

Consumer Units, Households and Sharing: A View from the Survey of Income and Program Participation (SIPP)

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Abstract

Poverty measures are based on assumptions about resource sharing for families and unrelated individuals, and on the premise that people who are related to one another and share the same living quarters pool their resources for the purpose of meeting important needs. These assumptions can have large and differential effects on poverty measurement. Recent data from the 2001 Survey of Income and Program Participation SIPP panel on sharing of expenses, and qualitative data are then employed to piece together a story about economies of scale and shared expenses in order to arrive at a better measure of resource sharing within and across consumer units, families and households. The effects of using different “unit” definitions on poverty rates and composition are illustrated using data from SIPP. If we are to improve our understanding of family and household economic functioning in surveys such as the (SIPP), we will need to find better qualitative measures of family economic functioning to complement and defend our empirical strategies.

I. Introduction

Over the past half century, the United States has undergone a massive demographic shift. These changes are evident in the demography of population aging; the growth and changing composition of single parent families; the decline of marriage and rise of cohabitation; later marriage and child rearing; and even boomerang generations (young adults who return to parental home after college education). While our individual demography is well aware of these changes, our household, family, unrelated individual and consumer unit lenses for viewing and measuring economic inequality have not fully accounted for these tumultuous changes in a very systematic or complete way.

For example, Table 1 is taken from some recent work by Johnson, Smeeding and Torrey (2005) on Consumer Expenditure Survey (CEX) 'consumer units'. One immediately notes that "true" single parent consumer units have not changed at all over the past 20 years. Married families with kids have dropped precipitously, but all the "action" is in the "other units"--- with and without-- children under age 18 (bottom two bold lines). This action is of course in a change toward less secure living arrangements: cohabitation and shared living situations with multiple persons (including relatives). These, in turn, are linked to immigration, movements in and out of prison, and especially out-of-wedlock childbirth and multiple partner fertility. As a result, the traditional lenses of 'families and unrelated individuals' have become increasingly blurred over the past decades as children and others living arrangements become less secure.

In fact these figures are just one snapshot of a larger picture. Households and families have morphed into smaller (elders) and bigger (single parents no longer living

alone) units. Decisions about how to treat cohabiters, multigenerational units, and income ‘sharing rules’ are constantly under surveillance; and are very important to any and all measures of economic inequality that we use for policy guidance, especially poverty rates and income distributions. That is, changes in income distribution parameters, and in number of households (families, unrelated individuals); can have big effects on the percent of kids and mothers and elders counted as poor or in various circumstances at various places in the distribution.¹

How these patterns map out for the other 40 years of the CPS is largely unknown at this time, but with the magical assistance of John Coder, we have managed to map the way that overall official census poverty rates, and those for children and elders vary if one assumes any of three types of units: traditional “Census” families and unrelated individuals households which assume full sharing of resources (the broadest and most cross-nationally comparative unit); and a unit based poverty where each sub unit or “nuclear family” is treated as an individual and no sharing of any sort takes place across units.²

Figure 1 (and the base data in Table A-1) traces out the bounds on poverty measurement from considering these three types of units. Note that all measures move in tandem—suggesting that policy and macroeconomic changes have independent effects on all three types of units the differences between household and official poverty have

¹ And these changes have been large indeed. For instance, the number of self declared ‘consumer units’ evident in the SIPP for 2001 (Table 2) are such that there were 50 percent more ‘spending units’ (41,233) than ‘households’ (27,401) in that year

² The separate or “no sharing” units consist of primary families excluding related subfamily members, related subfamilies, unrelated subfamilies, and unrelated individuals. These are related to, but are somewhat different than the SIPP units which are used in part IV of the paper below.

constantly widened over time, in both directions (for both smaller and larger units compared to the ‘official’ units).

In fact, these figures may hide more than they reveal, because changes are concentrated in specific types of ‘at risk’ families. For instance, atomization (increasingly more elders living alone) which may increase measured poverty, works in the opposite way from de-atomization (increasingly more younger lower educated persons, especially unmarried mothers living in multiple types of households). These young parent movements hide the fact that many of these units cannot afford a separate living arrangement, even if they wanted one (e.g., see Magnuson and Smeeding 2005). Hence cohabiting with a boyfriend, or a sibling or a parent or any and all of these variations is becoming increasingly common

Indeed, examining the subgroups, this larger trend has been largely driven by changes in children’s living arrangements. Since Carlson and Danziger (1999) reviewed the 1980’s difference in child living arrangements across households and families, these differences have exploded. Differences between subunits and official units are large and have remained constant since 1985; but movements of children into and out of households have increased steadily since 1970, now producing a difference between official unit based child poverty and household unit based child poverty of 1.7 percentage points, or 10 percent. If in contrast we assigned resources for children only to immediate family members, child poverty rates would rise by 1.9 percentage points. Thus, child poverty could swing by a full 3.5 percentage points depending on the units selected for income sharing. In contrast, the 1972 change in elder benefits seem to have triggered a large decline in the difference in elder poverty rates across these types of units.

This brief look at the “facts” suggests that we should take time and energy to revisit issues of living arrangements and explore many of their idiosyncrasies. (See also Magnusson and Smeeding, 2005; Haider and McGarry, 2005). And so this paper adds to this inquiry by using subjective responses to the 2001 SIPP to allow individuals to morph into either larger or smaller units depending on how respondents answer questions about resource and expense sharing. The last section of the paper conveys a plea to qualitative researchers to help the SIPP do a better job in determining expense and resource sharing within and across units.

II. Census Bureau Poverty Measurement: Some Historical Details

The official poverty measure for the United States is calculated based on assumptions about resource sharing for families and unrelated individuals. This has been true since the inception of the measure in the mid-1960s when Mollie Orshansky developed income criteria of need by family size. This convention is based on the premise that people who are related to one another and share the same living quarters pool their resources for the purpose of meeting important needs, and those who are not related by blood marriage or adoption do not pool.

This choice of unit of analysis followed the tradition from income measurement in the Current Population Survey from 1947 onward. Income, as recorded in early census data, was measured only for families. Later, the unit of interest changed to the household and household statistics were also compiled since 1967.

Over the past decades, the official poverty measure has been reviewed (see Citro and Michael, 1995) and the unit of analysis has typically been one of the most examined elements. In the 1970s an interagency group conducted this investigation and produced a series of papers. Technical Paper X, *Effect of Using a Poverty Definition Based on Household Income*³ discussed this issue in depth. This report stated that one reason for choosing families and unrelated individuals as basic economic units is that families are economic entities by virtue of traditional and legal bonds. Bonds between unrelated individuals who share a single residence; even those co parenting their biological children, may be weaker than familial bonds. On the other hand, households made up of unrelated individuals enjoy many of the economies of scale that characterize the economic situation of families. These benefits include the utilization of a single shelter and the purchase and preparation of food in quantities.

Various authors also presented the question of intra household resource sharing. The household-based definition is clearly preferable in those cases in which the household members act as a single spending unit.⁴ Early studies such as DHEW (1976) concluded that the choice of the ‘right’ unit depends upon the economic relationship between or among household members, “*The addition of questions to the March CPS which would allow tabulation of data for non-family spending units is a possible solution. The spending unit concept is subject to some ambiguity, however, because persons may share some basic expenses and not others. ...*”

³ U.S. Department of Health, Education, and Welfare, *The Measure of Poverty: Technical Paper X. Effect of Using a Poverty Definition Based on Household Income*, November, 1976.

⁴ For instance, the household-based definition would also be an improvement over current practice in the treatment of unrelated individuals under 15 years of age who are currently removed from the poverty universe altogether. However they are included in our Figure 1, because, in a world of multi partner fertility, child protective services and adoption, a child unrelated by birth to a parent with whom they are living should not be taken out of the universe of poverty measurement.

Underlying these choices then is an implicit and simplistic suggestion that nuclear units voluntarily pool resources and jointly decide optimal resource allocation, while unrelated persons do not so optimize. The literature on family bargaining and resource sharing within households, as sparse as it may be, belies such assertions (see review of literature in Haider and McGarry, 2005).

III. Another Concept: The Consumer or “Spending “Unit

The consumer unit is the basic reporting unit for the Consumer Expenditure Survey (CE), e.g., see Table 1. The BLS defines consumer units in the following way...

A consumer unit comprises either: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who pool their income to make joint expenditure decisions. Financial independence is determined by the three major expense categories: Housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided by the respondent.

At the beginning of the CE interview, families are assumed to be consumer units. Individual family members are assumed to pool resources. In 2003, the BLS also included unmarried partners in this group, no longer asking the expenses sharing questions of individuals, but assumed pooling of resources for this group. Thus, in the CE interview, only unrelated, non-cohabiting individuals were asked what are referred to as the *financial responsibility* questions (see Table 2).

In 1996, the U.S. Census Bureau considered including the expense-sharing questions in the Survey of Income and Program Participation (SIPP) in the interest of exploring the use of a *spending unit* as the unit of interest for measuring poverty. As a

part of this process, the Center on Survey Methods Research (CSMR) of the Census Bureau conducted a series of cognitive interviews exploring the validity of these questions in a household survey. Below we report on the implications of the Census Bureau's first relevant experience with "mixed methods" research on the topic of resource sharing units.

IV. Qualitative Interviews: the Census Experience

Indeed the CSMR recruited 15 respondents to test concepts of resource sharing within households. These researchers asked these questions of married couples as well unmarried couples for comparison purposes. Using the exact questions as they appear on the control card of the Consumer Expenditure Survey (CE) and in Table 2, they explored the understanding of the questions by the subjects. Generally, they found these questions were very confusing to the respondents they interviewed.⁵

The first question in the series asks about housing expenses, "Do you pay your housing expenses with your own money?" CSMR found that it was common for responders to include food in housing expenses. However, the biggest problem was with the phrase, "with your own money." For some, this meant money that they had earned rather than obtained from another source, such as public assistance or a loan from the bank. For others it meant their own personal money rather than their spouse or partner's money. It was common for both married couples and unmarried partners to answer in a way that reflected how they contributed in some specified way to expenses. For example,

⁵ It should be noted that, in part, confusion may have been exacerbated by asking the questions of married individuals as well as unmarried ones. It may be less problematic for the CE in which only unrelated individuals are asked these questions.

they indicated that they paid all housing expenses with their own money because each partner was paying for something specific, such as “I pay the mortgage but my partner pays the medical bills.” Another issue is with *how much* one pays toward joint expenses. For instance, in a recent sample of 75 unmarried mothers of young children, none of these mothers could afford to live alone, but many paid a token sum to parent or cohabiter to help cover housing expenses (Magnuson and Smeeding, 2005).

Answers to the second question, “Do you pay for all your food expenses with your own money?” had similar interpretations — that is, people said that they did not pay all their own food expenses because they had loans or other help or because they pooled their income. The third question, “Do you pay for all your other living expenses such as clothing, transportation, etc., with your own money?” met with similar interpretations as above, but with additional confusion about which expenses were included and what paying for some, but not all, such expenses meant to the respondent.

The results of this small test suggested that people may respond to these questions in exactly the opposite way than is intended. If people think of themselves and their spouse or partner as an economic unit, then they may answer that they paid with “your” (our) own money, thereby inferring economic interdependence. And, further, this may occur even though one spouse or partner has no earnings and the other partner appears to pay all their expenses. On the other hand, if the spouse/partner has a greater sense of self as an economic unit outside of this relationship – then they are more likely to say they don’t pay their own expenses when they may indeed share expenses by dividing them in rational ways amongst themselves.

Following this cognitive testing, the analysts in CSMR concluded that there was no consistency in the interpretation of these questions. Nevertheless, the questions were included in the 2001 panel of the SIPP due to continued interest in improving poverty measurement as well as interest in further understanding the workability of these questions. To address these research needs, the questions were asked in the SIPP 2001 panel of *all individuals*, so that answers among family members could be compared to answers from non-relatives. This paper examines these responses in the wave 3 topical modules of the 2001 panel of the SIPP.

Some Examples from SIPP Interviews

It is useful to describe some example households to consider how different groups of people may be classified in a given unit and how this may affect their classification into a poverty status.

The first group is a household with a married couple, ages 53 and 48. There are two children, their own child, 15 years old, and a foster child of 6 years. There is also 51-year-old who is not a relative in the household. Therefore, this is a 5-person household, with three ‘families’: the married couple and their child, the foster child alone, and the unrelated individual (UI) alone.

When asked about sharing of expenses they all report that the reference person pays all expenses. The spouse depends only on the reference person, while the 15-year-old child gets support from outside the household. The foster child is not asked the questions. The UI reports being supported outside the household. Using the consumer unit questions, there are two consumer units.

The first CU is the UI alone and the second CU includes everyone else, following the CU rules which include foster children with the family. For this group, the choice of unit of analysis does not affect poverty status. The poverty threshold for this household is \$1,800 per month, while the combined income is \$1,639, so this household is poor. The income is the sum of the reference person's total of \$1,142 and the UI's income of \$497 per month. The poverty threshold for the UI alone is \$767 and the threshold for the three person family is \$1,187 per month, therefore, both are poor as family units. In a similar way, the poverty threshold for the consumer unit, made up of the family plus the foster child, is \$1,496 per month, and again both units are poor.

Of course, the choice of unit of analysis can affect calculated poverty status. The second household is an unmarried couple, 20 and 21 years old. This household has two unrelated individuals (UI). They respond that they each pay all of their own expenses. The household's poverty threshold is \$994 and the household income is \$1,860, so the household is not poor. As UIs, however, each partner faces a poverty threshold of \$767. The first person has income of \$1,201 and the second person has income of \$659 – so only the second person is poor. Since they report that they both pay their own expenses they are two separate consumer units, and so the second consumer unit is also poor. If cohabitators were treated as a unit, their combined income would exceed their two-person poverty threshold, just as it does for the household.

The third household has a 42-year-old individual living with a 17-year-old non-related person. The 17-year-old points to the older person as paying expenses, so this household is a consumer unit. The poverty threshold for this CU is \$1,017 and the

combined income is \$1,160. Treated as a separate UI the 17 year old is classified as poor. Note that this is not a foster child or a cohabitor.

A fourth household has a 19 year old, a 20-year-old other relative, and a 20-year-old roommate living together. They all indicate sharing expenses with each other so they form a CU. Their combined income is \$1,320, one making \$800 per month and the second making \$520 per month, the third one reports no income. The household and CU threshold is \$1,154, so together they are not poor. As two related individuals, one with zero income and one with \$800 in income, they face a poverty threshold of \$988. This is greater than their income, so they are poor, as is the UI considered alone facing a threshold of \$767. Note that the UI is neither an unmarried partner nor a foster child.

IV. Some Results from Combining Individuals into Different Units

Examining individual households clarifies how the combination of different individuals into various units can affect our perception of who is ‘poor’. The next step is to put these units together and examine the outcome on our statistical measures of economic wellbeing.

In order to accomplish this, five different unit definitions are employed.

1. Households
2. Families (including single persons as one person families)
3. Consumer units – without joining unmarried partners
4. Families plus unmarried partners and foster kids
5. Spending units regardless of familial or biological relationships

We begin by putting all individuals in the third wave of the 2001 panel of SIPP in the above defined various units. Figure 2 shows the number of units that result. The most

inclusive unit, the household, results in the fewest number of units. The greatest number of units results from combining together only individuals who report that they share expenses with someone, regardless of relationship, and that they reside in the same household (spending units). Note that the suggestion here is that many individuals within families do consider themselves to be independent economic agents, according to the answers to these questions. It follows that each unit definition infers an average size in inverse relation to the number of units implied. Figure 3 shows these average unit sizes.

The definition used to put individuals together depends on our assumptions about the sharing that occurs among individuals residing together in a household. The current poverty measure assumes that relationships presuppose sharing, even though often that is not reported. The main difference among the groupings is the resulting number of single individual units that result from our definitions. These are ‘independent’ persons who feel they pay all of their own expenses and do not share with anyone else. Figure 4 shows the distribution of units by size of units. Here, the ‘single person expense sharing unit stands out from the relationship units with one third are individuals who are self declared as ‘economically independent.’ The other four unit definitions are quite similar, with the main difference being the proportion of single-person units. The definition that includes people identifying themselves as unmarried partners is nearly identical to the CU definition, being midway between the household and the more restrictive family, and being smaller than the number of spending units.

Effects of Scale Economies

While different unit definitions will affect all types of economic measurements, e.g., distribution as well as poverty, our main interest is to examine the effect on poverty

statistics. The first task is to calculate incomes combined as determined by unit members and also calculate the ‘correct’ poverty threshold based on the composition of each unit. Of course, any set of poverty thresholds (including the ‘official’ ones) contain implicit assumptions about economies of scale available to people who share a unit. The importance of these equivalence scale assumptions becomes apparent in the calculations which follow, because different unit sizes provide different economies of scale.

Figure 5 illustrates this by showing the average monthly income per unit and average monthly poverty threshold per unit. What is important to note is how income increases for more members on average compared with how much the thresholds increase as unit size changes. The main determinant of this difference between the top and bottom lines in Figure 5 is the assumed equivalence based economy scales. Seeing these relationships tells us what to expect from poverty statistics for these groups. Since poverty thresholds increase less for larger unit sizes than do average incomes, larger units will have lower poverty rates than do units that are more exclusive. In particular, assumptions about the economies of scale available for single—person vs. double-person units is quite important to these calculations.

Effects on Poverty Measurement

The next figure (Figure 6) shows the resulting poverty rates for the different units of analysis we have constructed. As predicted, when the unit becomes more inclusive, poverty rates go down, from the highest for reported economic sharing, to the midrange for groups based primarily on relationships, to the lowest grouping regardless of sharing

or relationship. The spending unit poverty rate of 23.1 percent is almost twice that for households (12.6 percent).

These results suggest that the grouping of people together in sharing units matters for poverty statistics and also that subjective responses to questions about resource sharing may produce widely different patterns of income sharing units and consequently very different poverty rates. The next question that arises is whether some groups that differ by relationship-forming behaviors, may show different poverty rates based on different units. In other words, does our perception of which socio-demographic groups are in poverty differ by the unit of choice?

Figures 7 and 8 show the poverty rates and the proportion of the poverty population comprised of different age groups. We find that, overall; the usual group specific comparisons of poverty status are not changed. Children have higher poverty rates no matter what the unit chosen, followed generally by the elderly. We also find that poverty rates for non elderly adults and elderly adults are slightly different. The poverty rates of elderly people are closer to the non elderly rates for the household and the sharing units, while they are slightly lower based on the family units. This suggests that the elderly are less likely to live with non relatives and report that they share expenses than non elderly individuals, at least at this income level.

The major difference is the explosion in child poverty rates in Figure 7 when spending units are arrayed separately. This suggests that low income children are living in groups which are hard to define using traditional statistical units and where resource sharing and responsibility for expenses is not well defined.

The next set of charts show differences by race. Figure 9 suggests that the poverty rates of race groups differ, but that Whites have lower poverty rates than Blacks in all cases. There are some small differences in the relative rates of Blacks using different units, with rates lower for Blacks using family units and higher using household and sharing units.

Looking at the composition of the poverty population by race groups (Figure 10) shows that Whites are a higher percentage of the poor ‘spending unit’ group than the other unit types, suggesting that they less often report expense sharing than do African Americans at this level of income. Note that the proportion of the poverty population increases slightly for Blacks when cohabitators are included with families, while that of Whites goes down, suggesting higher rates of reported unmarried partnerships for Whites. Differences are similar for consumer units and households. We also find similar results for ethnicity (not shown)—with non-Hispanics more likely to be poor than Hispanics when the unit is based on reported sharing, slightly less likely using reported relationships. This suggests that more expense sharing is reported by Hispanic than non-Hispanic householders.

Comparing Unit Definitions: A Brief Summary

Overall, it would seem that expanding the definition of who shares resources or expenses makes people appear to be better off. However, this is not always the case. Some people are classified as poor when grouped as families and cohabitators but not poor as CUs. These might be non relatives, such as roomers and boarders, who share expenses and thus face a combined lower threshold as a CU. Or they may be cohabitators who, while

they were not poor as singles are now poor because they share with others who have no income. Thus individuals are not always better off when included with others.

Some persons are not classified as poor when grouped as families but are poor when grouped as sharing units. One example is a family of 6 people consisting of a married couple, aged 66 and 60, and four others. The 60 year old says that she depends on someone outside the household for major expenses so they are independent financial units under the sharing rules. As a lone person, she is classified as poor. The four other people in this family are their children aged 28 and 37 years old; the latter person has two children. The 28 year old pays all her own expenses, while the 37 year old depends on someone outside the household, so they are also separate spending units. All are not classified as poor as a family, while all but the eldest person are poor when grouped as spending units.

This example leads to several wider concerns. What do respondents mean when they point to individuals outside the household for support? Are they referring to loans they have obtained to pay their bills or to public assistance support or support from other individuals? Do individuals, such as the 28-year-old child, benefit from sharing in the household and as such are benefiting from pooled resources whether or not they view themselves as financially independent?

Comparing the unit definitions further suggests that the CU definition and a family definition that adds cohabiters and foster children are very similar. However, there are still some differences. For example, some individuals are classified as poor when grouped into CUs, but are not poor as cohabiters. These are people who have unmarried

partners but do not report sharing expenses and so are considered as singles under the CU rules (before the BLS rules included cohabiters as families).

Finally, using these particular questions allows us to look more closely at our assumptions about sharing within families. Examining the responses to these questions by family members, however, leads to concerns about the efficacy of the questions used in Table 2 for defining an ‘economic unit’, while bringing about an understanding of the difficulty of asking persons directly about ‘sharing of resources.’

V. Conclusions

This paper has examined a variety of ways of putting people together in groups for the purpose of determining poverty status. The groups examined included those based on relationships, such as family and unmarried partner status, and those based on economic circumstances, such as sharing living quarters, and those who subjectively regard themselves as being financially dependent.

We have seen that financial independence is difficult to measure. This was achieved by using questions from the Consumer Expenditure Survey to group individuals into consumer units for the purposes of their interview. We have shown some of the difficulties encountered in ascertaining this information using an independent SIPP application of this same questionnaire.

Grouping individuals into these various units affects poverty statistics. And even ignoring these, CPS estimates (Table 1) suggest there are large differences between households, ‘nuclear’ families, and traditional Census practice (families and unrelated persons), especially for units with children. Except for the unit based on subjective

expense sharing responses, the SIPP results suggest that overall differences are small among the groups; and so the CPS results are more volatile. Even with the SIPP however, there are some differences among subgroups of the population.

These differences may reflect variation in forming family or economic units, or may simply reflect differences in the way these expense-sharing questions are understood and relationships are reported. A more informed set of questions and help from other disciplines may go along way to help resolve some of these issues and along way toward making surveys such as the SIPP more reflective of true resource sharing patterns. As the 'family' changes and becomes less traditional, less stable and perhaps also less secure, our lenses of units and resource sharing assumptions must be revisited.

References

- Bauman, Kurt J. 1999. "Shifting Family Definitions: The Effect of Cohabitation and other Nonfamily Household Relationships on Measures of Poverty." *Demography* 36(3):315-325.
- Bitler, Mariane, Jonah Gelbach, and Hilary Hoynes. 2004. "Welfare Reform and Children's Living Arrangements." University of Maryland unpublished manuscript (August).
- Carlson, Marcia, Sara McLanahan and Paula England, 2004. Union Formation in Fragile Families." *Demography* 41(2):237-262.
- Carlson, Marsha and Sheldon Danziger. 1999. "Cohabitation and the Measurement of Child Poverty" *Review of Income and Wealth* 45(2):179-191.
- Citro, Constance F., and Robert T. Michael. 1995. *Measuring Poverty: A New Approach*. National Research Council, National Academy Press: Washington, DC.
- DeLeire, Thomas and Ariel Kalil. 2005. "How Do Cohabiting Couples with Children Spend Their Money?" *Journal of Marriage and Family* 67:285-294.
- Engelhardt, Gary, Jonathan Gruber, and Cynthia Perry. 2002. "Social Security and Elderly Living Arrangements." NBER Working Paper 8911.
- Haider, Steven and Kathleen McGarry. 2005. "Recent Trends in Resource Sharing Among the Poor" in *Shifting Resources: The Next Generation of Research on Economic Changes, Public Policy Changes and Poverty*, eds., Rebecca Blank, Sheldon Danziger and Robert Schoeni.
- Hernandez, Donald J. 1998. "Official Poverty in the U.S.: Re-conceiving the Unit of Analysis." unpublished manuscript.
- Iceland, John. 2000. "The 'Family/Couple/Household' Unit of Analysis in Poverty Measurement." Poverty Measurement Working Paper. U.S. Census Bureau, <http://www.census.gov/hhes/poverty/povmeas/papers/famhh3.html>.
- Johnson, D.S., T.M. Smeeding, and B. Boyle Torrey. 2005. "United States Inequality Through the Prisms of Income and Consumption." *Monthly Labor Review* 128(4) (April):11-24.
- Korbin, Frances. 1976. "The Fall in Household Size and the Rise of the Primary Individual." *Demography* 13:127-138.

Lampman, Robert and Timothy Smeeding. 1983. "Interfamily Transfers as Alternative to Government Transfers to Persons." *Review of Income and Wealth* 29:45-66.

London, Rebecca and Robert Fairlie. 2005. "Economic Conditions and Children's Living Arrangements." In *Shifting Resources: The Next Generation of Research on Economic Changes, Public Policy Changes and Poverty*, eds., Rebecca Blank, Sheldon Danziger and Robert Schoeni.

Lundberg, Shelly and Robert Pollak, and Terence Wales. 1997. "Do Husbands and Wives Pool Their Resources? Evidence from the United Kingdom Child Benefit." *Journal of Human Resources* 32(3):463-480.

Magnuson, Katherine and Timothy M. Smeeding. 2005. "Earnings, Transfers and Living Arrangements in Low-income Families: Who Pays the Bills." Unpublished manuscript.

Michael, Robert, Victor Fuchs and S. Scott. 1980. "Changes in the Propensity to Live Alone: 1950-1976." *Demography* 17:39-53.

Moffitt, Robert, Robert Reville, and Anne Winkler. 1998. "Beyond Single Mothers: Cohabitation and Marriage in the AFDC Program." *Demography* 35(3):259-278.

Pampel, Fred. 1983. "Changes in the Propensity to Live Alone: Evidence from Consecutive Cross-Sectional Surveys, 1960-1976." *Demography* 20(4):433-448.

Short, Kathleen, Thesia I Garner, David Johnson, and Patricia Doyle. 1999. *Experimental Poverty Measures: 1990 to 1997*. U.S. Census Bureau, Current Population Reports, Series P60-205. Washington DC.

Smock, Pamela J., Wendy D. Manning, and Meredith Porter. 2004. "Everything's There Except Money": How Money Shapes Decisions to Marry Among Cohabitators." Population Studies Center Research Report 04(564). Population Studies Center at the Institute for Social Research. MI: University of Michigan.

Townsend, Robert. 1995. "Consumption Insurance: An Evaluation of Risk-Bearing Systems in Low-Income Economies." *The Journal of Economic Perspectives* 9(3):83-102.

Thomas, Duncan. 1990. "Intra-household Resource Allocation: An Inferential Approach." *Journal of Human Resources* 25(4):635-664.

U.S. Department of Health, Education, and Welfare. 1976. *The Measure of Poverty: Technical Paper X. Effect of Using a Poverty Definition Based on Household Income*, November.

Whittington, Leslie and Elizabeth Peters. 1996. "Economic Incentives for Financial and Residential Independence." *Demography* 33(1):82-97.

Table 1: Distribution of Persons in Consumer Unit Types for Various Time Periods

Unit Type	Distribution of Persons				
	1981	1990	1994	1999	2001
Single non-elderly units	5.1	5.2	6.1	7.2	7.1
Single elderly units	3.0	3.1	3.6	3.6	4.1
Non-elderly couple units	16.6	19.1	17.8	16.8	16.5
Elderly couple units	7.2	8.4	7.5	7.9	6.6
Married with children units	51.3	44.7	43.6	43.6	43.0
Single-mother alone units	6.4	5.9	7.3	5.9	6.0
‘Other’ units with children	4.7	7.1	7.0	8.0	8.4
‘Other’ units	5.6	6.5	7.1	7.1	8.5

Source: US Consumer Expenditure Survey; Johnson, Smeeding and Torrey 2004.

Note: Consumer Unit is comprised of members of a household who are related or share at least two out of three high expenditures – housing, food, or other living expenses.

Table 2. Questions on Expense Sharing 2001 Panel Wave 3 Topical Module

Now I am going to ask questions about the sharing of major expenses with the household.

Do you pay for all your housing expenses with your own money?

- (1) Yes
- (2) No

Do you pay for all your food expenses with your own money?

- (1) Yes
- (2) No

Do you pay for all your other living expenses such as clothing, transportation, etc., with your own money?

- (1) Yes
- (2) No

Does all or part of the money to pay for these expenses come from someone in this household?

- (1) Yes
- (2) No

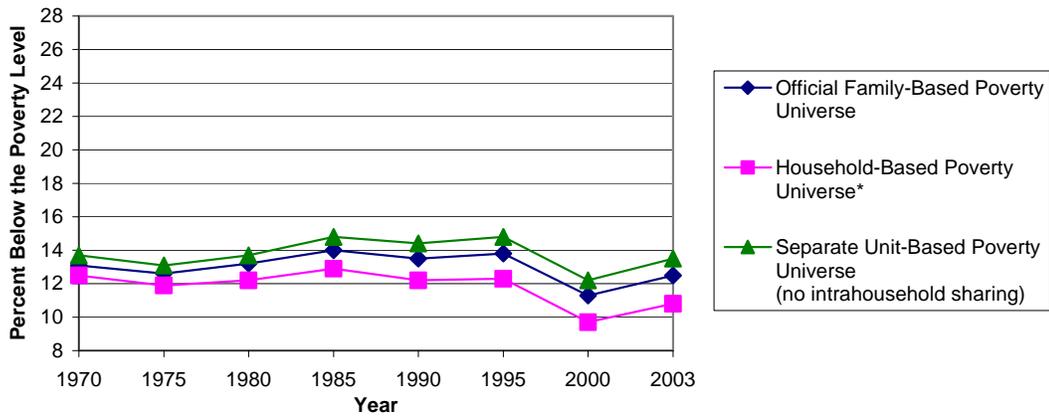
Who are these persons?

ENTER LINE NUMBER OF EACH PERSON

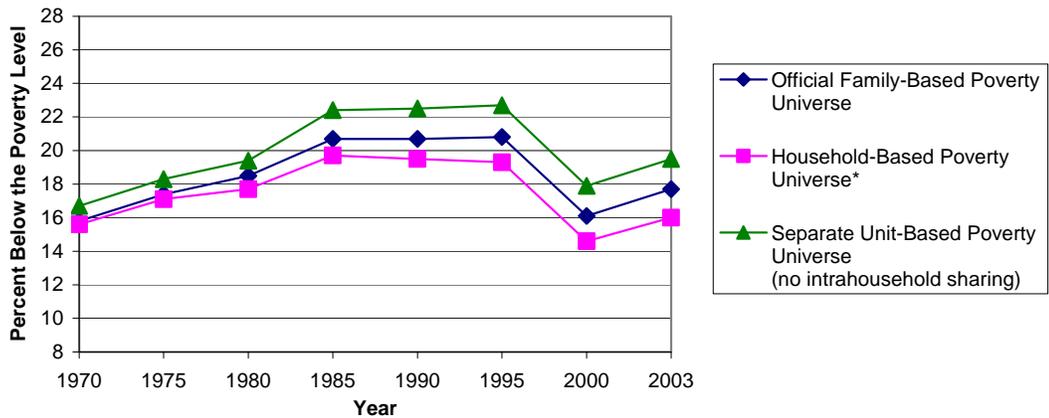
(N) No more

Figure 1. Poverty Estimates for Selected Alternative "Sharing Unit" Compositions: 1970 to 2003

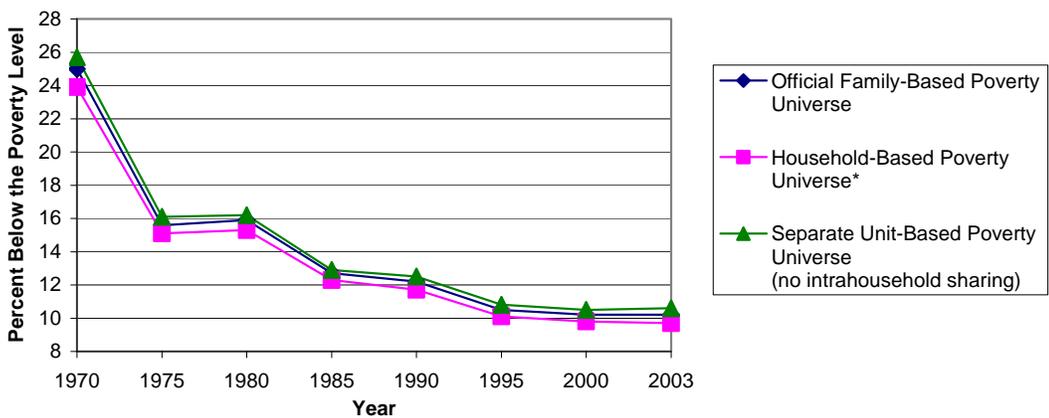
A. All Persons



B. Persons Under Age 18

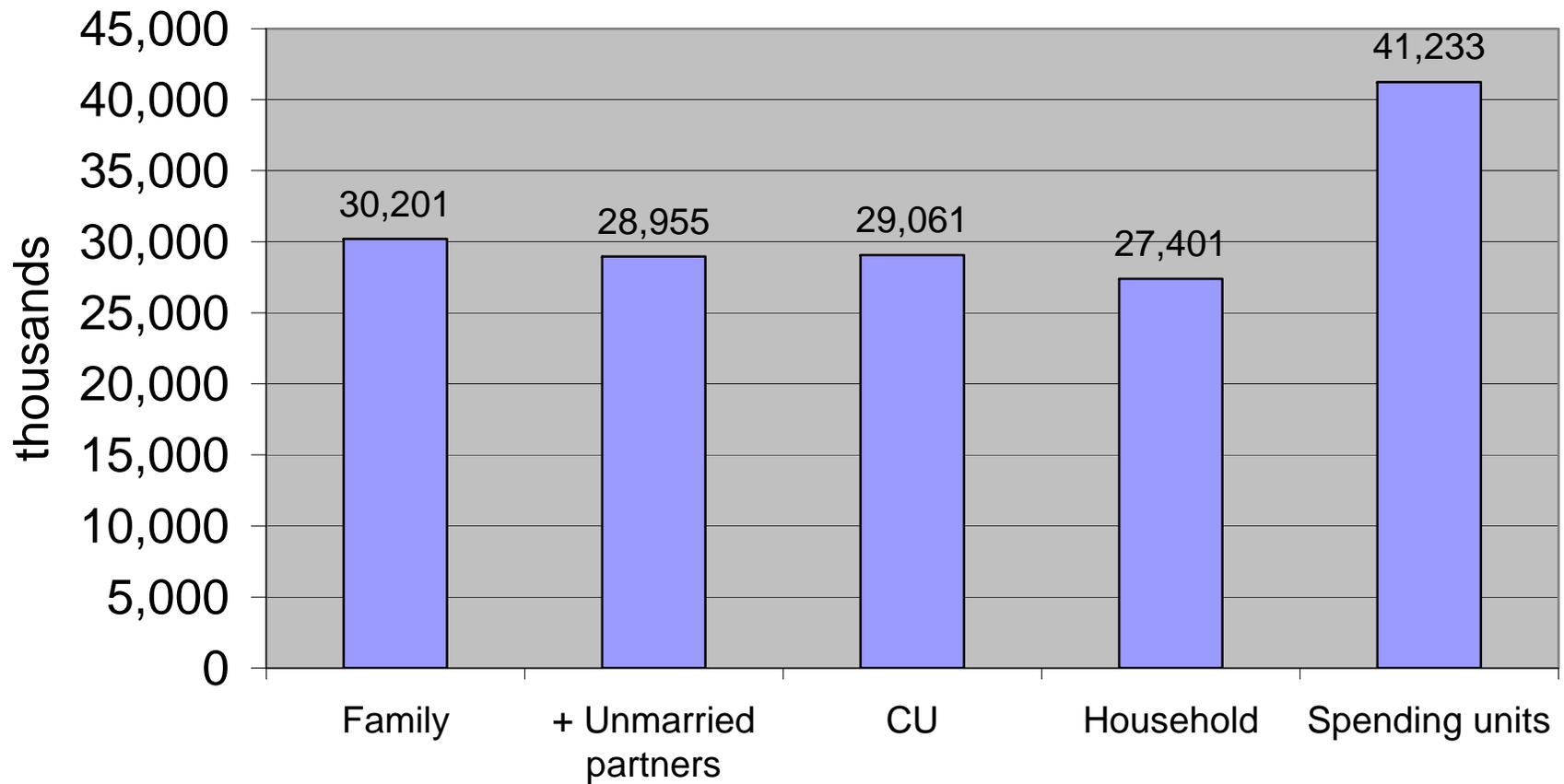


C. Persons Age 65 and Over



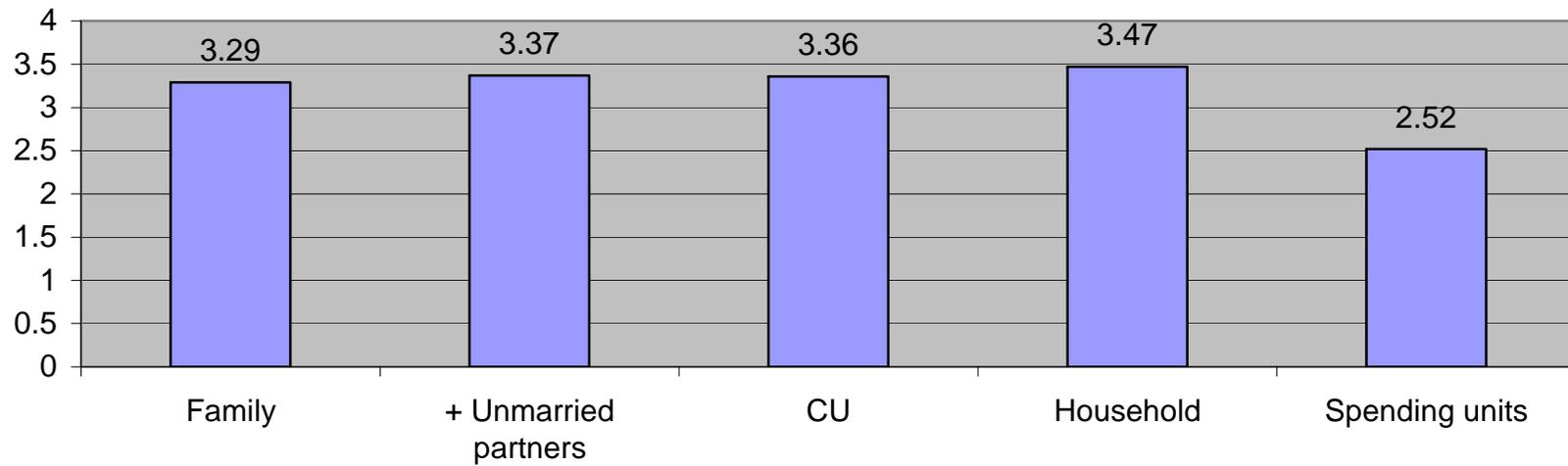
* Includes unrelated individuals under age 15 that are excluded from the official poverty universe.
Source: Coder (2005).

Figure 2: Total numbers of units by definition



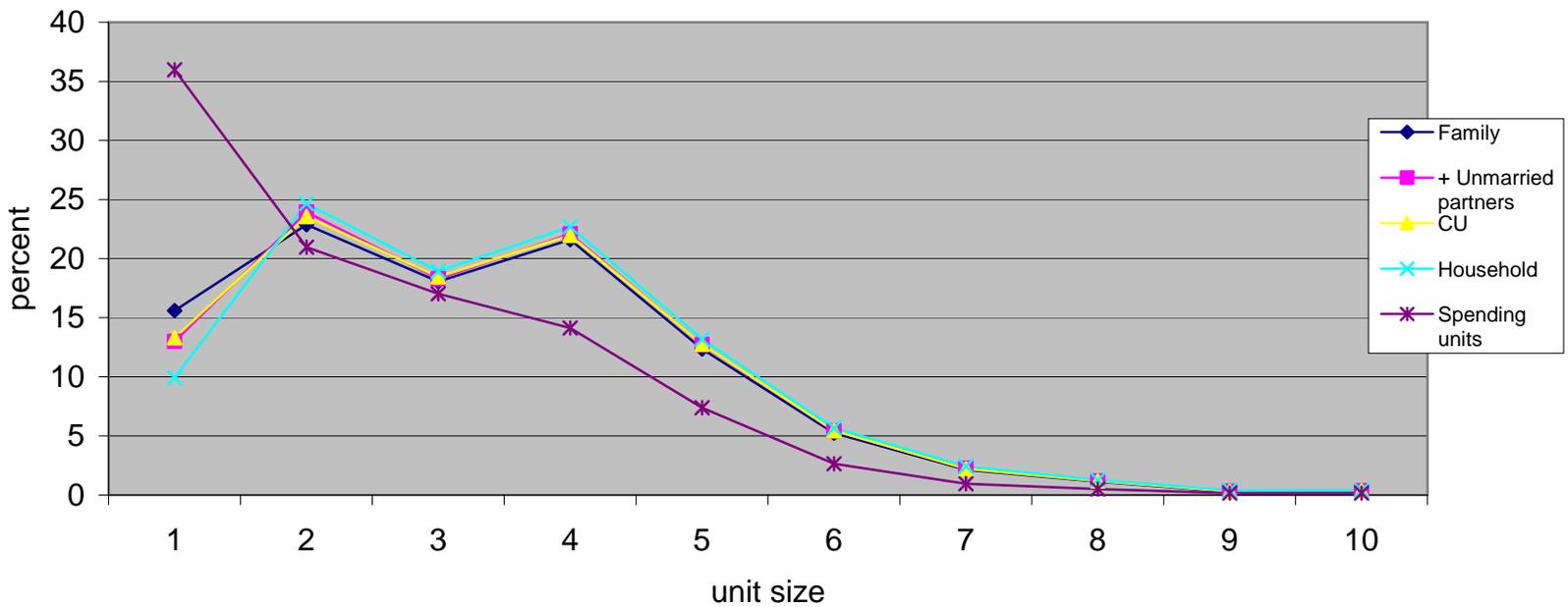
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 3: Mean Size of Units



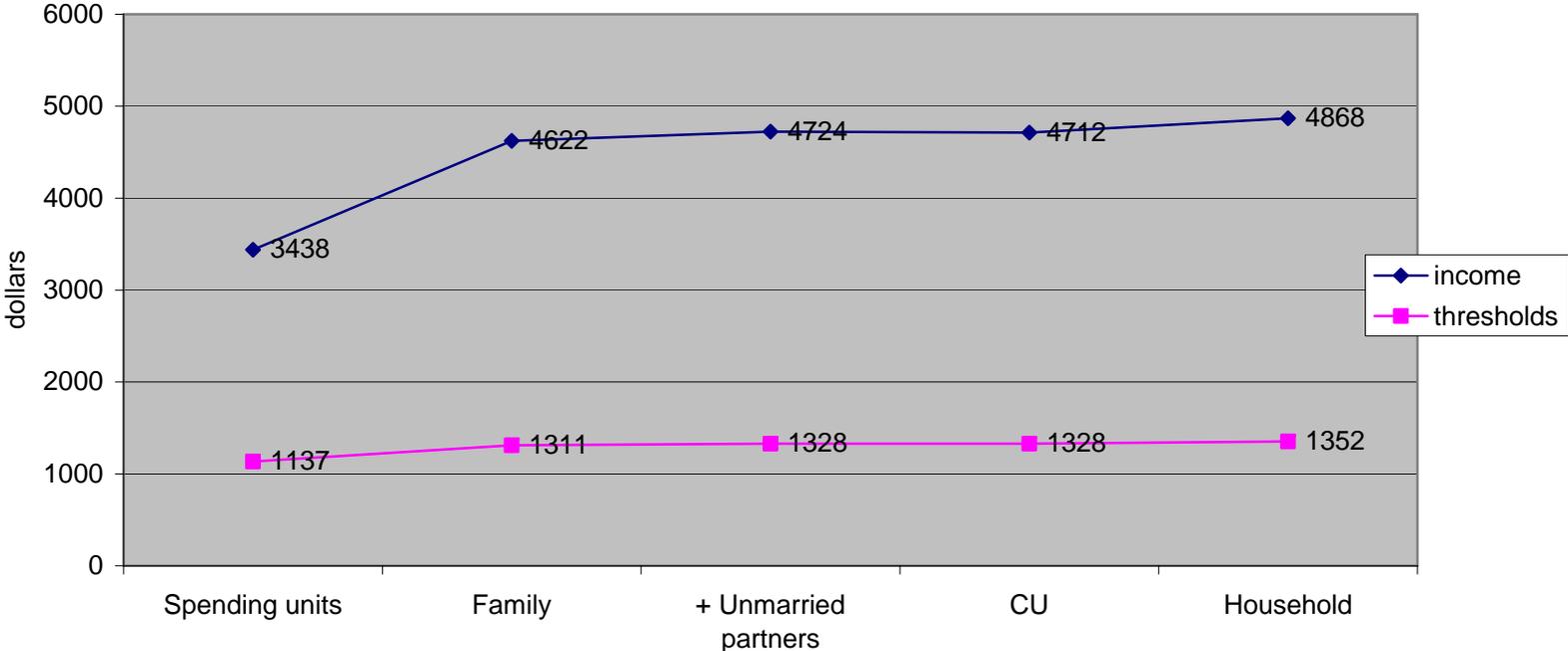
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 4: Unit Size Distribution



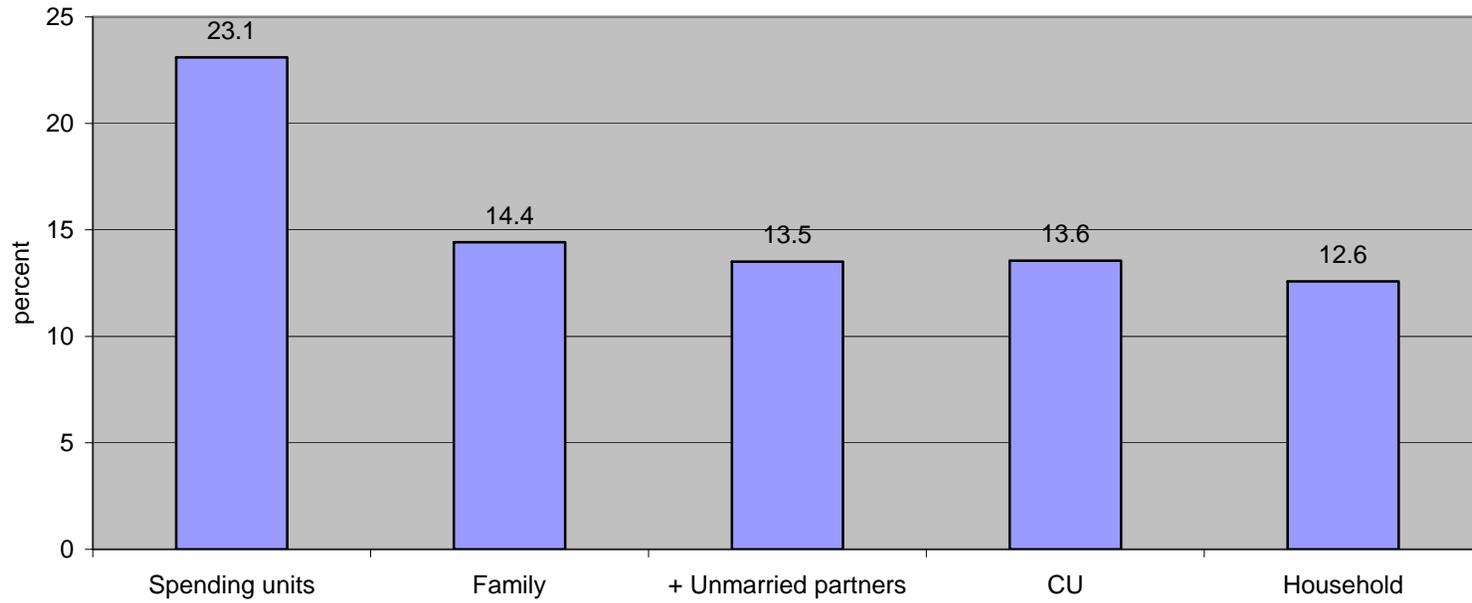
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 5: Mean Income and Mean Thresholds



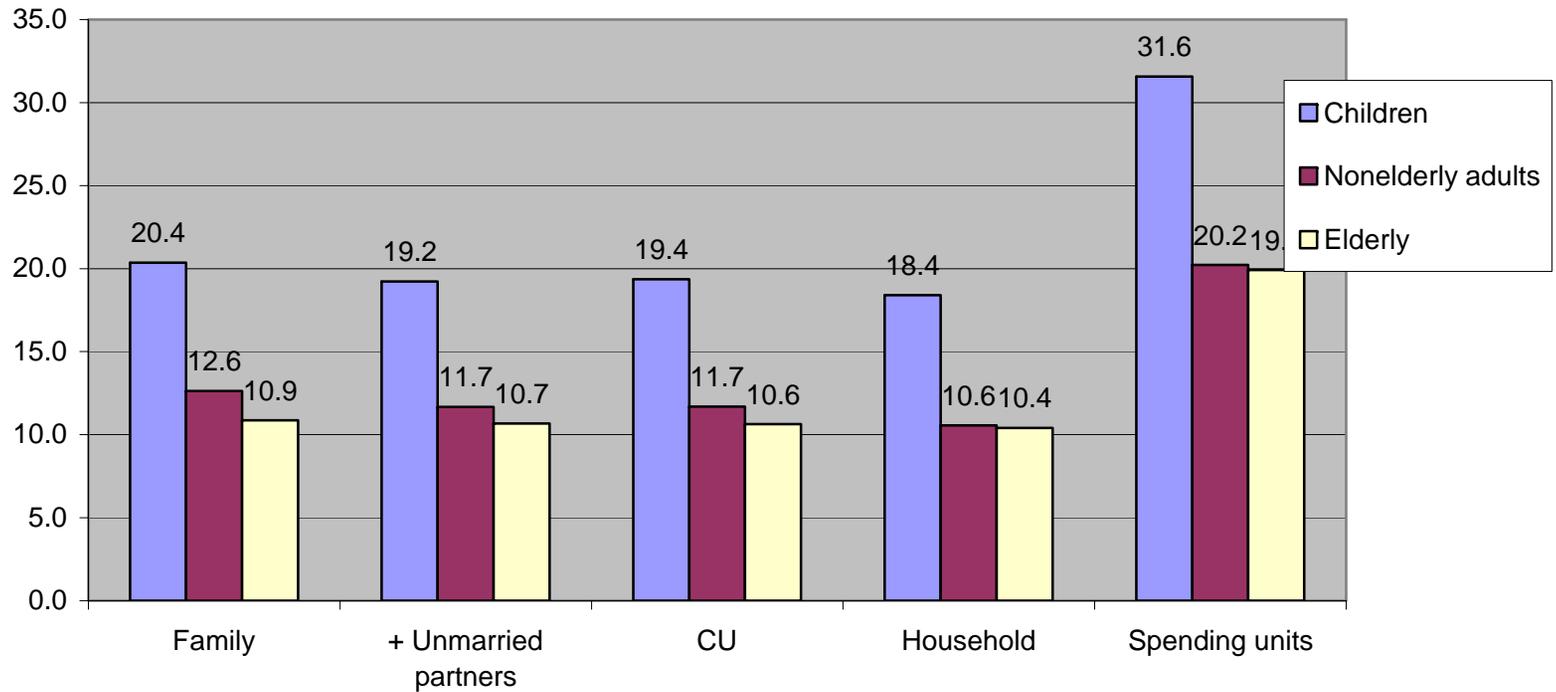
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 6: Poverty Rates Using Different Units



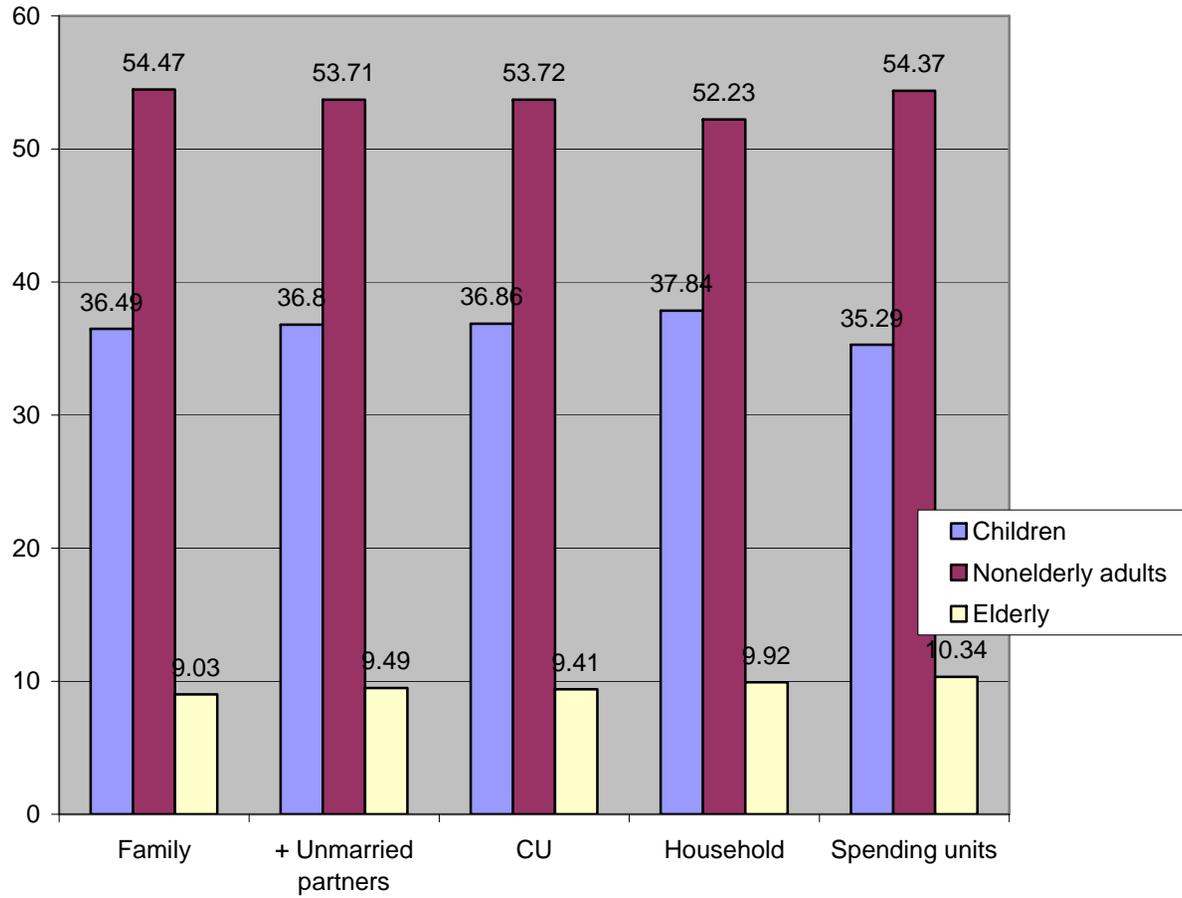
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 7. Poverty Rates by Age Group



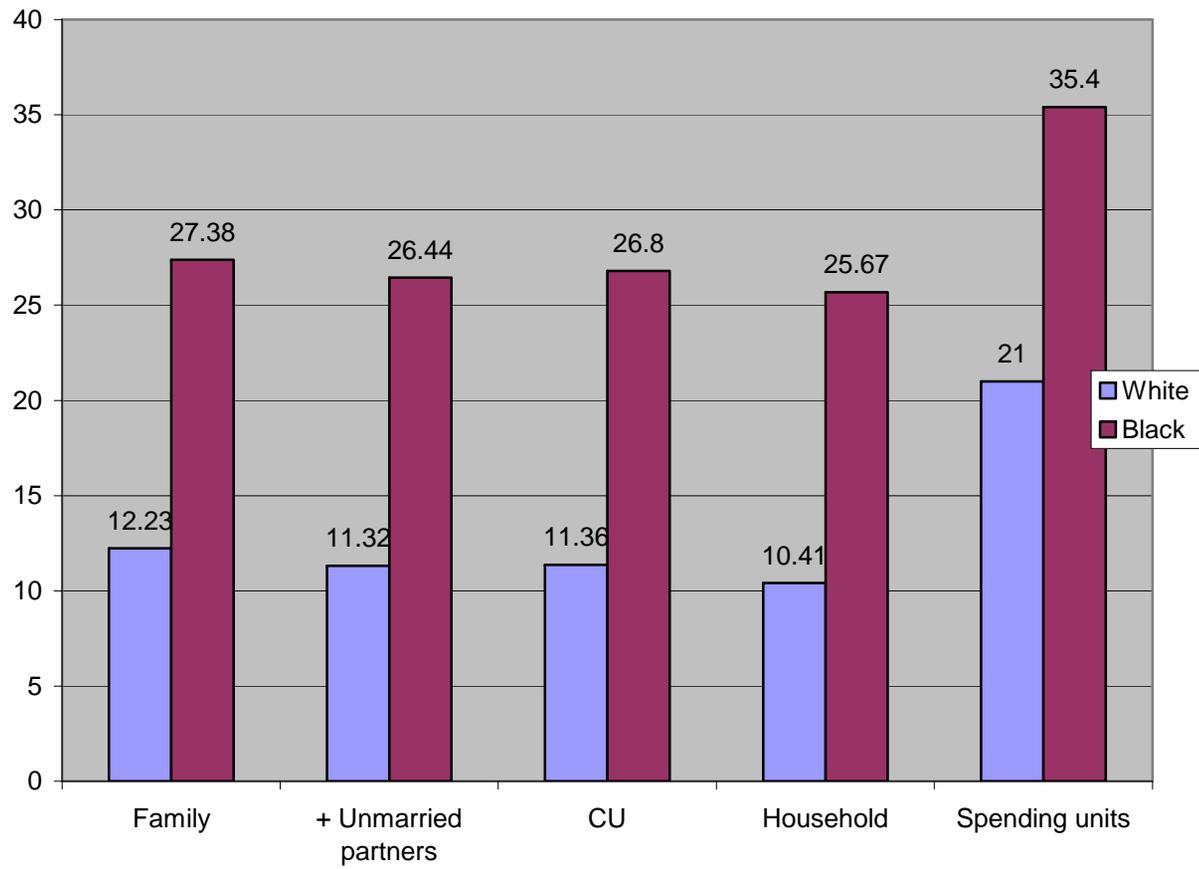
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 8: Distribution of Poverty Population by Age Group



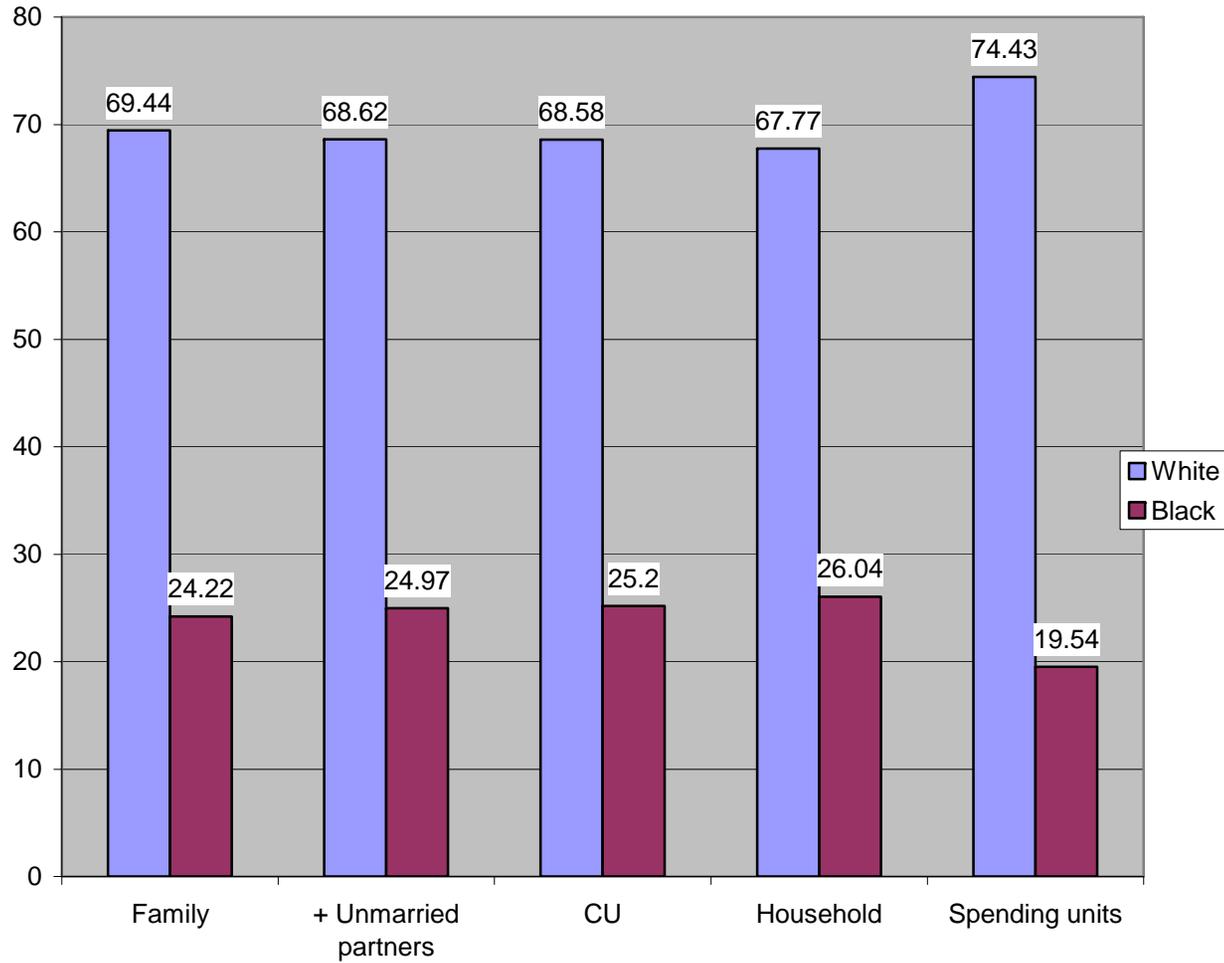
Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 9. Poverty Rates by Race



Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Figure 10. Distribution of Poverty Population by Race



Source:: 2001 Panel of the Survey of Income and Program Participation, U.S. Census Bureau

Table A-1. Poverty Estimates for Selected Alternative "Sharing Unit" Definitions: 1970-2003

A. All Persons

	Official Family- Based Poverty Universe (1)	Household- Based Poverty Universe¹ (2)	Difference (2) - (1)	Separate Unit- Based Poverty Universe² (3)	Difference (3) - (1)
1970	13.1	12.5	-0.6	13.7	0.6
1975	12.6	11.9	-0.7	13.1	0.5
1980	13.2	12.2	-1.0	13.7	0.5
1985	14.0	12.9	-1.1	14.8	0.8
1990	13.5	12.2	-1.3	14.4	0.9
1995	13.8	12.3	-1.5	14.8	1.0
2000	11.3	9.7	-1.6	12.2	0.9
2003	12.5	10.8	-1.7	13.5	1.0

B. Persons Under Age 18

	Official Family- Based Poverty Universe (1)	Household- Based Poverty Universe¹ (2)	Difference (2) - (1)	Separate Unit- Based Poverty Universe² (3)	Difference (3) - (1)
1970	15.8	15.6	-0.2	16.7	0.9
1975	17.4	17.1	-0.3	18.3	0.9
1980	18.5	17.7	-0.8	19.4	0.9
1985	20.7	19.7	-1.0	22.4	1.7
1990	20.7	19.5	-1.2	22.5	1.8
1995	20.8	19.3	-1.5	22.7	1.9
2000	16.1	14.6	-1.5	17.9	1.8
2003	17.7	16.0	-1.7	19.5	1.8

C. Persons Age 65 and Over

	Official Family- Based Poverty Universe (1)	Household- Based Poverty Universe¹ (2)	Difference (2) - (1)	Separate Unit- Based Poverty Universe² (3)	Difference (3) - (1)
1970	25.0	23.9	-1.1	25.7	0.7
1975	15.6	15.1	-0.5	16.1	0.5
1980	15.9	15.3	-0.6	16.2	0.3
1985	12.7	12.3	-0.4	12.9	0.2
1990	12.2	11.7	-0.5	12.5	0.3
1995	10.5	10.1	-0.4	10.8	0.3
2000	10.2	9.8	-0.4	10.5	0.3
2003	10.2	9.7	-0.5	10.6	0.4

Source: Coder (2005).

Notes: ¹ Assumes households of any and all composition fully share resources.

² Treats subfamilies, unrelated persons, and other "nuclear" family units as separate units, with no intrahousehold sharing of resources.