Child Poverty in the United States

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Quantitative Analysis Center Apprenticeship Program Summer 2012

Abstract

Even in highly developed countries such as the United States, many families are considering to be living below certain poverty thresholds, officially categorizing these people as being 'poor.'

However, there are many government-funded programs at both the state and federal level aimed to help remove these individuals and their families from poverty.

Our research this summer was an investigatory exercise looking at the extent of poverty among families with children in the United States and the effectiveness of tax-payer sponsored programs to help these people. As part of our analysis, we also explored different ways of measuring poverty as well as different ways of accounting for resource sharing within households.

The results of our analysis are primarily descriptive at this point in time. Using the March Supplement of the 2011 Current Population Survey (CPS), a rich data set collected annually by the United States Census Bureau, we were able to look at differences in poverty rates and poverty-fighting programs across states and regions, as well as across different definitions of poverty.

Goals

- Explore and compare different ways of measuring poverty
- Look at tax-payer funded programs available to those who are in poverty at both the state and federal level
- Look at state-level, as well as regional level, data to see how certain states are fighting poverty and how particular programs are
- Create indices that account for resource sharing that occurs among people living in the same household
- Identify different groups (based on family charateristics, demographics, etc.) that are particularly sensitive (or not) to government transfer and tax credit programs
- Provide descriptive analysis that will allow us to find interesting areas for further research and exploration

Definitions

Poverty: A person (or family) who is designated as being in poverty means that they have an income which is lower than a certain 'poverty threshhold'

Poverty Threshold: A cutoff number for income used to determine if a family or individual is considered in poverty or not. A baseline measure of the minimum income one must have in order to not be "poor." Sometimes refered to as "need" for a particular family. Most threshold measures are based off of family size and age of the earners within the household.

Acknowledgements:
I'd like the thank my faculty sponsor, Wendy Rayack, for her support and help over the course of the summer. I'd like to thank my faculty advisor, Abigail Hornstein, for helping me to have the opportunity to do this program. I'd like to also thank Manolis Kaparakis for always knowing how to answer all of my questions and for creating a great summer program. Finally, I'd like to thank my research partner, Raymond Wong, for working with my over the summer and helping me understand everything more clearly.

Definitions (*continued*)

Household: A household is any physical location where people reside together. For instance, a household is made up of an inhabitants residing together in an apartment or house.

Family : Any individuals related by blood, marriage, or adoption. Note that multiple families can live in the same household.

Well being index: Several indicators of economic 'well-being' for an individual were created for this project. Economic well being is measured by accounting for the per capita resources available to an individual based on family income while also adjusting for resource sharing.

Resource Sharing

Equivalence Scales: Equivalence scales are indices used to account for resource sharing among people living under the same roof. In the context of this project, equivalence scales tell us how many "adult's worth" of resources a family needs after accounting for resource sharing. For example, consider a family of two married adults - we use equivalence scales to say this family's resource needs are less than that of two adults living by themselves. The best example is that the married couple needs only one refrigerator, while the two, independent individuals will each need their own refrigerator. For our purposes, we used our data set to create a few different kinds of equivalence scales that account for different inter-household sharing patterns. Equivalence scales are used in tandem with poverty thresholds to adjust for differences in family type, size, and composition.

For our analysis, we used equivalence scales to help calculate multiple measure of well being. We created four main well-being measures:

Income per capita (family)

- This measure was calculated by dividing a family's total income by the amount of individuals in that family. This measure assumes no sharing of resources with non-family members of the household, nor does it take into account the benefitical economies of scale that occur as a result of resource sharing.

Income per capita(household)

- This measure was calculated by dividing a household's total income by the amount of individuals in that household. This measure assumes that non-family household members share their resources equally with members of the family (and their children) that they are living with. Again, this measure also doesn't account from economies of scale that occur from resource sharing.

Income per equivalent adults(family)

- This measure is the same as income per capita (family) except that, instead of dividing by family size, we divide by 'equivalent adults' within the family. This takes into account the fact that an aditional family member does not need the same amount of resources as an individual living alone. We created the variable 'equivalent adults' by using the OPM measures found in our data and taking the ratio of a family's assigned poverty threshold to that of a single person living alone.

Income per equivalent adults(household)

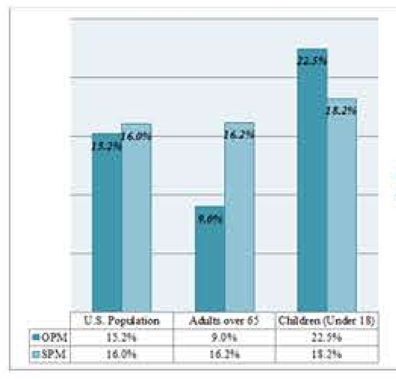
- This measure follows the same logic as the one above, except that, instead of family-level variables, we use household level variables. We calculated equivalent household adults in two ways- the first was to sum the equivalent adults for all families living in a household; the second was to treat the household as a family and assign an overall poverty threshold to the household and compare it the cutoff for a single person living alone.

Poverty Thresholds in the United States

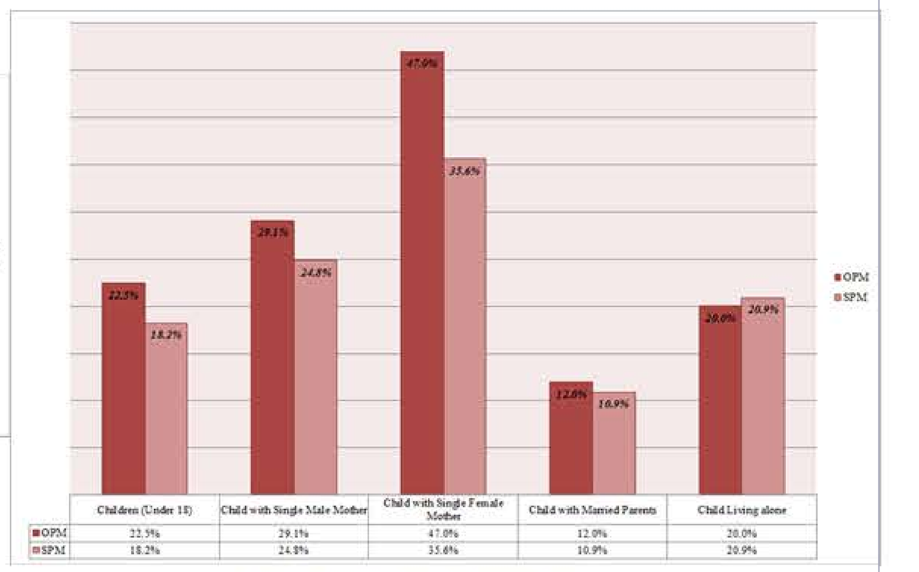
Official Poverty Measure (OPM): The official poverty measure used by the United States Census Bureau to determine the poor population is set at the federal level and was developed and implemented in 1969. It calculates the needs for a family by multiplying the cost of a so-called 'minimum food diet' by three. This number is then adjusted for inflation (using the Consumer Price Index) and is compared against a family's before-tax family income in order to determine poverty status.

Supplemental Poverty Measure (SPM): There have been many criticisms of the OPM in recent years. In 2010, a group called the Interagency Technical Working Group (ITWG) was commissioned with creating a new poverty threshold to account for inadequacies with the OPM. These inadequacies include the following: no accounting for geographical differences in costs of living; the cost of living includes many factors that are not encompassed by the 'minimum food diet'; there is sharing in resources amongst people living under the same roof (i.e. - not just amongst related peoples); the OPM, while accounting for family size, does not account for family composition; and finally, the OPM does not consider the impact of meidcal expenses on poverty status. The SPM threshold is compared against cash income plus in-kind benefits minus taxes, work, and medical expenses.

The following graph(s) shows differences in national poverty rates across different family structures by using the OPM thresholds versus the SPM thresholds.



Population



Children in Poverty

Currently, the SPM is still 'experimental'. However, it is interesting to note the differences in poverty rates across familial structure. For example, the results above show that the poverty rate for older adults is substantially higher using the SPM versus the OPM. This is likely due to the fact that the OPM doesn't take into account medical expenses while the SPM does.

It is also notable that the SPM thresholds generally show lower poverty rates for children than the OPM. One possible explanation is that non-cash benefits are important programs for reducing poverty - something the SPM considers while the OPM does not.

Conclusions

As this project was exploratory in nature, suffice it to say, the only real conclusions we have come to is that we have many more questions. However, we have acknowledged that it is difficult to quantify an appropriate measure of "need" because there are many different living situations that are not easily comparable. Furthermore, we can begin to use our understanding of poverty in the United States to lok at certain demographic groups of interest and see how trasnfer and aid programs help (or don't help) these specific groups.