs support economically vulnerable children and their families by providing additional resources to the family. AFDC historically required mothers to be living alone with their children. The presence of spouses or cohabiting partners in the home was sufficient reason for the termination of financial support to the mother and her children. Social workers would make surprise visits to homes of public assistance recipients to ensure that no spouse or cohabiting partner was present. (Blank 1997)

Over the years, additional programs have developed with similar intentions of providing support to vulnerable families and individuals. These include the Women, Infants, and Children (WIC) program, Medicaid, public housing, and Section 8 housing vouchers. While none of these programs is limited to lone mother families, lone mother families participate in these programs at a disproportionately high rate. Since the new SPM accounts for these programs when identifying

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⁵ Temporary Aid to Needy Families (TANF) replaced AFDC in 1996. Supplemental Nutrition Assistance Program (SNAP) replaced Food Stamps in 2008.

families in poverty, we expect lone mothers poverty rates to be more sensitive to changes in poverty measurements that account for these programs.

Lone mother Families, Household Composition, and Poverty

Household and family composition is complex, even more so when families face a lack of resources and other economic constraints. Mothers with small children and no spouse or partner present are more vulnerable to poverty than other family types. Some lone mother families live independently and numerous studies have analyzed the characteristics of these families in which the mother is the householder (Arends-Kuenning and Duryea 2006; Bedard and Deschenes 2005; Conley and Ryvicker 2005; Daniels, Rettig, and delMas 2006; Danziger, Jakubson, Schwartz, and Smolensky 1982; Horrell and Krishnan 2007; Mitra 2005; Renwick and Bergmann 1993; Schmidt and Sevak 2006; Yamano, Shimamura, and Sserunkuuma 2006). However, if resources are lacking or family preferences for intergenerational cohabitation dominate, lone mother families may live with other relatives or nonrelatives in complex household configurations.

Fewer studies have examined these families (Buvinic, Valenzuela, Molina, and Gonzalez 1992; Heggeness 2010). For measurement purposes, when lone mother families live with other relatives, their poverty status and other socioeconomic characteristics are rarely reported for their subfamily unit. More commonly, the larger household (the primary resource unit) absorbs the lone mother subfamily, and their poverty status is as part of that unit. If the lone mother family lives with nonrelatives then their poverty rate is calculated separately, but the mother is not considered the householder of the household. Understanding poverty for this group of individuals is complex. Since they live in complex family households, poverty rates may be understated.

Reports published by the Census Bureau describe poverty for female householders where the spouse is absent. The most recent report for the official poverty measure shows a poverty rate of 31.6 percent for female householder, no husband present families in 2010. This is much higher than the rate of 11.7 percent of all families living below poverty or the 6.2 percent of married-couple families below poverty. The poverty rate for female householder, no husband present families has ranged between 25 and 38 percent over the past four and a half decades. (DeNavas-Walk, Proctor, and Smith 2011, 74)

These estimates may not accurately reflect lone mother poverty rate. Female householder, no spouse present families include widows with no children, widows with adult children, single women with no children, and other types of configurations. They exclude lone mothers that are not householders. To understand poverty in the context of lone mothers, lone mothers must be defined as are those women with related minor children (under age 18) in the household where the father is not in the household.

According to a recent report on the SPM, which compares the official poverty measure to the SPM, female householder units had a poverty rate of 28.7 percent under the official poverty measure and 29.0 percent under the SPM (Short 2011). The difference is not statistically significant. If lone mothers were equivalent to female householders, this finding would be surprising, as we would expect poverty rates to decrease significantly for the group most affected by anti-poverty programs. However, as stated above, female householders are not equivalent to lone mothers.

The relationship between gender, householder status, household composition, and poverty is complex. Numerous studies, as previously shown, have attempted to examine and provide insight into the complex world of lone mother families in poverty. The next section

analyzes how new measures of poverty potentially change the composition of these lone mother families. It also adds to the literature by including all lone mother families in its analysis, reporting poverty estimates for these families, and identifying characteristics associated with poverty.

Data and Methodology

For this analysis, we use the 2011 Census Bureau's Current Population Survey Annual Social and Economic Supplement (CPS ASEC). The CPS ASEC is well suited to examine poverty status among lone mothers since it serves as the basis for both the official poverty statistics and for the SPM. Further, the CPS ASEC contains a *mother pointer* for each individual in the survey sample that points to the line number of the mother of that individual if she resides in the household. This *mother pointer* enables us to identify all the females in the CPS ASEC who are mothers and reside in the same household with their minor child(ren). Collected annually between February and April, the CPS ASEC captures information on current household composition and income and poverty status for the prior year. The 2011 CPS ASEC captures household composition in spring 2011 and poverty status for calendar year 2010.

Defining Lone mothers

We define lone mothers as any female who resides in a household with at least one of her children under age 18 but who does not share the household with the father of any of her resident children. Lone mothers may be householders or may be living in someone else's household with

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⁶ Data are subject to error arising from a variety of sources. For more information on sampling and non-sampling error, see www.census.gov/apsd/techdoc/cps/cpsmar11.pdf (accessed May 21, 2012).

their children. Further, lone mothers may be cohabiting with a partner who is not the father of their children ⁷

In order to identify lone mothers, we first identify children under age 18 in the 2011 CPS ASEC. Children with positive values on the *mother pointer* variable are matched to their mother. Of the 58,424 children in the survey sample, 54,073 had a mother residing in the household. We identified 29,173 mothers for these children. Of these mothers, 7,574 were lone mothers. When weighted, our analytic sample consists of 10.1 million lone mothers or 27.5 percent of all mothers.

Describing Lone mothers' Poverty Status Using Alternative Measures

In this paper, we compare estimates of the number and percent of lone mothers with incomes below poverty using: (1) The official poverty measure (OPM); and (2) the Supplemental Poverty Measure (SPM). We present sample characteristics for all lone mothers and by poverty status using both measures. Finally, we describe the number and percent of lone mothers experiencing a "change" in poverty status under the SPM compared to their status under the OPM.

For lone mother families where the mother is not the householder, the poverty status under both OPM and SPM is determined based on the resource unit with which the lone mother and her children are associated. For example, if she is the child of the householder, then she and her children enter into the householder's resource unit for poverty estimation. While it is important to understand her potential poverty status if she were living independently, we cannot

⁷ Mothers residing with a cohabiting partner who is the father of at least one of the mother's children are not defined as lone mothers in our sample. Note that 248 mothers had children with multiple partners and cohabited with the father of at least one of their children. These 248 mothers were excluded from our sample of lone mothers, since the father of at least one child was also residing in the household.

know for sure what her income might be without the support of those within the household she is residing. Therefore, we limit this analysis to comparing her poverty status within the resource unit she is residing with the poverty status of lone mothers who are householders and their own respective resource units.

Associations between Characteristics and Poverty Status Using Multiple Measures

In this analysis, we estimate two sets of nested logistic regression models in order to identify differences in the characteristics of lone mothers classified as poor under the OPM and under the SPM. In the first set of models, the dependent variable is defined as 1 if the lone mother is characterized as poor using the OPM, and 0 otherwise. In the second set of models the dependent variable is defined as 1 if the lone mother is characterized as poor using the SPM, and 0 otherwise. Model 1 incorporates demographic and socioeconomic characteristics including age, race, nativity, marital status, cohabiting status, educational attainment, employment status, presence of a child under 6 years old in the household, as well as whether the mother moved in the last year. Model 2 adds in household characteristics, such as the number of lone mothers in the household, metropolitan residence, and region. Model 3 adds variables reflecting the value of in-kind benefits (SNAP, housing subsidies, free and reduced price school lunch, WIC, energy assistance and federal EITC) and additional expenses (taxes, work-related expenses, child care expenses, medical out-of-pocket expenses) included in the SPM, as well as the change in the SPM unit.⁸

Associations between Characteristics and Changing Poverty Status

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⁸ The calculation of the SPM subtracts child support paid from resources. However, we do not include it in our models since less than 1.0 percent of lone mothers in our sample report paying child support.

In order to examine which characteristics are associated with a change in poverty status, we estimate two additional sets of nested logistic regression models. The first set of models is estimated for the subset of lone mothers who are classified as poor under the OPM (n=3,790). The dependent variable for these models is coded as 1 if the lone mother is NOT classified as poor using the SPM, and 0 if the lone mother is defined as poor under the SPM. The second set of models is estimated for the subset of lone mothers who were not defined as poor using the OPM (n=6,341). The dependent variable for these models is coded as 1 if the lone mother is defined as poor under the SPM, and 0 if she is not. For each set of models, model 1 includes individual demographic and socioeconomic characteristics, model 2 adds household characteristics and model 3 incorporates variables indicating the value of in-kind benefits and additional expenses and the change in the SPM unit.

Since the SPM is more inclusive and incorporates program benefits from EITC, WIC and other programs disproportionately used by lone mother families, we expect to see poverty rates for these families decrease under the SPM (compared to the OPM). Additionally, we expect to see significant associations between changes in poverty status from OPM to SPM and program participation variables.

Results

Sample Characteristics of Lone mothers

Table 3 reports sample characteristics for lone mothers, by poverty status in 2010. An estimated 77.1 percent of lone mothers were householders, and approximately 22.9 percent lived in someone else's household with their own children. About 10 percent were cohabiting with a

⁹ Unless otherwise stated, all descriptive statistics discussed in this section are significant at the 10 percent level.

partner who was not the father of her children, and almost half (45.2 percent) had more than one child under 18 years old in the household.

In terms of demographic characteristics, the majority of lone mothers (85.7 percent) were between the ages of 25 and 64 years old. Around two percent of lone mothers were under age 20. Although 44.9 percent of lone mothers were white, non-Hispanic, about 28.5 percent were black, non-Hispanic, and about five percent were other, non-Hispanic. More than one in five lone mothers (21.8 percent) were of Hispanic origin and 14.4 percent were foreign born.

In terms of educational attainment and labor force participation, 16.1 percent of lone mothers did not have a high school diploma and 32.0 percent were high school graduates.

Although 35.2 percent had some college experience, 16.7 percent had at least a bachelor degree. Nearly two-thirds (65 percent) of lone mothers were employed in 2010, while 11.4 percent were unemployed and 23.5 percent were not in the labor force.

Lone mothers were also relatively mobile, with roughly one in five (20.9) percent moving within the last year.

Poverty Status of Lone mothers

In Table 2, we report the poverty status in 2010 for lone mothers using the OPM and the SPM. As shown, 37.4 percent of lone mother families lived in a resource unit whose total income was below their official poverty threshold. Measuring poverty with the SPM reduced the proportion of lone mothers in poverty compared to the OPM. For example, 31.3 percent of lone mothers were poor using the SPM.

¹⁰ Please note that there is no statistically significant difference between not having a high school diploma (16.1 percent) and having at least a bachelor's degree (16.7 percent).

Table 2 also shows the percent of lone mothers that were poor in 2010 by their householder status. Measuring poverty with the OPM, 40.3 percent of lone mothers heading their own household were poor, compared to 32.5 percent under the SPM. Although poverty rates for lone mothers heading their own household using the OPM were higher than poverty rates using the SPM, poverty rates under the OPM (27.6 percent) and the SPM (27.1 percent) were not significantly different for lone mothers who were not householders. Poverty rates under both measures were significantly higher for lone mothers heading their own household compared to lone mothers who were not householders.

Characteristics of Lone mothers, by Poverty Status

Table 3 also reports characteristics of lone mothers, by poverty status under both the measures examined in this analysis. As shown in Table 2, lone mothers who were living in poverty under the OPM were significantly more likely to be householders (83.1 percent) than those who were poor under the SPM (80.2 percent).

Lone mothers who were cohabiting were also more likely to be poor under the OPM than under the SPM, but this result is not surprising given that cohabiting partners of the householder and their income are incorporated into the SPM unit.

Lone mothers with only one child also had higher poverty rates under the SPM than under the OPM. About half of lone mothers with only one child in the household were poor using the SPM (50.4 percent), compared to 44.1 percent of lone mothers with only one child living below the official poverty measure.

There were additional differences in the characteristics of lone mothers living in poverty using the OPM and the SPM. For example, poor lone mothers under the OPM were younger (33.8 years old on average) than poor lone mothers under the SPM (34.5 years).

In addition, 17.6 percent of lone mothers living under the OPM were foreign born compared to 21.3 percent of lone mothers who were living in poverty using the SPM. Lone mothers defined as poor under the SPM were also more likely to have graduated from college (7.5 percent) than those defined as poor using the OPM (5.6 percent).

Difference in Poverty Status for Lone mothers Using Alternative Measures

Table 4 reports the difference in poverty status for lone mothers using the OPM and the SPM. As shown in Table 3, about 86 percent of all lone mothers experienced no change in poverty status under the alternative measures. Specifically, 27.6 percent were poor using both the OPM and SPM; 58.4 percent were not poor under both the OPM and SPM.

While the majority of lone mothers do not change their poverty status, we know the SPM produces lower estimates of the overall percent of lone mothers in poverty compared to the OPM. What proportion of lone mothers actually changes poverty status? To do that, we look at how many mothers went from being poor in OPM to not poor in SPM and visa versa. Nine point eight percent of all lone mothers were in poverty under the OPM but not in poverty under the SPM. Another 4.2 percent were not in poverty under the OPM but in poverty under the SPM. The net "reduction" in poverty for all lone mothers between the two poverty measures was 5.6 percent.

Table 4 also presents differences in poverty status using alternative poverty measures by householder status. For householders, the net reduction in poverty rates under the SPM

compared to the OPM is 7.8 percentage points: 12.2 percent of lone mother householders who were in poverty under OPM were not in poverty under the SPM, while 4.4 percent were not in poverty under the OPM and were in poverty under the SPM. Among lone mothers who were not householders, the net change in poverty status was only 0.4 percent. For these lone mothers, 7.1 percent were in poverty under OPM and not in poverty under SPM, and 6.7 percent were not in poverty under the OPM and in poverty under the SPM. Using the SPM measures has a larger impact on poverty rates for lone mother householders than for lone mothers who do not head a household.

Program Participation and Additional Expenses of Lone mothers

Table 5b reports mean values of in-kind benefits from government transfer programs, taxes, and necessary expenses for lone mothers, by poverty status.¹¹ As shown in Table 5b, on average, values for in-kind benefits were higher and most necessary expenses were lower among those lone mothers classified as poor under either measure compared to the full sample.¹² This result is not surprising since many of these transfer programs target poor or low-income families. Further, in general, lone mothers classified as poor under the OPM received significantly higher benefits and had lower tax liability on the Federal and state level than those defined as poor under the SPM.¹³

¹¹ Note that the value of WIC is not included in this analysis. Instead, we report the percentage of lone mothers reporting WIC receipt.

¹² Federal EITC benefits were not statistically different between the full sample and those under the OPM. Medical out-of-pocket expenses were not statistically different between the full sample and those under the SPM.

There was no difference in the amount of childcare expenses paid by lone mothers classified as poor under the OPM and those defined as poor under the SPM.

Logit Regressions¹⁴

As previously mentioned, we use nested logit regression models, which include: (1) demographic and socioeconomic variables, (2) demographic, socioeconomic, and household level variables, and (3) all previous variables plus program variables that determine resources under the SPM. Program eligibility for many of these programs is based on having income at or below some percent of a poverty guideline. If the purpose of our models was to predict poverty status, we would be concerned about endogeneity. The poverty guidelines, determined by the Department of Health and Human Services and derived from official poverty thresholds, determine program eligibility in many social programs. Instead, we are interested in the association between these program variables and the SPM since this measure accounts for inkind benefits and other resources coming into the household. Since lone mothers rely on these inkind and cash transfer benefits at a higher rate than the general population, we expect to see strong associations between these programs and lone mother poverty status.

Table 6 shows associations between covariates and poverty status for mothers under both the OPM and the SPM. As expected, the demographic characteristics of lone mothers, as well as their education and employment status, are associated with their poverty status. These associations remain significant even after including program specific variables into our regressions.

Official Poverty Status

Under the official poverty measure, being separated or married, spouse absent compared to never-married are associated with an increase in the probability of being poor. Being less

¹⁴ Significant differences discussed in this section vary in degree of significance. To determine whether a particular comparison is significant at the 1, 5, or 10 percent levels, please see Table 6 and Table 7.

educated and not in the labor force are consistently associated with an increased odds of being poor across all three models, as is having at least one child under age 6 and moving within the past year. Being foreign born is also positively associated with poverty status in our models.

What program and resource variables are associated with the probability of being in official poverty? Federal, State, and FICA taxes, as well as Earned Income Tax Credits (EITC) and work and childcare related expenses are all associated with a decrease in the probability of being in poverty. Whereas, receiving SNAP (formerly Food Stamps) and housing subsidies are associated with an increased probability of being poor under the official measure.

Supplemental Poverty Status

Many factors are associated with the Supplemental Poverty Measure (SPM). Being black, non-Hispanic, foreign-born, married with a spouse absent, having less than a high school diploma and being unemployed or out of the labor force are associated with increases in the probability of being poor for all three models under the Supplemental Poverty Measure. Having at least some college education is associated with a decreased probability of being poor. In the final model (3), having at least one child under age 6 and the presence of multiple lone mothers in the household are both associated with increases in the probability of being poor under the Supplemental Poverty Measure, as is living in an urban area. As we would expect, receiving transfers and in-kind benefits such as EITC, SNAP, and energy assistance is associated with a decrease in the probability of being poor under the supplemental measure.

Taxes, childcare expenses, and medical out-of-pocket (MOOP) expenses are associated with supplemental poverty. Paying higher taxes is associated with a decreased likelihood of being poor under supplemental poverty, as we would expect. Many poor mothers cannot afford

formal or expensive daycare settings and often opt for informal familial arrangements or lower cost arrangements among friends and neighbors. Increased childcare related expenses are associated with a decreased probability of being poor. Medical expenses in the U.S. are increasing and definitely have the ability to change a family's poverty status if an unexpected medical emergency occurs. Every \$100 spend on MOOP is associated with an increased 1.3 percent chance of being poor.

Lone mothers are more vulnerable to poverty. Because of this, we expect lone mother poverty rates to be sensitive to poverty estimates and alternative poverty definitions. The next section discusses the results of two logit regressions (see Table 7) and highlights the variables associated with changes in poverty status. As previously mentioned, the two changes in poverty status we analyze are those lone mother families who are in official poverty, but not in poverty under the supplemental measure and those who are not in official poverty, but in poverty under the supplemental measure.

In Official Poverty, Not in Supplemental Poverty

We expect that demographics will not play a dominant role in changes to poverty status moving from official poverty measures to Supplemental Poverty Measures. However, to the extent that these factors are correlated with program participation and household composition, it is possible that we will find associations. There is, however, only one demographic variable that is significant across all three models for those families who are in official poverty but not in supplemental poverty. Divorced mothers in poverty are associated with higher rates of being in poverty under OPM and out of poverty under SPM than their never-married counterparts.

For those mothers in official poverty, the full model shows that having at least some college education is associated with a higher probability of being in poverty under OPM and not in poverty under the SPM. Households with more than one lone mother and those living in an urban area are associated with being in poverty under OPM and being less likely to not be in poverty under the SPM. Age, race, ethnicity, being born in a foreign country, cohabiting, and labor force participation are not associated with changes in poverty status for those mothers in official poverty compared to their supplemental poverty status.

In-kinds benefits and cash transfer programs matter for this group. Receiving benefits from EITC, SNAP, housing subsidies, and energy assistance are all associated with an increased probability of being in poverty under OPM and not in poverty under the SPM. Medical out-of-pocket expenses are associated with being in poverty under OPM and remaining in poverty under the SPM. Mothers who are in a reconfigured resource unit under the Supplemental Poverty Measure are associated with a four times greater probability of not being poor under the SPM (compared to being poor under the OPM). Free or reduced lunch, WIC, taxes, work-related expenses, and child care-related expenses are not associated with not being in poverty under the SPM for those mothers in poverty under the OPM.

Not in Official Poverty, In Supplemental Poverty

We also investigated the factors associated with mothers who are not in official poverty but are in poverty under the SPM. Here we find more demographic variables associated with this change. Race matters. For example, compared to their white, non-Hipsanic counterparts, mothers of color and those born in a foreign country that are not poor under the OPM are associated with

an increased probability of being classified as in poverty under the SPM. This association is strong for black, non-Hispanic and foreign-born mothers across all three models.

Having a college education and labor market participation are associated with a decreased probability of being considered in poverty under the SPM for those mothers not in poverty using the OPM. This is not surprising since higher levels of education lead to higher wages.

Furthermore, being employed compared to not working provides more income to the resource unit.

Those families not in poverty who have children under age 6 living in their household or who have multiple lone mothers living in their household are associated with higher rates of being classified as in poverty under the SPM. Living in an urban area is also associated with an increased probability of being in poverty under the supplemental measure.

What programs are associated with an increased likelihood of being in supplemental poverty for those lone mothers not in official poverty? EITC, SNAP, housing subsidies, and free or reduced lunch decrease the probability, as does energy assistance and taxes. Work-related expenses and medical out-of-pocket expenses are associated with an increased probability of being in poverty under the SPM. Finally, being in a new resource unit under supplemental poverty is weakly associated with a decreased probability of being in poverty under the SPM.

Conclusion

This paper attempts to provide a deeper understanding of the associations between demographic and socioeconomic characteristics, program participation, and poverty status for lone mother families. It advances the literature on lone mother families and poverty measurement

by examining the factors associated with changes in poverty status between the official poverty measure and the Supplemental Poverty Measure for these families.

The results in this paper have important implications for lone mother research. First, lone mothers experience higher poverty rates compared to the overall poverty estimates. For example, 27.5 percent of lone mothers were poor under the official poverty measure in 2010, compared to 15.1 percent of the population (DeNavas-Walt, Proctor, and Smith 2011). Even using the Supplemental Poverty Measure, 31.3 percent of lone mothers were poor, compared to 16.0 percent of the population (Short 2011). This population is vulnerable to poverty and the need for more research on factors influencing that vulnerability is apparent. Second, lone mothers who are householders experience higher levels of poverty than those who are not householders under either measure. While householders are more vulnerable to poverty, it is important to consider lone mothers who are not householders, a group often overlooked by researchers focused on female-headed households. The relationship between poverty status and household configuration is still unclear for lone mothers. Would those lone mothers living with other family members experience higher rates of poverty if they moved out and lived on their own? Additional research is needed to understand the dynamics of lone mothers, poverty, and household composition.

The subpopulation of lone mothers in poverty shifts under the Supplemental Poverty Measure compared to the official measure. While a large proportion (86.0 percent) of lone mothers did not change their poverty status between official and Supplemental Poverty Measures, 14.0 percent of lone mothers did change their poverty status from one measure to the other, with more than three in four (11.0 percent) of lone mothers are not in poverty under the SPM.

Our analysis has also shed light on factors associated with lone mother poverty and, specifically, shifts in poverty status based on the measure used (OPM versus SPM). We have shown that cash transfer and in-kind programs such as the Earned Income Tax Credit (EITC), SNAP (formerly Food Stamps), housing subsidies, and energy assistance programs are strongly associated with changes in poverty status under the two measures. Specifically, they are more likely to bring lone mothers out of poverty under the SPM. Medical out-of-pocket (MOOP) expenses are associated with lone mothers entering poverty under the SPM.

In conclusion, this paper provides a glance into the realities of all lone mothers, regardless of householder status, as they relate to experiencing poverty. As expected, program benefits matter for this group and provide a necessary buffer to poverty, as witnessed by the incorporation of these programs into poverty estimates under the Supplemental Poverty Measure and our analysis here. Future work will attempt to isolate program effects on poverty for this group, as well as attempt to estimate poverty for lone mothers who are not householders using their own nuclear subfamily as the resource unit. The goal will be to compare what poverty rates might look like for them if they were to become householders.

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Appendix: Independent Variable Definitions

In this section, we provide basic definitions of the independent variables used in the logit regressions.

Demographic and Socioeconomic Characteristics

We include several demographic and socioeconomic characteristics in our models, including a continuous measure of age; categorical variables indicating race/ethnicity, educational attainment and employment; and dichotomous variables indicating whether the lone mother was foreign born, whether she was cohabiting, whether there was a child under 6 year in the household and whether she had moved in the past year.

Household Characteristics

Our models are control for household characteristics such as metropolitan status, region and the presence of more than one lone mother in the household.

Program Receipt, Taxes, Additional Expenses and the SPM Unit

In our regression models, we incorporate a set of variables indicating the value of in-kind benefits and additional expenses, as well as a variable indicating a change in the Supplemental Poverty Measure (SPM) unit. These variables are included because they represent the changes in the calculation of resources for defining poverty status under the SPM. Each of these measures is calculated for the lone mother at the family level, representing the official poverty measure unit.

In-kind Benefits¹⁵

<u>Supplemental Nutrition Assistance Program (SNAP)</u>: In the CPS ASEC, respondents report if anyone in the household ever received SNAP benefits in the previous calendar year, and if so, the face value of those benefits and the number of months the benefits were received. The annual household amount is pro-rated to resource units to derive the market value of SNAP benefits received by the family.¹⁶

National School Lunch Program: In the CPS ASEC, the household reference person is asked to identify any children in the household who "usually" ate a complete lunch at school and to further identify which of these children received free or reduced price lunch through the Federal School Lunch Program. The value of school lunch through the Federal School Lunch Program is based on the assumption that the children received the lunches every day during the last school year. Benefits for the family are valued using the cost per lunch from the Department of Agriculture Food and Nutrition service.

<u>Housing Subsidy</u>: The value of housing subsidies is estimated as the difference between the "market rent" for the housing unit and the total tenant payment. The market rent is estimated using a statistical match with the U.S. Department of Housing and Urban Development (HUD)

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¹⁵ Definitions of in-kind benefits taken from Short (2011).

¹⁶ In 2011, the CPS ASEC noted a decline in the number of households reporting SNAP receipt while administrative data showed an increase. As a result, a Monte Carlo methods was used to assign SNAP benefits to households reporting none. Assignment was based on reported receipt in the prior calendar year among those households interviewed both years), participation in other public assistance programs and household total money income. Imputation flags were set for cases where food stamp receipt was changed.

administrative data. For each household in the CPS ASEC identified as receiving help with rent or living in public housing, an attempt was made to match on state, Core Based Statistic Area (CBSA) and household size. The total tenant payment is estimated using the total income reported by the household in the CPS ASEC and HUD program rules.

<u>Women, Infants, and Children (WIC)</u>: In the CPS ASEC, the household reference person is asked to identify which household members, if any, received benefits through the Women, Infants and Children (WIC) Nutrition Program in the prior calendar year. Family level WIC receipt was defined as a dichotomous variable coded as 1 if the lone mother or any member of the lone mother's family received WIC; and coded as 0 if no person in the lone mother's family (including the lone mother) received WIC benefits.

<u>Low-Income Home Energy Assistance Program (LIHEAP)</u>: In the CPS ASEC, the household reference person is asked whether the household received help with heating costs and the amount received. The value of household energy assistance is pro-rated to resource units to drive the value of LIHEAP benefits received by the resource unit.

<u>Earned Income Tax Credit (EITC)</u>: The CPS ASEC does not include information on taxes paid or tax credits received but relies on a tax calculator to simulate taxes paid. These simulations include federal and state tax credits.

Additional Expenses

<u>Taxes</u>: The CPS ASEC does not include information on taxes paid but relies on a tax calculator to simulate taxes paid. These simulations include federal and state income taxes and social security payroll taxes (FICA). These simulations also use a statistical match to the Statistics of Income (SOI) microdata file of tax returns.

<u>Work-Related Expenses</u>: Family work-related expenses are calculated by multiplying 85 percent of median weekly expenses times weeks worked for each individual and are summed to the resource unit level. Median work expenses for 2011 were derived from the most recent work-related expenses topical module of the 2008 Survey of Income and Program Participation (Wave 4) and were equal to \$30 per week.

<u>Childcare Expenses</u>: In the CPS ASEC, parents are asked whether or not they pay for child care and how much they spent. Family childcare expenses are capped not to exceed the reported earnings of the lowest earner in the family.

<u>Medical Out-of-Pocket (MOOP) Expenditures</u>: In the CPS ASEC, the respondent reports out-of-pocket medical expenditures for health insurance premiums, including vision and dental plans, and prescription drug insurance; medical care, including payments for hospital visits, medical providers, dentists, medicine and medical supplies; and over-the-counter spending, including aspirin, cold remedies, bandages, first aid supplies and other items. Resource unit

medical out-of-pocket expenses are calculated by summing out-of-pocket medical expenditures for each family member.

Supplemental Poverty Measure (SPM) Resource Unit

Because the SPM resource unit includes cohabiting partners of the householder, some lone mothers and their families in our sample are subsumed into new resource units under the SPM. We include a variable coded as 1 if the individual experienced a change in resource unit, and 0 otherwise.

Table 1. Number of Mothers and Lone Mothers, by Householder Status

	Unweighted	Weight	ed
	Number	Number	SE
All Mothers	29,173	36,889	224
Single Mothers	7,574	10,130	131
Householders	5,850	7,811	114
Non-Householders	1,724	2,319	67
Not Single Mothers	21,599	26,759	227
Householders	8,674	10,710	169
Non-Householders	12,925	16,049	139

Notes: Weighted results reported in thousands. Standard errors obtained using replicate weights.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 2. Poverty Status in 2010 for Lone Mother Families Using Official Poverty Measure and Supplemental Poverty Measure, by Householder Status

			Offic Poverty N		Suppler Poverty N	
	Tot	al	(OP)	M)	(SPI	M)
	Number	SE	Percent	SE	Percent	SE
All Single Mothers	10,130	131	37.4	0.7	31.3	0.6
Householders	7,811	114	40.3	0.8	32.5	0.7
Non-Householders	2,319	67	27.6	1.2	27.1	1.4

Notes: Numbers reported in thousands. Standard errors obtained using replicate weights.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 3. Sample Characteristics for All Lone Mothers by Poverty Status

	Tota	al	Office Poverty M (OP)	Measure	Suppler Poverty N (SPI	Measure .
	N=10		N=3,		N=3,	
	Percent	SE	Percent	SE	Percent	SE
DEMOGRAPHIC CHARACTER	RISTICS					
Age ^A	35.7	0.1	33.8	0.2	34.5	0.2
Under 20	2.1	0.2	3.3	0.4	3.0	0.4
20-24	11.8	0.4	15.7	0.8	14.5	0.9
25-64	85.7	0.5	80.4	0.9	82.1	0.9
65 years and older	0.5	0.1	0.6	0.2	0.5	0.1
Race						
White Non-Hispanic	44.9	0.6	35.4	1.1	33.5	1.1
Black Non-Hispanic	28.5	0.5	34.0	1.1	32.7	1.0
Hispanic origin	21.8	0.5	26.5	1.0	29.2	1.1
Other Non-Hispanic	4.9	0.2	4.1	0.4	4.5	0.5
Nativity						
US born	85.6	0.5	82.4	0.9	78.7	1.0
Foreign born	14.4	0.5	17.6	0.9	21.3	1.0
Relationship Status						
Married						
Cohabiting	9.5	0.4	10.5	0.6	6.4	0.6
Separated/Widowed/Divorced	48.5	0.6	40.8	1.1	44.5	1.2
Never Married	42.0	0.6	48.7	1.1	49.1	1.2
Householder status						
Householder	77.1	0.6	83.1	0.8	80.2	1.1
Non-Householder	22.9	0.6	16.9	0.8	19.8	1.1
Number of single mothers in house	ehold					
One	94.6	0.4	93.4	0.7	92.6	0.8
Two or more	5.4	0.4	6.6	0.7	7.4	0.8

(Continued on next page)

Table 3. Sample Characteristics for All Lone Mothers by Poverty Status (continued)

			Offic	cial	Suppler	nental
			Poverty N	leasure	Poverty N	Measure
	Tota	al	(OP	M)	(SPI	M)
	N=10	,130	N=3,	790	N=3,	172
	Percent	SE	Percent	SE	Percent	SE
SOCIOECONOMIC CHARAC	TERISTICS					
Educational attainment						
Less than high school	16.1	0.5	27.9	1.0	27.9	1.1
High school graduate	32.0	0.6	37.3	1.0	36.5	1.1
Some college	35.2	0.6	29.2	1.0	28.2	1.1
College graduate	16.7	0.5	5.6	0.5	7.5	0.6
Employment status						
Employed	65.0	0.6	40.9	1.2	40.7	1.2
Unemployed	11.4	0.5	17.5	0.9	16.8	1.0
Not in labor force	23.5	0.5	41.6	1.1	42.5	1.2
Moved in the last year	20.9	0.6	27.3	1.2	24.7	1.2
CHILD CHARACTERISTICS						
Number of children ^A	1.7		1.9		1.8	
One child	54.8	0.6	44.1	1.0	50.4	1.1
Two children	29.3	0.6	30.4	1.0	28.9	1.0
Three or more children	15.9	0.5	25.5	0.9	20.6	0.9
Age of youngest child ^A	7.8	0.1	6.6	0.1	7.0	0.1
Less than 6 years old	40.7	0.7	51.4	1.1	48.8	1.3
6 to 17 years old	59.3	0.7	48.6	1.1	51.2	1.3
Age of oldest child ^A	10.0	0.1	9.5	0.1	9.6	0.1
Less than 6 years old	25.1	0.6	28.4	1.0	28.5	1.2
6 to 17 years old	74.9	0.6	71.6	1.0	71.5	1.2

^A Mean (Standard Deviation) reported; --- represents or rounds to zero

Notes: Numbers reported in thousands. Standard errors obtained using replicate weights.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 4. Change in Poverty Status in 2010 for Lone Mothers from the Official Poverty Measure (OPM) to the Supplemental Poverty Measure (SPM)

		T	Total			House	Householders		Z	on-hor	Non-householders	
	Z	SE	Percent	SE	Z	SE	Percent	SE	Z	SE	Percent	SE
TOTAL	10,130	131	100.0	1	7,811	114	100.0	;	2,319	29	100	1
No Change in Poverty Status												
Poor	2,798	75	27.6	0.7	2,201	99	28.2	0.7	474	30.3	20.5	1.1
Not Poor	5,916	106	58.4	0.7	4,319	87	55.3	8.0	1,525	54.3	65.8	1.4
Change in Poverty Status												
From Poor to Not Poor	992	43	8.6	0.4	950	40	12.2	0.5	165	18.3	7.1	8.0
From Not Poor to Poor	425	28	4.2	0.3	341	23	4.4	0.3	155	155 16.7		0.7
Net Change in Poverty Status	267	15	5.6	0.1	609	17	7.8	0.2	6	1.5	0.4	0.1

Notes: Numbers reported in thousands. Details may not sum to totals due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 5a. Percent of Lone Mother Families Receiving In-Kind or Cash Transfer Benefits by Poverty Status

			Offic	ial	Suppler	mental
			Poverty N	1easure	Poverty N	Measure
	Tota	al	(OPI	M)	(SPI	M)
	N=10,	,130	N=3,	790	N=3,	172
	Percent	SE	Percent	SE	Percent	SE
Program Receipt						_
SNAP	36.5	0.7	64.2	1.1	52.3	1.4
WIC	14.0	0.5	23.9	1.0	21.1	1.0
School lunch	65.7	0.7	69.6	1.1	66.6	1.2
FENG/LIHEAP	9.7	0.4	17.6	0.9	13.7	0.9
Housing subsidy	13.5	0.5	26.5	1.1	17.7	1.1
Taxes						
Federal Earned Income Tax Credit	57.9	0.7	54.2	1.2	51.6	1.3
Federal Taxes	28.1	0.6	1.3	0.2	4.4	0.5
State Taxes	39.6	0.7	6.0	0.5	10.5	0.8
FICA	81.1	0.5	57.7	1.1	57.4	1.3
Necessary Expenses						
Work expenses, excluding child						
care	80.9	0.5	57.3	1.1	57.2	1.2
Child care expenses	18.2	0.5	11.8	0.7	11.9	0.8
Medical Out-of-Pocket						
Expenditures	91.6	0.4	84.7	0.8	86.2	0.8
Child Support Paid	0.4	0.1	0.2	0.1	0.4	0.1

Notes: Numbers reported in thousands. Standard errors obtained using replicate weights.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 5b. Mean Values for Program Receipt, Taxes and Additional Expenses by Poverty Status

			Officia	al	Supplen	nental
			Poverty Mo	easure	Poverty M	leasure
_	Total		(OPM	(I)	(SPM	1)
	N=10,1	30	N=3,79	90	N=3,1	72
	\$	SE	\$	SE	\$	SE
Program Receipt						
SNAP	1,420	37	2,909	78	2,160	83
WIC (% receiving reported)	14.0	0.5	23.9	1.0	21.1	1.0
School lunch	378	7	563	13	492	13
FENG/LIHEAP	42	2	80	5	61	6
Housing subsidy	424	19	949	45	755	49
Taxes						
Federal Earned Income Tax Credit	1,601	27	1,620	51	1,340	49
Taxes (Federal, State & FICA)†	4,292	168	-224	13	163	30
Necessary Expenses						
Work expenses, excluding child care	1,227	14	604	17	668	22
Child care expenses	734	28	371	29	377	29
Medical Out-of-Pocket Expenditures	2,546	122	1,122	84	2,533	376

[†]Before credits

Notes: Numbers reported in thousands. Standard errors obtained using replicate weights.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 6. Logit Regression Results of Poverty Status for OPM and SPM

		In	Official F	over			I	n Su	pplement	al Po	verty	
	(1)		(2)		(3)		(1)		(2)		(3)	
Demographic variables												
Age	1.008		1.008		0.914	***	1.024		1.023		0.978	
	(0.180)		(0.018)		(0.023)		(0.019)		(0.019)		(0.020)	
Age Squared	1.000		1.000		1.001	***	1.000		1.000		1.000	
	(0.000)		0.000		(0.000)		(0.000)		(0.000)		(0.000)	
Race/ethnicity (White)												
Black, Non-Hispanic	1.717	***	1.798	***	1.098		1.469	***	1.475	***	1.361	***
_	(0.148)		(0.152)		(0.124)		(0.117)		(0.116)		(0.125)	
Hispanic	1.221	**	1.400	***	0.831		1.326	***	1.275	**	1.154	
•	(0.122)		(0.143)		(0.116)		(0.126)		(0.122)		(0.132)	
Other, Non-Hispanic	0.838		0.917		0.595	**	0.929		0.895		0.938	
•	(0.115)		(0.130)		(0.123)		(0.138)		(0.136)		(0.185)	
Country of Birth Status	,		,		,		,		,		,	
Foreign-Born	1.409	***	1.494	***	3.176	***	1.975	***	1.925	***	2.721	***
	(0.160)		(0.168)		(0.524)		(0.191)		(0.187)		(0.354)	
Marital Status (Never-Mari			,		,						,	
Married, Spouse absent	1.398	**	1.397	**	2.082	***	1.371	**	1.376	**	1.654	**
7 1	(0.199)		(0.203)		(0.452)		(0.213)		(0.213)		(0.328)	
Separated	1.427	***	1.409	***	1.401	**	1.258	**	1.289	***	1.189	
1	(0.137)		(0.134)		(0.214)		(0.120)		(0.123)		(0.138)	
Divorced	0.843	**	0.822	**	0.899		,	**	0.855	**	0.857	
_ = = = = = = = = = = = = = = = = = = =	(0.067)		(0.066)		(0.108)		(0.067)		(0.068)		(0.086)	
Widowed	0.836		0.793		0.624	**	0.832		0.861		0.625	**
3. 2 2 - 2.	(0.147)		(0.138)		(0.141)		(0.148)		(0.155)		(0.128)	
Cohabitation Status	(****)		(*****)		(****)		(****)		(*****)		(***=*)	
Cohabiting	1.541	***	1.505	***	0.853		0.604	***	0.610	***	0.645	
e orane mang	(0.146)		0.145		(0.363)		(0.068)		(0.069)		(0.236)	
Socioeconomic Variables	(***				(****)		(*****)		(****)		(**==*)	
Education (High School Dip	oloma)											
< High School Diploma	1.794	***	1.829	***	1.391	**	1.445	***	1.441	***	1.329	***
ing. State of Equation	(0.179)		(0.182)		(0.192)		(0.133)		(0.132)		(0.129)	
Some College or Higher	0.501	***	0.511	***	0.567	***	0.578	***	0.570	***	0.610	***
Some Conege of Higher	(0.035)		(0.036)		(0.056)		(0.041)		(0.040)		(0.052)	
Labor Force Participation (1)	(0.050)		(0.020)		(0.011)		(0.0.0)		(0.022)	
Unemployed	3.600	***	3.632	***	1.130		3.075	***	3.101	***	1.454	***
Chemployeu	(0.362)		(0.368)		(0.166)		(0.317)		(0.322)		(0.187)	
Not in Labor Force	5.475	***	5.584	***	1.316	*	4.753	***	4.769	***	1.512	***
T (of MI Eugot I of C	(0.441)		(0.453)		(0.194)		(0.368)		(0.368)		(0.170)	
Other Characteristics	(0.111)		(0.100)		(0.1)		(0.500)		(0.500)		(0.170)	
Child Under 6	1.414	***	1.402	***	1.528	***	1.288	***	1.294	***	1.337	***
	(0.104)		(0.103)		(0.176)		(0.112)		(0.112)		(0.135)	
Moved in the Past Year	1.679	***	1.692	***	1.256	*	1.326	***	1.319	***	1.008	
1110 rea in the 1 tist 1 car	(0.139)		(0.142)		(0.150)		(0.115)		(0.115)		(0.100)	
	(0.137)		(0.112)		(0.150)		(0.113)		(0.113)		(0.100)	

(Continued on next page)

Table 6. Logit Regression Results of Poverty Status for OPM and SPM (continued)

]	n Official Po	ovei			In Su	ıpplemental P	overty
	(1)	(2)		(3)		(1)	(2)	(3)
Household-Level Character								
Multiple Single Mothers	1	0.811		2.883	***		1.088	3.020 ***
		(0.154)		(0.876)			(0.194)	(0.751)
Lives in Urban Area		0.659	***	0.984			1.267 **	1.663 ***
		(0.062)		(0.119)			(0.123)	(0.179)
Region (Northeast)								
Midwest		1.315	**	1.340	*		1.017	0.934
		(0.165)		(0.226)			(0.112)	(0.116)
South		1.066		1.573	***		0.912	0.956
		(0.118)		(0.228)			(0.086)	(0.101)
West		0.897		1.493	**		1.058	1.214
		(0.102)		(0.237)			(0.122)	(0.160)
Program Variables		,		,			,	,
EITC+				0.966	***			0.949 ***
				(0.005)				(0.004)
SNAP†				1.025	***			0.994 ***
•				(0.002)				(0.002)
Housing Subsidy†				1.032	***			0.998
				(0.005)				(0.003)
Free or Reduced School	ol Lunch†			1.002				0.989
	'			(0.009)				(0.008)
WIC (Received during)	income vear -	ves/no)		0.962				0.933
	3	,		(0.141)				(0.118)
Energy Assistance†				1.009				0.964 **
				(0.026)				(0.018)
Federal and State Taxes	s, includes FIC	CA†		0.890	***			0.931 ***
	,	'		(0.006)				(0.004)
Work-Related Expense	s†			0.937	***			0.990
1	1			(0.012)				(0.009)
Child Care-Related Exp	enses†			0.982	***			0.992 ***
P				(0.003)				(0.002)
Medical Out-of-Pocket	Expenses†			0.998				1.013 ***
	F			(0.001)				(0.002)
New Resource Unit Un	der SPM (ves	/no)		1.840				0.576
11011 11000 0200 0110		,110)		0.778				(0.206)
Constant	0.228 **	* 0.287	***	9.293	***	0.130 ***	0.111 ***	`
Constant	(0.086)	(0.117)		(5.615)		(0.051)	(0.044)	0.946
N	7,574	7,574		7,574		7,574	7,574	7,574
Population Size	10,130	10,130		10,130		10,130	10,130	10,130
Wald chi2	1375.06	1597.45		1869.65		1116.26	1144.78	1339.67
TT GIG CIIIZ	13/3.00	1071.73		1007.03		1110.20	1111,/0	1337.01

Notes: Standard errors in parenthesis and obtained using replicate weights. *** p-value<.01, ** p-value<.05, * p-value<.10, † \$100/income year.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Table 7. Logit Regression Results of Changing Poverty Status between OPM and SPM

	In	Official Pove	rty;	Not	In Official Po	verty;
		Supplemental	•		ıpplemental P	•
	(1)	(2)	(3)	(1)	(2)	(3)
Demographic Variables						
Age	1.002	1.003	0.985	1.041	1.048	1.015
	(0.034)	(0.034)	(0.029)	(0.034)	(0.033)	(0.045)
Age Squared	1.000	1.000	1.000	1.000	0.999	1.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Race and Ethnicity (White)						
Black, Non-Hispanic	1.212	1.281 **	0.950	1.818 ***	1.775 ***	2.430 ***
	(0.145)	(0.160)	(0.147)	(0.305)	(0.296)	(0.485)
Hispanic	0.939	1.137	0.832	1.602 **	1.359	1.512 *
	(0.146)	(0.184)	(0.161)	(0.300)	(0.270)	(0.374)
Other, Non-Hispanic	1.427	1.655 **	1.316	1.779 **	1.640	2.250 **
	(0.348)	(0.406)	(0.338)	(0.520)	(0.504)	(0.802)
Country of Birth Status						
Foreign-Born	0.407 ***	0.452 ***	0.444	1.798 ***	1.654 ***	1.796 ***
	(0.072)	(0.082)	(0.100)	(0.313)	(0.287)	(0.378)
Marital Status (Never Married)						
Married, Spouse Absent	0.889	0.894	0.756	1.340	1.340	1.586
•	(0.241)	(0.241)	(0.235)	(0.377)	(0.378)	(0.466)
Separated	1.048	1.029	0.986	1.191	1.272	1.110
•	(0.177)	0.172	(0.200)	(0.219)	(0.244)	(0.244)
Divorced	1.370 **	1.348 **	1.493 **	1.189	1.294	1.118
	(0.197)	(0.189)	(0.242)	(0.190)	(0.212)	(0.210)
Widowed	0.954	0.857	1.184	0.797	0.890	0.493
	(0.306)	(0.279)	(0.498)	(0.294)	(0.335)	(0.219)
Cohabitation Status	,		,			
Cohabiting	3.655 ***	3.616 ***	1.946	0.680	0.690	2.216
C	(0.562)	(0.571)	(1.007)	(0.189)	(0.194)	(1.542)
Socioeconomic Variables	,		,			
Education (High School Diplon	na)					
< High School Diploma	0.935	0.930	0.797	1.113	1.054	1.095
2 1	(0.120)	(0.120)	(0.120)	(0.229)	(0.215)	(0.265)
Some College or Higher	1.051	1.091	1.441 ***	0.597 ***	0.575 ***	0.657 **
8 8	(0.119)	(0.129)	(0.195)	(0.090)	(0.087)	(0.117)
Labor Force Participation (Emp		,	,	,	,	,
Unemployed	0.561 ***	0.553 ***	1.114	1.575 **	1.568 **	1.946 ***
r P - 2	(0.086)	(0.087)	(0.216)	(0.306)	(0.313)	(0.427)
Not in Labor Force	0.413 ***	0.418 ***	0.885	2.072 ***	2.048 ***	2.637 ***
	(0.051)	(0.052)	(0.148)	(0.368)	(0.364)	(0.541)
Other Characteristics	(******)	(****=)	(****)	(0.000)	(0.00)	(0.001-)
Child Under 6	1.148	1.140	0.885	1.713 ***	1.770 ***	1.507 **
<u> </u>	(0.163)	0.164	(0.148)	(0.288)	(0.289)	(0.309)
Moved in the Past Year	1.073	1.110	1.162	1.051	1.038	0.897
	(0.124)	(0.129)	(0.153)	(0.217)	(0.216)	(0.201)
Household-Level Characteristics	()	(/)	()	(/)	()	()
Multiple Single Mothers		1.039	0.403 **		1.923 **	2.490 **
		(0.326)	(0.184)		(0.608)	(1.004)
		(()		()	()

(Continued on next page)

Table 7. Logit Regression Results of Changing Poverty Status between OPM and SPM (continued)

]	In Official Pove	erty;			Not 1	In Officia	ıl Po	verty;	
	Not I	n Supplementa	l Poverty		I	n Su	pplemen	tal Po	overty	
·	(1)	(2)	(3)		(1)		(2)		(3)	
Household-Level Char (con't)										
Lives in Urban Area		0.538 ***	0.702	***			3.499	***	5.504	***
		(0.080)	(0.080)				(1.001)		(2.087)	
Region (Northeast)										
Midwest		1.088	1.018				0.697		0.549	**
		(0.197)	(0.214)				(0.150)		(0.134)	
South		1.002	0.949				0.630	**	0.525	***
		(0.153)	(0.168)				(0.117)		(0.108)	1
West		0.628 **	0.756				0.944		0.929	
		(0.120)	(0.160)				(0.183)		(0.202)	
Program Variables		,	,				,		,	
EITC†			1.069	***					0.988	**
			(0.008)						(0.006)	
SNAP†			1.022	***					0.977	***
Si (i ii)			(0.003)						(0.007)	1
Housing Subsidy†			1.017	***					0.922	***
Trousing Subsidy			(0.003)						(0.020)	
Free or Reduced School Lur	cht		0.999						0.953	**
Tiec of Reduced School Edit	icii į		(0.012)						(0.019)	
WIC (Received during incom	a vaar va	os/no)	1.081						0.854	1
wie (Received during incom	ic year - ye	3/110)	(0.206)						(0.231)	
Energy Assistance†			1.053	**					0.231)	
Energy Assistance			(0.024)						(0.063)	
Federal and State Taxes, incl	udos EICA	4	0.024)						0.962	***
rederarand State Taxes, incl	udes FICA	. 1							(0.902)	
Work Doloted Ermanage			(0.015) 0.972						1.021	*
Work-Related Expenses†										*
Child Comp Deleted Forest			(0.018)						(0.012)	
Child Care-Related Expenses	81		0.996						1.002	
M 1: 10 (CD 1 (E	.t.		(0.004)	ale ale ale					(0.003)	
Medical Out-of-Pocket Expe	ensest		0.970	***					1.019	
N D 11 21 1 0	D) (/	`	(0.005)						(0.002)	
New Resource Unit Under S	PM (yes/no	0)	4.030	***					0.275	
~			(1.939)						(0.188)	
Constant	0.561	0.861	0.149	***	0.019	***	0.007	***	0.020	***
	(0.338)	(0.546)	(0.098)		(0.014)		(0.005)		(0.020)	
N	2,678	2,678	2,678		4,896		4,896		4,896	
Population Size	3,790	3,790	3,790		6,341		6,341		6,341	
Wald chi2	169.11	253.03	597.38		123.48		162.70		326.83	

Notes: Standard errors in parenthesis and obtained using replicate weights. *** p-value<.01, ** p-value<.05, * p-value<.10, † 100/income year.

Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement