Institute for Research on Poverty Discussion Paper no. 1123-97

Shifting Family Definitions: The Effect of Cohabitation and Other Nonfamily Household Relationships on Measures of Poverty

Kurt Bauman American University E-mail address: kbauman@american.edu

February 1997

This research was conducted while the author was a postdoctoral trainee at the Institute for Research on Poverty, University of Wisconsin–Madison.

An earlier version of this paper was presented at the IRP Small Grants Conference, May 3, 1996. Helpful comments and advice were provided by Barbara Wolfe, David Betson, Kathleen Short, Stacy Furukawa, and anonymous reviewers. The author also gratefully acknowledges the editorial assistance of Patty Peltekos of the Institute for Research on Poverty. Errors and opinions are those of the author alone.

IRP Publications (discussion papers, special reports and the newsletter *Focus*) are now available electronically. The IRP Web Site can be accessed at the following address: http://www.ssc.wisc.edu/irp/

Abstract

Recently there have been proposals to change the way we define families for the purpose of measuring poverty. This paper used the 1990 and 1992 SIPP to examine several of the practical and conceptual issues of changing the definition of "family." This research found that the poverty rate for 1990 was not greatly affected by expanding the definition of family for poverty calculations to include persons with nonfamily household relationships, although some population subgroups—including single-parent families—were more affected. If the family definition were changed, many currently available surveys would provide an inaccurate picture of poverty because they measure living arrangements at a single point in time, rather than longitudinally. Finally, the main rationale for expanding the family definition—that persons in cohabiting and other nonfamily household relationships are likely to share resources—was not given strong support in this research. Income from persons in nonfamily household roles was found to have contributed slightly less to helping other household members avoid financial hardship, implying that they tend to keep more of this income to themselves.

Shifting Family Definitions: The Effect of Cohabitation and Other Nonfamily Household Relationships on Measures of Poverty

In the last few years, increasing attention has focused on the adequacy of the official U.S. government measure of poverty. Those who object to the current measure argue that it has become outdated: although reasonable at the time of adoption in 1969, the poverty threshold has not been adapted to take account of the economic, social, and policy environment that has emerged since then (Citro and Michael 1995; Ruggles 1990). Among the most prominent of the changes that have taken place in the intervening quarter century has been the change in the structure of American families—with the rise in cohabitation, single-parent families, and nonfamily living arrangements putting stress on traditional conceptions and definitions of what constitutes a family.

Although concerns about family definitions have not been central to the debate on the adequacy of our current poverty measure, these concerns are nonetheless important. They are important because taking account of these changes could have a growing impact on measured levels of poverty. More broadly, a change in family definition for measuring poverty could lead to a changed conception of who is obligated to provide resources to those facing material shortages. Finally, the change may change the conception of the family itself—because the sharing of material resources is an important component of what constitutes a family, and because the adoption of a new federal family definition of poverty will almost inevitably be reflected in research on the family. Thus, if the federal government changes the way it counts families in calculating poverty, there needs to be careful thought about the consequences of such a change.

Currently, poverty is measured by adding together the incomes of all members of a "family" (persons in a household who are related by blood, marriage, or adoption), and comparing this amount to an income threshold that depends on the number of persons in this family. As a way to reflect changing living arrangements, the federal definition of "family" for the purpose of measuring poverty could be expanded to include other household members. Some have called for counting cohabiting couples as if they were

members of the same "family" (see Citro and Michael 1995, pp. 302–308). Others have suggested that all persons residing in a household be counted, regardless of family relationship (Mayer and Jencks 1989).

One potential problem with expanding the current definition of family is that the data sets used to estimate poverty and study its causes and effects may not be adequate for the task. Most surveys have not traditionally asked directly about partner or cohabitant status. Most surveys also use measures of household composition at a single point in time to represent composition over the year, and this may create greater inaccuracies with regard to nonfamily household members than with regard to family.

A second problem with expanding the current family definition is our poor basis for judging the degree of resource sharing that takes place between household members not related by blood or marriage. We would want to expand the family to include nonfamily household members only if their income is available to other household members. To this point, no research has directly addressed this issue.

Practical Concerns of Expanding the Current Family Definition

For a new definition of poverty to be useful to researchers and policy makers, it should be applicable to a large number of surveys and data collection efforts. Unfortunately, not all surveys provide enough information to classify cohabitants and other housemates.

Until recently, few surveys asked direct questions about the nature of relationships between potential cohabitants. A question was asked in the 1990 Census of Population and 1996 rounds of the Current Population Survey (CPS) and Survey of Income and Program Participation (SIPP). Many smaller special-purpose surveys collect this information, but many others do not. Researchers often must rely on data about unmarried adults of the opposite sex who live in the same household, rather than about adults who identify themselves as being in a cohabiting relationship.

Manning (1995), using the 1990 Census, found that 75 percent of opposite-sex adults sharing living quarters were also self-identified cohabitants. In turn, 80 percent of self-identified cohabitants were classified correctly using the opposite-sex-housemate criteria. Expanding the definition of a family to

include cohabiting couples would make for research results that are not strictly comparable, due to counting cohabitants in these two different ways. An advantage of using the household as a basis for measuring poverty would be that adequate information is available in most, if not all, data sets.

In considering a change in the definition of poverty, we also should know something about how it will change estimates of the poverty population. Using 1990 Census data, Manning and Lichter (1995) examined cohabitation and poverty among children living in single-parent families. They found that approximately 13 percent of children in single-parent families lived with a person identified on the Census long form as an "unmarried partner." Of these, 43 percent lived in poverty by the standard poverty definition, while 31 percent would have been considered poor if the unmarried partner were considered to be in the same family. Manning and Lichter were not able to explore how these impacts were affected by the difference between living arrangements measured at one point in time versus those which are monitored over the course of a year, a concern that will be discussed below. Also, they did not examine the impact of nonfamily household members on poverty measurement.

Many of the data sets used for examining poverty present information on household composition only at a single point in time. This is true of the CPS, the decennial Census, and surveys on health, education, public opinion, and other subjects for which income and poverty determination is a secondary concern. Using such data sources, researchers are forced to calculate poverty on the assumption that household composition for the previous year is the same as household composition at the time of the survey. However, many nonfamily housemates and cohabitors may have been together only a few months of the year. No studies have directly examined how well such snapshot measures reflect cohabitation spells within the reference year.

Resource Sharing among Cohabitants and Other Housemates

A major consideration for using a group of people as the unit for measuring poverty is the degree to which they pool resources or share income. In a group that shares resources, the material well-being of one member will be closely related to the material well-being of another. Because families have traditionally been the group within which sharing takes place, families have naturally been the unit for defining poverty thresholds.

The efficiency of government assistance programs to the poor is improved when accurate account is taken of resources available to a person through traditional (family) modes of resource sharing. Government programs aimed at alleviating poverty usually provide support only when it is not available from family members, which results in a greater share of government aid flowing to those without access to alternative resources.

The definition of family in the poverty measure also reflects political concerns about "preserving the family." It has been argued by some that government policies should not disrupt existing family support mechanisms so as not to undermine family and kin relations (Stack 1974; Murray 1984). This raises the question of how the family definition for poverty measurement would affect policy.

The poverty threshold adopted by statistical agencies has been influential in determining the poverty guidelines issued by the Department of Health and Human Services. These guidelines, in turn, have been used to determine eligibility for programs such as Food Stamps, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), weatherization assistance, Job Corps, family planning services and several state health insurance programs (Fisher 1992, 1996). Revising the family definition for defining poverty would force families with cohabitors or other nonfamily housemates to seek these types of assistance from nongovernmental sources, which would presumably put pressure on these nonfamily household members to contribute income to the support of the family. This counterweight to the "marriage penalty" implicit in welfare programs prior to their recent revision (Moffitt, Reville, and Winkler 1995)

would presumably be seen as a positive step by those who feel that preserving marriage should be a goal of policy.

But counting nonfamily household members' income also provides an incentive for families to live apart from persons who might contribute to the family's material well-being or to misrepresent living situations to authorities in order to be eligible for government assistance. This would revive the same set of conflicts surrounding "man in the house" rules which were enforced under the Aid to Families with Dependent Children program until the early 1970s (see Piven and Cloward 1993).

A potential way out of this dilemma would be to sever the link between the statistical poverty threshold and the poverty guidelines. However, this would have drawbacks of its own, including the lack of conceptual uniformity to discussions of the federal government's role in fighting poverty, and the potential for additional political pressures to enter into the setting of the poverty guidelines.

Both with respect to the efficiency of government programs and with respect to the political goal of "preserving the family," it is important to know the extent to which nonfamily household members contribute to the material well-being of persons and families near the poverty threshold.

Measuring the Sharing of Material Resources

Resource sharing within households can be thought of as the degree to which resources nominally controlled by one household member are available to others. At least in principle, a number of aspects of this could be measured.

Pooling of resources. One way of addressing the question of resource sharing is to look at resource pooling. If people keep joint bank accounts or spend money without keeping track of whose money is involved, there is a greater chance that each member of the family has access to those collective resources to meet their needs. The Bureau of Labor Statistics uses this approach to defining "consumer units" in its Consumer Expenditure Survey. However, this does not account for the fact that some persons may have greater control over these resources than others.

Power over spending decisions. Another way to measure how resources are shared is to examine the degree to which other people in the household have the ability to encourage or restrict purchases. However, disproportionate power over spending does not necessarily result in spending disproportionately to meet one person's needs at the expense of others. Also, a person may have a great deal of control over resources withheld from the rest of the household even if the person has little control over shared resources.

Meeting of needs. Another criterion for judging how income is shared is to see how resources are actually used to affect other members' well-being. This criterion gets closer to the heart of the matter, but it suffers from the problem of defining appropriate measures of well-being. For both practical and conceptual reasons, consumption within families cannot easily be divided among members (Lazear and Michael 1988; Betson 1990). And even if it were possible, it might require imposing value judgments on people's expenditure patterns.

Nonetheless, certain aspects of people's consumption can be measured. Ideally, it would be possible to measure whether others' resources are available to meet day-to-day needs, as well as the degree to which these resources are available during periods of acute need or emergency. The research presented here takes this general approach to the question, using several measures of material hardship to take account of sharing of resources.

RESEARCH QUESTIONS

The research presented here addresses the following questions:

- 1. What is the prevalence of cohabitation and other nonfamily household relationships in population subgroups? How does prevalence vary when we take account of the duration of cohabitation and other nonfamily household relationships?
- 2. What are the poverty rates among population subgroups before and after accounting for cohabitation and other nonfamily household relationships?

- 3. How does the relationship between household composition and poverty change when household relationships are measured over the course of a year rather than at a point in time?
- 4. Compared to the income received by family members, how much does the income of cohabitants and other nonfamily members reduce material hardship?

DATA

The data for this study are from the 1990 and 1992 panels of the Census Bureau's Survey of Income and Program Participation (SIPP). Tabulations and descriptive analysis focus on calendar year 1990 data from the 1990 panel (waves 1 through 4); the regression analyses use waves 1, 2, and 3 of the 1992 panel. The 1990 panel was chosen for two reasons. Several analyses of the income data in the 1990 data have already been produced (e.g., Coder and Scoon-Rogers 1994; Martini and Sablehouse 1995), facilitating the verification and comparisons of the results obtained here. The 1990 panel also oversampled the low-income population, making its estimates of poverty more reliable.

The 1990 SIPP longitudinal panel file contains 69,432 cases, which were weighted to match January 1990 population estimates from the CPS, or 246 million total persons. After dropping cases with missing data, the file consisted of 48,763 cases, representing a total population of 242 million. Some analyses made use of data from the March 1991 SIPP matched to the 1990 longitudinal file. Because of the need to match the two files, the file had fewer observations—47,420 cases representing 235 million people. The 1990 panel did not include the questions on material hardship that were of interest for the regression analyses, so I used the 1992 data for that portion of the work. Wave 3 of the 1992 panel included a topical module on "basic needs" administered to the reference person in each household, providing needed data on material hardship. These data included 53,401 cases which were collapsed into 17,948 households for regression analysis.

RESULTS

Table 1 shows the number and percentage of persons living in cohabiting and nonfamily households using the 1990 SIPP. In this paper, all members of a family in which a member is cohabiting are classified as cohabitants. So, for example, children can be cohabitants if they live with a parent who cohabits. Similarly, all persons in nonfamily households are placed in the nonfamily household classification. Because the SIPP did not ask about the nature of opposite-sex relationships until 1996, persons were considered cohabitants if they were over 15, unmarried, and living with one other such person of the opposite sex.

The first two columns of the table show the number of persons and the total number of cohabiting persons in the United States in March 1991, as estimated from the 1990 SIPP. The third column shows the rate of cohabitation. There is surprisingly little variation in the rate of living in cohabiting family situations across the population subgroups (by gender, age, race/ethnicity, and single-parent status) in Table 1. With few exceptions, the snapshot measure taken in March 1991 shows between 3 and 5 percent of each group live with a cohabitant. The major exceptions are persons over 65, who are very rarely in a cohabiting family, and members of single-parent families (children and parents), among whom over 9 percent lived in a cohabiting situation in March 1991.

Columns 4 and 5 of Table 1 take advantage of the SIPP's monthly accounting of living situations. Column 4 shows the percentage of persons who lived in a cohabiting family situation for at least one month but fewer than six months in 1990; column 5 shows the percentage in such situations for six to twelve months. Clearly, the majority of persons were in cohabiting family situations that lasted from six to twelve months of calendar year 1990. Overall, three-quarters of those who cohabited at any time

TABLE 1

Persons Living in Cohabiting and Nonfamily Households

	March 1991	Persons living in a house March 1991		<u>chold with cohabitant</u> 1990		Persons living with a nonfamily household member 1990	
	All persons	Cohabitants		1–5 mo.	6+ mo.	1–5 mo.	6+ mo.
	(millions)	(millions)	%	%	%	%	%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
All	234.62	8.61	3.7	1.3	3.8	1.9	6.7
Male	113.48	4.40	3.9	1.4	4.0	2.0	7.3
Female	121.14	4.21	3.5	1.2	3.7	1.8	6.1
Under 6	18.70	0.56	3.0	1.2	3.4	1.9	5.1
6–17	40.70	1.06	2.6	0.9	2.9	1.3	4.4
18–24	23.09	1.48	6.4	3.5	6.6	5.1	12.6
25–44	77.46	4.08	5.3	1.8	5.5	2.4	9.6
45-64	45.62	1.05	2.3	0.4	2.3	1.0	4.1
65-plus	29.05	0.39	1.3	0.1	1.3	0.3	2.2
Non-H White	181.86	6.10	3.4	1.3	3.5	1.8	6.2
Non-H Black	28.46	1.52	5.3	1.3	5.4	2.1	7.8
Hispanic	16.38	0.64	3.9	1.3	4.4	2.7	9.2
Other	7.92	0.35	4.4	1.0	4.6	1.5	8.7
Single parent	14.59	1.38	9.4	3.2	9.8	4.4	15.3
Single nonparent	115.44	7.21	6.2	1.5	6.1	2.1	10.4

Source: Author's tabulations from the 1990 SIPP.

during the year (3.85 percent out of a total of 5.14 percent) were in cohabiting situations that lasted six months or more. There is an age gradient to the proportion in cohabitation fewer than six months, with older adults less likely to be cohabiting for a smaller portion of the year. Whites and Hispanics are less likely than blacks or persons in the "other" racial grouping (which includes Asians and American Indians) to report being in cohabiting situations for six to twelve months of the year, but just as likely to report being in relationships lasting five months or less. Thus, whites and Hispanics who do cohabit tend to be in those relationships for a smaller portion of the year.

The last two columns show the prevalence of persons in households with nonfamily members. Cohabitants are nonfamily household members by definition, and the percentages shown in columns 6 and 7 include both cohabitants and other nonfamily household members. Cohabitants and their families represent 60 percent of those living in nonfamily households.

Compared to the subgroup of cohabitors, the larger group of nonfamily households members are more likely to be in such a household six to twelve months of the year (78 percent of nonfamily households versus 75 percent of cohabitants). However, this difference is deceiving because one group includes the other. Persons in cohabiting situations part of the year and other types of nonfamily situations the rest of the year are counted as being in a nonfamily household the full year. Comparison of cohabitants with other nonfamily household members (not shown) indicate that they are equally likely to be in the household six or more months of the year.

Table 2 shows poverty rates and examines how alternative family definitions would affect poverty measurement. For individuals in the 1990 SIPP data set, poverty was calculated by comparing the sum of monthly family income amounts to the sum of monthly poverty thresholds. Comparing the percent poor in column 3 to the percent poor in column 5 shows that counting cohabitants reduces poverty by 0.6 of a percentage point, or a 6 percent reduction in poverty. Adding other nonfamily household members reduces the poverty rate another 0.4 of a percentage point (a 4 percent reduction in poverty). These

TABLE 2

Poverty Rates of Selected Population Groups, 1990 SIPP Data, Under Alternative Poverty Definitions

		Standard Family Definition		Cohabiting Family Definition		Household	
	Total Persons	Poor	Percent	Poor	Percent	Poor	Percent
	(millions)	(millions)	Poor	(millions)	Poor	(millions)	Poor
All	241.08	25.13	10.4	23.63	9.8	22.72	9.4
Male	116.85	9.83	8.4	9.42	8.1	8.99	7.7
Female	124.24	15.30	12.3	14.20	11.4	13.72	11.0
Under 6	19.14	3.80	19.9	3.60	18.8	3.53	18.4
5–17	41.67	6.80	16.3	6.46	15.5	6.27	15.0
18–24	24.04	2.67	11.1	2.28	9.5	2.01	8.4
25-44	79.58	6.36	8.0	5.98	7.5	5.74	7.2
45-64	46.71	3.06	6.6	2.88	6.2	2.77	5.9
65 or over	29.95	2.44	8.1	2.42	8.1	2.39	8.0
White	186.30	12.03	6.5	10.92	5.9	10.35	5.6
Black	29.68	8.22	27.7	8.04	27.1	7.86	26.5
Hispanic	16.93	3.61	21.3	3.48	20.5	3.38	20.0
Asian & other	8.18	1.27	15.6	1.20	14.6	1.12	13.7
Single parent	16.34	5.09	31.2	4.64	28.4	4.37	26.7
Single nonparent	115.22	15.55	13.5	14.53	12.6	13.91	12.1

Source: Author's tabulations from 1990 SIPP.

changes in poverty could be characterized as small but noticeable. Cohabitants account for about 60 percent of the reduction in poverty for those in nonfamily households, just as cohabitants and their families represent 60 percent of persons in nonfamily households.

The effect of accounting for nonfamily relationships has a larger impact on several subgroups than on others. Among the members of single-parent families, accounting for cohabitation reduces poverty by 2.8 percentage points, which amounts to a 9 percent reduction in the poverty rate for this group. Accounting for all nonfamily housemates reduces poverty another 1.7 points. Accounting for nonfamily household relationships also has a large impact on measured poverty of young adults. Perhaps more surprising is the relatively small change in measured poverty after accounting for cohabitation of African-Americans, given their relatively high rate of cohabitation. The poverty rates for both blacks and whites decrease by 0.6 of a percentage point when cohabitants are treated as part of a family, a reduction of nearly 10 percent for whites, but only a 2 percent reduction for blacks. Accounting for other nonfamily housemates has a somewhat larger impact on measured poverty among blacks—a reduction of 0.6 of a percentage point, as compared to a reduction of 0.3 of a percentage point for whites.

The impact of cohabitation on measurement of children's poverty shown in Table 2 can be compared to the results of Manning and Lichter (1995), who found that approximately 300,000 fewer children would be considered poor if the definition of family for calculating poverty were expanded to include cohabitants. Table 2 shows an estimate of 10.60 million poor children by the standard family definition, and 10.06 million when cohabitants are included, which means slightly over half a million children would no longer be considered poor if cohabitation were taken into account. Manning and Lichter's estimate is probably more reliable, given the larger sample size available in the 1990 Census with which they worked, and their use of direct questions on partner status, as compared with the opposite-sexhousemate definition of cohabitation used here.

Including cohabitants and other nonfamily housemates in the resource unit affects the measurement of poverty fairly substantially, given the small number of households involved. This implies that the definitional change makes a big difference for households that contain cohabitants or other nonfamily members. The first two columns of Table 3 examine how expanding the definition of family would affect poor persons currently living in cohabiting households. Of the 2.95 million poor people in cohabiting households, 55.4 percent would no longer be counted as poor if cohabitants were included in the resource base for calculating poverty. The last two columns focus on poor people living in families with nonfamily members. In this group, 60.4 percent would no longer be counted as poor if the household were to become the basis for calculating poverty. It is evident, therefore, that the income of nonfamily household members makes a substantial difference for poor people living in these situations.

Among population subgroups, less than one-third of poor blacks in cohabiting families would be reclassified as nonpoor if the family definition were changed. Among whites, more than twice that proportion would be changed. This is not due to differences in the time spent in cohabiting relationships over the course of 1990. As seen in Table 1, black cohabitants spent a greater portion of the year in a relationship. Blacks may have a lower probability of being raised out of poverty through cohabitation due to lower income and/or greater need.

Point-in-Time versus Longitudinal Measures

To compare point-in-time estimates of household relationships with month-by-month reports of relationship status over the course of a year, it is helpful to know at what point these two types of estimates part company as they affect poverty. There is a clear break between those who lived in a cohabiting family or in a household with a nonfamily member for six months or more over the course of 1990 and those who did for five months or less. Among persons in poor families who cohabited one to five months, taking account of this relationship changes the poverty status of fewer than 10 percent. By contrast, over two-thirds of those who cohabited for six months or more would have their status changed.

TABLE 3

Number and Percentage of Persons Reclassified Out of Poverty by Including Nonfamily Household Members in "Family" Definition

		s in Households bhabitants	Poor Persons in Households with Nonfamily Members			
	Millions of Persons	Percentage Reclassified Out of Poverty	Millions of Persons	Percentage Reclassified Out of Poverty		
All	2.95	55.4	4.34	60.4		
Male	1.13	46.5	1.78	55.8		
Female	1.82	61.0	2.56	63.6		
Under 6	0.44	45.8	0.62	44.6		
6–17	0.67	51.8	0.98	56.9		
18–24	0.63	62.3	0.97	68.6		
25–44	0.90	53.6	1.24	59.0		
45-64	0.26	71.8	0.43	76.9		
65-plus	0.05	53.1	0.10	59.0		
Non-H White	1.73	65.9	2.43	71.3		
Non-H Black	0.84	32.3	1.18	40.3		
Hispanic	0.27	54.2	0.54	47.8		
Other	0.11	70.4	0.18	82.1		
Single Parent	0.87	55.4	1.27	58.1		
Single Nonparent	2.01	55.6	2.87	61.8		

Source: Author's tabulations from 1990 SIPP, waves 1-4.

An almost identical pattern exists for those living in households with nonfamily members. A snapshot measure of household relationships would work best for our purposes if it correctly classified those who were in a given situation for six or more months, while excluding those who were in a situation for a shorter period of time.

Comparing the longitudinal and snapshot measures shows that the latter do a moderately good job of meeting this criterion. Of those who were in a cohabiting family for six to twelve months, 76.4 percent were in cohabiting relationships in March 1991. Looking at the situation the other way, 80.0 percent of those in a cohabiting family in March 1991 had been in such a relationship for six months or more during 1990. The numbers are practically identical when we look at households with nonfamily members.

Now we turn to poverty itself. Are people whose poverty status is affected by changes in the definition of family the same whether we take a snapshot or a longitudinal measure? Approximately two-thirds (66 percent) of persons reclassified out of poverty by a March 1991 snapshot definition of cohabitation are also reclassified out of poverty by the month-to-month longitudinal accounting of cohabitation during 1990. At the same time, just over three-fourths (77 percent) of those who were reclassified out of poverty by the month-to-month accounting of cohabitation were also reclassified out of poverty by the March snapshot definition.

The picture is about the same when we look at nonfamily household membership. Of those reclassified out of poverty based on the income of nonfamily housemates, 69 percent would also be so reclassified using a month-by-month accounting. And of those reclassified by the month-to-month method, 81 percent were reclassified out of poverty based on their March household situation.

What does this tell us about using annual point-in-time estimates for estimating poverty and nonfamily household relationships? Clearly, it would be best to use surveys, such as the longitudinal SIPP, that collect data on changes in family situations over time. Retrospective questions about changes in family situation might serve as well. When such data are not available, as is commonly the case, attempts to

expand the current family definition for measuring poverty do little to improve the accuracy of our measures. An additional problem with many data sets is that they fail to identify adults as partners, requiring researchers to identify cohabitants as adults of the opposite sex who share living quarters. If the two types of misidentification (duration of household membership and type of partnership) were uncorrelated, then a March survey using a sharing-living-quarters definition would produce a set of cohabiting family members of whom only 60 percent would have been in a true cohabiting family for six months or longer in the previous year. However, this is just a worst-case scenario because the two types of misidentification are probably positively correlated.

If one believes that cohabiting family groups ought to be classified as families for the purposes of measuring poverty, taking account of cohabitation would probably reduce misclassification over the current measure, but not by much.

The Effect of Household Composition on Material Hardship

Although the above results have shed some light on the practicality of counting cohabitants as part of a family and on using households as a basis for measuring poverty, what of the sharing of resources? The 1992 SIPP asked a series of questions on material hardship which were very similar to those used by Mayer and Jencks (1989) in their analysis of poverty and material hardship in Chicago. Several of these hardship measures were used in the present analysis. Household heads were asked, "During the past 12 months, has there been a time when your household did not meet its essential expenses? By essential expenses, I mean things like the mortgage or rent payment, utility bills, or important medical care." They were then asked about instances when the household did not pay the full amount of rent or mortgage, did not pay the full amount of utility bills, had telephone service cut off due to nonpayment, had someone who needed to go to the doctor or hospital but didn't go, had someone who needed to see a dentist but didn't go. Household heads were asked to categorize the food eaten in their household as "enough of the kinds of food

we want," "enough but not always the kinds we want to eat," "sometimes not enough to eat," or "often not enough to eat."

The responses to these questions were treated in two ways. First, the response to each question was analyzed individually, using logistic regression. The variables were given a score of 0 if people indicated they experienced trouble meeting expenses or obtaining health care, or if they offered the first answer to the question about food adequacy. A score of 1 indicated the absence of hardship. Then, loosely following Mayer and Jencks (1989), answers to the seven questions were summed to create an index of "freedom from hardship," which was analyzed using tobit regression. The analysis reported in Table 4 focuses on the summary regression and Table 5 presents selected results from the series of regressions on the seven separate hardship measures.

The idea behind these regressions is that if cohabitants contributed resources to partners and their families in the same way as married persons, one would expect that, among cohabitants with similar incomes and other background factors, the probability of experiencing these types of material hardship would also be similar. If, on the other hand, cohabitants were more likely to withhold money from the household, or to purchase items that served personal priorities rather than household needs, there would be a greater likelihood that the household would report hardship. With appropriate controls, the difference between cohabiting households and other types of households should provide an indication of whether this type of resource sharing is equal between cohabitants and family members. We can apply a similar test to compare nonfamily housemates to family members.

It is important to control for other factors besides income in these regressions, because living with nonfamily household members is likely to be correlated with a number of other situational factors that will have an impact on hardship. The results in Table 4 show the parameters of interest along with the effects of a number of such control variables.

TABLE 4

Regression of "Freedom from Hardship" Index on Income Types and Background Variables

Variable	Parameter Est.	Std. Err.	Ratio
Ususshald in some in \$10,000	0.95	0.040	10.5
Household income in \$10,000	-0.03	0.049 0.004	19.5 -6.7
Household income in \$10,000, squared			
Income of spouse	-0.21	0.046	-4.6
Income of other family	-0.20	0.101	-2.0
Income of cohabitant	-0.36	0.142	-2.5
Income of housemate	-0.45	0.151	-3.0
Number of adults	-0.58	0.069	-8.4
Number of children	-0.29	0.046	-6.3
Spouse in hh—part year	0.36	0.194	1.9
Spouse in hh—full year	0.49	0.116	4.2
Other family in hh—part year	-0.52	0.173	-3.0
Other family in hh—full year	-0.33	0.139	-2.4
Cohabitant in hh—part year	-0.23	0.243	-0.9
Cohabitant in hh—full year	0.50	0.254	2.0
Housemate in hh-part year	0.26	0.228	1.2
Housemate in hh—full year	0.06	0.308	0.2
Age of household head	0.05	0.003	18.4
Education of household head	0.01	0.009	1.3
Household head black	-0.62	0.101	-6.1
Household head other race	0.39	0.199	1.9
Household head Hispanic	0.26	0.120	2.2
Household head male	0.20	0.072	2.7
Medical insurance—part year	-0.01	0.124	-0.1
Medical insurance—full year	1.23	0.109	11.3
Received food stamps	-0.67	0.096	-7.0
Received rent assistance	0.13	0.153	0.8
Received energy assistance	-0.70	0.215	-3.2
Metro area residence	-0.17	0.080	-2.1
Southern residence	0.16	0.074	2.1
Moved in last 12 months	-0.25	0.112	-2.2
Intercept	5.37	0.224	23.9

Note: Global fit chi-squared statistic (versus null model)

-2 LL = 3567.8 D.F.= 30 on 16479 observations.

TABLE 5

Effect of Income Types on Seven Measures of Avoiding Household Hardship, with Controls for Background

Dependent Variable							
	Meet	Enough	Visit	Visit	Pay	Pay	Pay
	Expenses	Food	Doctor	Dentist	Rent	Utilities	Phone bill
Household Income	0.49	0.29	0.43	0.35	0.48	0.50	0.51
	(0.038)	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)	(0.07)
Household Income	-0.010	-0.013	-0.004	0.005	-0.013	-0.006	-0.015
Squared	(0.004)	(0.003)	(0.006)	(0.006)	(0.004)	(0.006)	(0.008)
Income of Spouse	-0.15	-0.03	-0.12	-0.09	-0.18	-0.16	-0.06
	(0.035)	(0.04)	(0.05)	(0.04)	(0.05)	(0.04)	(0.08)
Income of Other Family	-0.17	-0.11	-0.14	-0.12	0.03	-0.20	-0.24
	(0.075)	(0.08)	(0.09)	(0.09)	(0.12)	(0.09)	(0.15)
Income of Cohabitant	-0.27	-0.11	-0.21	-0.18	-0.31	-0.18	-0.21
	(0.101)	(0.12)	(0.13)	(0.12)	(0.12)	(0.12)	(0.18)
Income of Housemate	-0.14	-0.09	-0.39	-0.37	-0.31	-0.37	0.27
	(0.125)	(0.13)	(0.14)	(0.12)	(0.13)	(0.14)	(0.32)
Chi-squared statistic (vs. null model)	2401.3	414.7	1240.0	1520.8	1577.5	1966.2	986.6
D.F.	28	29	28	28	28	28	28

Note: Control variables are identical to those in Table 4.

The first pair of variables in Table 4 are total household income and income squared. It is expected that income would be positively associated with eliminating the experience of hardship, with the second term included to allow the impact of income to decrease as income climbed. If all members contributed equal portions of their income to help meet the basic needs of household members, the slopes of the spouse, other family, cohabitant, and housemate income variables would be zero. If some household members devoted a smaller share of their income to household needs, their slopes would be negative, indicating that relative to the effect of total household income, the amount contributed by these household members contributed less to reducing hardship.

The household income variable has a strong positive impact on relieving hardship. Every \$10,000 of income reduces the number of expected hardship incidents by one. Household income squared is also significant, indicating that income has a diminishing impact on level of hardship, as might be expected. Since we have taken separate account of the income of other household members, the effect of total household income in this equation is equal to the effect of household head's income, which is treated as an omitted category.

Once total household income is controlled, the effect of spouse's income is significantly negative, indicating that income from a spouse is less likely to contribute toward reducing hardship levels than income from the household head. Income from other family members seems to lessen family hardship at about the same rate as income from a spouse, although the coefficient is not significant. Where does cohabitant's income fall in this picture? Cohabitants' income seems to lessen family hardship only to a slightly lesser extent than that of spouses. The coefficient on housemates' income indicates that they make a little more than half the contribution to lessening hardship than the household head's income.

Income of cohabitants and other nonfamily household members is significantly less likely to be used to address the basic material needs of a household than income contributed by the household head. However, there is not enough statistical power to pin down their contribution relative to other household

members besides the household head. One cannot reject the hypothesis that the influence of income from all household members besides the household head is equal. Nonetheless, there is a hint that there is a pattern here—with those persons having spousal and family relationships to the household head most likely, and those having less formal relationships least likely to contribute to the basic needs of the household, as perceived by the household head.

The rest of the variables in Table 4 are control variables. The next group includes several indicators of the presence of different types of household members in addition to the household head. Hardship is greater when there are more persons in the household, with the presence of additional adults having a slightly higher effect than additional children. The indicators showing the presence in the household of people in various roles generally produce a positive impact on freedom from hardship. The presence of a spouse, for instance, reduces the level of hardship reported in the household. The presence of other family members, on the other hand, raises the level of hardship. The role of cohabitants is less clear. When they are present for the full year, they seem to be like spouses in that their presence reduces reported hardship levels (though the impact is not significant). However, when they are present part of the year, they seem to be a net drain on the household. One explanation may be that part-year insurance coverage and program receipt, discussed below. Alternatively, cohabitation may make it more difficult to call upon other family members when needs arise (see Nock 1995). The last pair of variables in this section of the table show the impact of the presence of housemates. Whether present for the full year or for part of the year, housemates have a positive impact on reducing hardship levels, though the coefficients are not significant.

Next is a group of demographic variables that describe the household. Age of household head has a large and highly significant impact on reducing the level of hardship in the household, with education having a slightly smaller impact (although the coefficients are about equal, age has a range of around 80, education 20). Controlling for other factors, blacks report a higher incidence of hardship while the other

racial and ethnic groups identified here report significantly less hardship. Male household heads report lower levels of hardship than females, which may be due to greater access to resources or to less willingness to report hardship.

The last group of controls focus on insurance, program receipt, and geographic location. The variable with the largest impact is medical insurance, which greatly reduces the level of material hardship. Note, however, that receiving insurance for part of the year has no effect on the level of hardship. It is probable that many of the people who were insured only part of the year experienced other problems or dislocations, such as loss of a job, that are not controlled here. Otherwise, one would expect that insurance receipt for part of the year would be better than no insurance at all, and similarly for the coefficients on food stamp receipt and energy assistance. Receipt of food stamps and energy assistance contribute significantly to experiencing hardship because they indicate a lack of resources not captured by the measures here, or the experience of changing circumstances. Most other parameters are in the expected direction. Moving and living in metropolitan areas contribute to hardship; living in the South, where the cost of living is lower, increases freedom from hardship. Rent assistance has a small positive impact on freedom from hardship.

Thus far, we have examined a dependent variable which summarizes several types of hardship. Table 5 shows how the different types of income described here affect the individual components of this summary variable. As described earlier, the dependent variable in each of these equations is a binary variable indicating absence of a particular type of hardship. The power of these regressions is smaller than in the summary regression of Table 4. Only one of these equations has a significant coefficient on income of cohabitant. Four of the seven have a significant coefficient for income of nonfamily housemate. The overall pattern of coefficients is somewhat uneven, but generally conforms to that established in the summary regression. Spouse's income generally contributes the most to avoiding hardship, nonfamily housemate's income generally contributes the least. It is interesting to note that for the four types of

hardship where the coefficients of nonfamily housemate's income are the largest, they almost completely offset the positive impact of household income. That implies that when it comes to avoiding trouble in paying rent and utilities, and problems in visiting the doctor or dentist, nonfamily housemates contribute essentially nothing.

The overall conclusion from Tables 4 and 5 is that household composition does make a difference for families vulnerable to hardship. A household is more likely to experience hardship if a share of its income comes from other than the household head. These results provide a note of caution in the move to group nonfamily household members together for calculating poverty. Other research may confirm the finding of a "gradient" where household head contributes most and nonfamily housemates contribute least toward meeting basic needs. If so, it may be advisable to move cautiously to include cohabitants, but not other nonfamily members of the household. Unfortunately, the evidence here is too thin to argue strongly for or against any particular course of action.

CONCLUSION

This research was designed to address some of the practical issues and the desirability of shifting from the current family definition for calculating poverty. One practical problem in defining families to include cohabitants is that, in most data sets, cohabitant status can only be imputed, rather than directly measured. However, the three major surveys most likely to be used for national poverty statistics—the Census, SIPP, and CPS—have all begun to include questions allowing self-identified cohabitation. Another practical issue is whether snapshot measures of cohabitation or nonfamily housemate status are sufficient for determining poverty status with respect to the previous year. The answer here is clear. Only two-thirds of those whose poverty status would be changed by relying on a snapshot measure of household status would be correctly reclassified. This is not much better than breaking even—if half were correctly reclassified, half would be incorrectly reclassified and a revised definition would be no improvement at all

over the current definition. Should SIPP become the basis for poverty statistics, this problem would be avoided. If we continue to rely on the CPS, there will be a large degree of mismeasurement. One way to alleviate this problem would be to ask respondents directly about the number of months spent in a household relationship in the past year, rather than about (or in addition to) current status.

For certain subgroups, particularly young adults and single-parent families, counting cohabitants and nonfamily household members would have a fairly substantial impact on calculated rates of poverty. In addition, the current growth in cohabitation and other nonfamily household relationships (Saluter 1994; Sweet and Bumpass 1987, p. 376) means that the choice of definition will take on increasing importance in the future.

References

- Betson, David M. 1990. Alternative Estimates of the cost of Children from the 1980–86 Consumer Expenditure Survey. Report to the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Washington, D.C.
- Citro, Constance F., and Robert T. Michael, eds. 1995. *Measuring Poverty: A New Approach*. Washington, D.C.: National Academy Press.
- Coder, John, and Lydia Scoon-Rogers. 1994. "Evaluating the Quality of Income Data Collected in the Annual Supplement to the March Current Population Survey and the Survey of Income and Program Participation." Working Paper, U.S. Bureau of the Census, Housing and Household Economic Statistics Division.
- Fisher, Gordon M. 1992. "Poverty Guidelines for 1992." Social Security Bulletin 55(1):43-46.
- Fisher, Gordon M. 1996. "Disseminating the Administrative Version of the Federal Poverty Measure in the 1990's." Paper presented at the Annual Meeting of the Sociological Practice Association, Arlington, VA, June 6, 1996.
- Lazear, Edward P., and Robert T. Michael. 1988. *Allocation of Income within the Household*. Chicago: University of Chicago Press.
- Manning, Wendy. 1995. "Comparisons of Direct and Inferred Measures of Cohabitation." Unpublished paper. Population Research Institute, Pennsylvania State University.
- Manning, Wendy, and Daniel T. Lichter. 1995. "Parental Cohabitation and Children's Economic Wellbeing." Unpublished paper, Population Research Institute, Pennsylvania State University.
- Martini, Alberto, and John Sablehouse. 1995. "Documenting and Explaining SIPP-CPS Differences in Poverty Measures among the Elderly: A Progress Report." Income and Benefits Policy Center, The Urban Institute. Washington, D.C. Mimeo.
- Mayer, Susan E., and Christopher Jencks. 1989. "Poverty and the Distribution of Material Hardship." *Journal of Human Resources* 24(1):88–114.
- Moffitt, Robert A., Robert Reville, and Anne E. Winkler. 1995. "State AFDC Rules Regarding the Treatment of Cohabitors: 1993." *Social Security Bulletin* 57(4):26–33.
- Murray, Charles. 1984. Losing Ground. New York: Basic Books.
- Nock, Steven. 1995. "A Comparison of Marriages and Cohabiting Relationships." *Journal of Marriage and the Family* 16(1):53–76.
- Piven, Frances Fox, and Richard A. Cloward. 1993. *Regulating the Poor: The Functions of Public Welfare*. Updated ed. New York: Vintage Books.

- Ruggles, Patricia. 1990. Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy. Washington, D.C.: Urban Institute Press.
- Saluter, Arlene F. 1994. *Marital Status and Living Arrangements: March 1993*. Current Population Reports, Household Economic Studies, P70-42. Washington, D.C.: U.S. Bureau of the Census.
- Stack, Carol. 1974. All Our Kin. New York: Harper and Row.
- Sweet, James A., and Larry L. Bumpass. 1987. *American Families and Households*. New York: Russell Sage Foundation.