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Time Poverty Thresholds and Rates for the US Population

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Abstract Time constraints, like money constraints, affect Americans' well-being. This paper defines what it means to be time poor based on the concepts of necessary and committed time and presents time poverty thresholds and rates for the US population and certain subgroups. Multivariate regression techniques are used to identify the key variables associated with discretionary time and time poverty. The data confirm the idea that individuals in households with children have less discretionary time and are thus more likely to be time poor than those in households without children. Controlling for other household characteristics, an additional child reduces a household adult's daily discretionary time by 35 min. Surprisingly, while one might expect the necessary and committed activities required of an individual to be less in a two-adult household with children than in a one-adult household with children because child care can be shared, the data show that the presence of such a second adult only marginally reduces the necessary and committed time burden of an individual household member. Perhaps even more surprisingly, household income is not a statistically significant correlate of discretionary time or time poverty.

Keywords Discretionary time · Time poverty · Time poor · American Time Use Survey

The views expressed here are those of the authors and are not necessarily those of the Economic Research Service or the US Department of Agriculture.

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1 Introduction

Much of the focus of research and policy in the United States is on alleviating monetary poverty. However, individuals can also be time poor. That is, they do not have enough discretionary time to engage in leisure, educational, and other activities that improve their well-being. Indeed, if individuals do not have a certain amount of leisure time to participate in customary leisure activities, they may suffer from social exclusion (Bittman 2002). While a few studies on time poverty and time pressure can be found in the time use literature, no recent measures of time poverty in the US exist. Yet, such measures would help us to answer many questions. They would help us to identify those individuals in the population who are vulnerable to time poverty. They would allow us to determine how time poverty affects individuals' behaviors and health status. They would also tell us whether time poor individuals have adequate time to pursue educational opportunities that would increase their future earnings.

In this paper we define discretionary time using the concepts of necessary and committed time. Discretionary time is the residual number of minutes that an individual has remaining after he or she performs the basic activities of personal care and paid and unpaid work. Using this definition and data from the 2003–2006 American Time Use Survey (ATUS), we develop time poverty thresholds. With these thresholds, we are then able to determine whether an individual is time poor and to compute time poverty rates for various subgroups in the population. We then perform multivariate analyses to identify the correlates of discretionary time and time poverty. Finally, we offer an exploratory regression whereby we examine the association between an individual's time poverty and health status.

2 Income Poverty

Much of the focus of research and policy in the United States is on alleviating monetary poverty and the literature has been extensively reviewed. Atkinson (1989), Ravallion (1994), and Danziger and Haveman (2001) are all good sources of summaries and discussion of income poverty research. An income poverty standard can be defined and measured using one of three approaches (Ruggles 1990). The first approach focuses on absolute poverty, that is, having less than some objective amount of consumption or income. The second approach focuses on relative poverty, that is, having less than others, where the cutoff may be something like a proportion of the median of the population. The third approach considers subjective poverty, which is the feeling of not having enough, and is based on survey responses regarding the amount of income that is "just sufficient." The United States takes the first approach in defining its income poverty thresholds, basing its thresholds on the amount of income required to purchase and make meals based in part on the US thrifty food plan (Fisher 1997).

Vickery (1977) was the first to consider that income poverty may be related to available time. Taking the absolute measure approach, she calculated time-adjusted income poverty thresholds for the US based on her estimate of the minimum amount of time that would be needed to complete household tasks, given that an individual had monetary income equal to the US poverty threshold (and so had limited ability to buy household services, etc.). Her definition of this minimum amount of time was based on the average amount of time non-employed homemakers spent on household work according to US time budget data and on other ad hoc assumptions regarding how much time was necessary for certain activities.

Vickery calculated different thresholds based on the number of adults and the number of children in the household to account for differences in household time resources and needs. Taking similar approaches, Douthitt (2000) updated Vickery's time-adjusted income-poverty rates for the United States using the 1985 Time Use Survey and Harvey and Mukhopadhyay (2007) calculated similar rates using 1998 Canadian data.

3 Time Poverty

While adjusting income poverty thresholds to account for time deprivation may be useful, dedicated time poverty thresholds are important in their own right. How should such time poverty thresholds be defined? As with income poverty, time poverty may either be subjectively or objectively measured. A subjective measure would be based on individuals' perceptions as to whether or not they feel time pressured. An objective measure would be a threshold of the time needed for rest or leisure or other activities after performing personal care, paid work in the marketplace, and unpaid domestic labor. Two studies that have taken the subjective approach and used measures of "perceived" time pressure are Mothersbaugh et al. (1993) and Hamermesh and Lee (2007). Looking at the effects of time stress, Mothersbaugh et al. (1993) showed that perceived time pressure has a negative effect on adherence to recommended dietary practices (RDPs). Hamermesh and Lee (2007) found that higher-income-couple households experience higher time stress than other households and that women feel greater time stress than men. The objective approach, and the approach taken in this paper, compares an individual's actual usage of time to some absolute or relative standard.

There is some precedent for both absolute and relative standards. Douthitt (2000) took the absolute standard approach. She calculated time poverty rates by comparing individuals' actual available time (after deducting market work hours and estimated home production work hours) to the discretionary time that would be available given an absolute amount of time needed to perform personal care and household maintenance. However, this required making ad hoc assumptions about the minimum amounts of time required for particular activities such as personal care and household maintenance. For example, an absolute measure of time poverty requires assumptions as to how much time must be spent talking to or listening to a child although the amount of time that must be spent listening and talking to a child likely depends on the particular child and parent. Similarly, an assumption must be made as to the minimum time required to clean a house, yet the amount of time required for this activity depends on the size of the house and the preferences of the people living in it. While they do not compute thresholds, Goodin et al. (2005) present the concept of discretionary time as being the amount of time potentially available to individuals if they spent only the amount of time strictly needed to maintain a subsistence standard of living.

Bardasi and Wodon (2006), who studied time poverty in Guinea using data for 2002–2003, used a relative standard. They defined time poverty as occurring when individuals do not have enough time for rest and leisure after taking into account the time spent working (whether paid or unpaid). In one set of thresholds they defined time spent in work as time spent in the labor market, in domestic chores, and in collecting water and food. In another set of thresholds they used an expanded definition that included the amount of time spent helping other households and participating in community services. They defined their thresholds *relative to the distributions* of actual time spent in these necessary activities. In particular, they used two alternative relative time poverty lines, a lower threshold of one

and a half times the median of the distribution of time spent working (both paid and unpaid) and a higher threshold of two times the median. Then they calculated time poverty rates for the population as a whole and for various groups of individuals. Another study, Bittman (2002), defined a leisure time poverty threshold, 50% of the population median of leisure time. Most recently, Burchardt (2008) calculated time poverty thresholds for the United Kingdom based on the relative distribution of time use. Like the other recent studies, she included personal care, unpaid work, and paid work in her definition of committed time, calling the residual "free" time. In our paper, we follow these recent studies and take the relative approach, providing alternative thresholds based on different points of the discretionary time distribution.

4 Buying Time and Time Flexibility

Higher income individuals have the option of "buying" time and thus should be less likely to be time poor. They can buy prepared foods and pay for child care, housekeeping, and home maintenance services. By purchasing these goods and services, these individuals can reduce the number of hours they need to spend in committed activities and so increase their time in other activities. However, some activities cannot be bought—an individual cannot pay someone to eat or sleep for him. Higher income individuals also tend to have better-timed and more flexible schedules (Hamermesh 2002). Consequently, higher income households may be less likely to be time poor. Thus we explore the relationship between income and time poverty in this paper.

5 Data

The data we use to compute the time poverty thresholds are time-diary and questionnaire data from the 2003–2006 American Time Use Surveys (ATUS). The ATUS is a continuous survey that the Bureau of Labor Statistics (BLS) began in 2003 and that is conducted by the US Bureau of the Census.[1] Respondents to the ATUS are drawn from households that have completed their last month of participation in the Current Population Survey (CPS). One person aged 15 or over within each outgoing CPS household is randomly selected to participate, for a total of 60,674 respondents over the period 2003–2006.[2] As our concern is with the time use of responsible adults in a household, our analysis excludes persons under age 18 who live with at least one parent and who do not have own children living in the household, leaving us with a sample of 57,816 respondents.

The time-diary component to the ATUS describes what individuals were doing over the course of a 24-h period. Individuals' own descriptions are coded into standardized activities. The survey questionnaire updates the household roster and labor force participation information from the CPS. Consequently, the ATUS data files include not only the

[1] While the ATUS sample is nationally representative, the response rate for this sample has ranged from 52.5% in 2007 to 57.8% in 2003. See the ATUS User's Guide, Section 3.6 Response Rates: http://stats.bls.gov/tus/atususersguide.pdf. There is concern that perhaps the busiest people are those not responding to the survey. If true, then this nonresponse would affect time poverty thresholds as the data would potentially exclude those most likely to be time poor. However, Abraham et al. (2006) found that much of the nonresponse was due to non-contact and not respondent refusal, suggesting that nonresponse to the ATUS had little effect on aggregate estimates of time use.

[2] There are 20,720 observations for 2003; 13,973 for 2004; 13, 038 for 2005; and 12,943 for 2006.

respondent's time diary but also demographic and labor force information for the respondent and the respondent's household's members.

We pool the 2003–2006 ATUS data files. Because time use patterns do not change much from year to year,[3] pooling the 4 years of data allows analysis by various household characteristics. We utilize the ATUS Respondent files, the Roster files, the Activity Summary files, the Replicate Weights files, and the ATUS-CPS files. We use the final weights for each year that are based on the 2006 weighting methodology.[4] We use SAS 9.1 and SAS 9.2 for generating estimates.

6 Methodology

The resource that we are comparing across households is discretionary time. Having discretionary time improves individuals' well-being by allowing them to take part in leisure activities as well as exercise, educational activities, and other activities that provide utility directly or improve individuals' human capital. We define an individual's daily discretionary minutes by subtracting minutes of necessary and committed time from 1440 (total daily minutes). *Necessary activities* are those activities that must be performed by an individual for him or herself, i.e., personal care. This includes sleep, grooming, health-related self-care, and other personal and/or private activities. *Committed activities* are those activities that must be performed given previous life choices (e.g., whether to marry, to divorce, to have and raise children, and to be employed). Such activities include time spent in household work, time spent in child care, time spent caring for household adults, and time spent in market work or related activities (see Table 1). Although the individual has the ability to make these choices over time, in the short-run these commitments are essentially fixed. Time spent in travel related to these necessary and committed activities is also included. This conservative list of necessary and committed activities is similar to Burchardt's (2008).[5]

Using this measure of discretionary time we designate time poverty thresholds. We present thresholds at 50, 60, and 70% of the median of the population discretionary time distribution similar to Bittman (2002), Blackden and Wodon (2006), and Burchardt (2008).[6] Because income poverty thresholds have historically been defined and presented for different household composition groups, and because household composition is expected to affect an individual's discretionary time, we also present thresholds for various household types.

[3] Average time spent in primary activities per day has changed little from 2003 to 2006. For example, in 2003, the average number of hours per day spent watching television was 2.57 and, in 2006, was 2.58 h. See http://stats.bls.gov/tus/#news for News Releases for all ATUS years. Years 2003 through 2006 were all economic expansion years; therefore, the macroeconomic context was the same over this time period.

[4] See BLS guidance on combining multiple years of ATUS data: http://stats.bls.gov/tus/pooling.htm.

[5] Burchardt (2008) includes time spent eating in her measure of non-free time. Although we had considered it in preliminary analyses, we do not currently include it. This is because eating has a large leisure component that we cannot separately identify. She also combines necessary time for personal care into the committed time category which includes paid and unpaid work.

[6] We use medians instead of means for two reasons. First, we follow the practice of other researchers. Second, we know that some activities have skewed distributions. We do not want our measure to be affected by small numbers of observations with unusually long durations.

Table 1 Necessary and committed activities by major activity group

	ATUS major activity code
Necessary activities	
Personal care (includes sleeping and grooming)	01
Committed activities	
Household activities (includes housework, food & drink prep)	02
Caring for and helping household members, both children and adults	03
Work and work-related activities	05
Discretionary activities	
Caring for and helping non-household members	04
Education	06
Consumer purchases	07
Professional and personal care services (includes banking, paying for daycare, doctor's appointment, getting a haircut)	08
Household services (includes dropping off/picking up clothes from dry cleaner, hiring a plumber for home repair, waiting while car is repaired)	09
Government services and civic obligations (includes using social services, getting car inspected, serving on jury duty, voting)	10
Eating and drinking	11
Socializing, relaxing, and leisure (includes entertaining family and friends, watching television, computer use for leisure, attending performing arts event, gambling)	12
Sports, exercise, and recreation (includes participating in sports and attending a sporting event)	13
Religious and spiritual activities	14
Volunteer activities	15
Telephone calls	16

Related waiting and travel times are included in each use of time. See Appendix 1 for a list of detailed activities

7 Results

7.1 Time Poverty Thresholds and Rates

Table 2[7] shows alternative time poverty thresholds for the total population (row 1) and for subgroups defined by household composition (remaining rows) as well as each group's representation in the population. The alternative thresholds are defined according to 50, 60, or 70% of the median. As expected, individuals in households with children have considerably less discretionary time than those without children, and discretionary time decreases with the number of children in the household. However, the relationship between discretionary time and the number of adults is not clear. Perhaps this is because the presence of an additional adult, while *potentially* making another 24 h available to the household, does not necessarily mean that the additional adult offers any of their time to

[7] All tables presented are authors' calculations using the Bureau of Labor Statistics American Time Use Survey data for 2003–2006.

Table 2 Time poverty thresholds for the total population and for household composition groups

	Group percent of population	Median discretionary minutes	Median discretionary hours	50% of median discretionary minutes	60% of median discretionary minutes	70% of median discretionary minutes
Total population	100.0	483	8.1	241.5	289.8	338.1
One adult, no children	14.4	583	9.7	291.5	349.8	408.1
One adult, one child	1.5	408	6.8	204.0	244.8	285.6
One adult, 2 or more children	1.7	390	6.5	195.0	234.0	273.0
Two adults, no children	32.5	535	8.9	267.5	321.0	374.5
Two adults, one child	8.8	418	7.0	209.0	250.8	292.6
Two adults, two or more children	15.9	382	6.4	191.0	229.2	267.4
Three or more adults, no children	14.1	525	8.8	262.5	315.0	367.5
Three or more adults, one child	5.9	480	8.0	240.0	288.0	336.0
Three or more adults, two or more children	5.2	440	7.3	220.0	264.0	308.0

alleviate the responsibilities of the respondent. In addition, we did not distinguish between spouses and other household adults. As a result, the second adult in the household could be the respondent's adult son or daughter or elderly parent, which may help explain the lack of a clear result between discretionary time and the number of adults.

For one-adult households, the difference in median discretionary time between households without children and households with one child is 175 min (583 min − 408 min), almost 3 h, and the difference between households with no children and those with 2 or more children is 193 min (583 min – 390 min), 3.2 h. This means that the single person with one or more children has, on average, about 3 h of necessary and committed tasks on a given day more than the single person without children. The difference between median discretionary time for the single parent with one child and the two-adult household with one child is only 10 min (418 min – 408 min). Thus, a second adult in a household affords, at the median, only 10 additional minutes of discretionary time. For households with two or more children, individuals in the two-adult households actually have less discretionary time (a median of 382 min) than one-adult households have (390 min). Perhaps this is due to differences in preferences across the groups about how much child care should be performed, with two-parent households deciding to spend more time. For individuals in households with three or more adult households, the third adult in a household does appear to increase the discretionary time of respondents.

Using the 60% threshold defined for the total population, 289.8 min (4.8 h), Table 3 shows cell percentages by group for those individuals whose discretionary time falls below this threshold (those designated time poor) and those whose discretionary time is at or above this threshold (those designated not time poor). These are columns 2 and 3 in the table. We focus on the 60% of median results because this is the percentage of the median used by Burchardt (2008). Time poverty rates using 50 and 70% of the median are presented in Appendix 2. Column 4 presents the time poverty rates for the various groups. For example, 4.94% of all non-employed individuals in single-person households with income below the poverty threshold are also in a state of time poverty. Note that several cell percentages and rates are suppressed due to small cell sizes. We used the BLS standard of 60 observations to define a minimum cell size for an estimate. Panel A of the table shows results for those not employed and Panel B shows results for those employed. Time poverty rates are much higher for those who are employed than those who are not employed, as expected. Time poverty rates are also higher for individuals living in households with more children, as expected. Although our prior was that those who are income poor are more likely to be time poor also, due to their inability to "buy" time by outsourcing activities like child care and housecleaning, the data do not show a clear relation between income poverty and time poverty.

In order to obtain a clearer picture, Table 4 provides an aggregate look at time poverty and its relation to income poverty in the United States. Individuals are identified as income poor if their income is less than the income poverty threshold. Although the actual percentage of the population that is both income poor and time poor is quite small (2.18%), 18.60% of individuals who are income poor are also time poor. However, individuals who are not income poor are even more likely to be time poor at 21.06%. The time poverty rate for those not reporting income is similar to that for individuals who are income poor at 18.16%, although the two rates are statistically different at the 90% confidence level. Note that these summary rates combine the two groups with income above the poverty threshold but below 185% of the poverty threshold with those with income above 185% of the poverty threshold.

Table 3 Time poverty by employment status, household composition, and household income

	Time poor	Not time poor	Time poverty rate
Panel A: Not employed			
One adult, no children			
Income < poverty threshold	1.31	25.21	4.94
Poverty threshold < income < 185%	0.63	24.17	2.54
185% < Income	0.91	29.55	2.99
Income missing	0.47	17.75	2.58
One adult, one child			
Income < poverty threshold	5.01	49.78	9.14
Poverty threshold < income < 185%	1.84	13.19	12.24
185% < Income	1.11	16.25	6.39
Income missing	–	–	–
One adult, 2 or more children			
Income < poverty threshold	11.13	55.60	16.68
Poverty threshold < income < 185%	1.80	8.31	17.80
185% < Income	–	–	–
Income missing	3.69	9.89	27.17
Two adults, no children			
Income < poverty threshold	0.42	8.87	4.52
Poverty threshold < income < 185%	0.75	14.76	4.84
185% < Income	1.91	52.53	3.51
Income missing	0.70	20.04	3.38
Two adults, one child			
Income < poverty threshold	1.68	17.86	8.60
Poverty threshold < income < 185%	1.49	15.14	8.96
185% < Income	5.57	46.38	10.72
Income missing	1.63	10.26	13.71
Two adults, two or more children			
Income < poverty threshold	4.93	22.97	17.67
Poverty threshold < income < 185%	3.52	19.32	15.41
185% < Income	6.14	33.19	15.61
Income missing	1.35	8.59	13.58
Three or more adults, no children			
Income < poverty threshold	0.92	13.30	6.47
Poverty threshold < income < 185%	0.53	12.13	4.19
185% < Income	2.82	52.86	5.06
Income missing	0.26	17.18	1.49
Three or more adults, one child			
Income < poverty threshold	1.00	17.50	5.41
Poverty threshold < income < 185%	2.41	17.56	12.07
185% < Income	1.87	43.88	4.09
Income missing	1.49	14.28	9.45

Table 3 continued

	Time poor	Not time poor	Time poverty rate
Three or more adults, two or more children			
Income < poverty threshold	2.51	28.59	8.07
Poverty threshold < income < 185%	4.40	18.71	19.04
185% < Income	4.42	27.57	13.82
Income missing	1.56	12.24	11.30
Panel B: Employed			
One adult, no children			
Income < poverty threshold	1.29	5.91	17.92
Poverty threshold < income < 185%	2.07	9.60	17.74
185% < Income	14.80	53.66	21.62
Income missing	2.98	9.67	23.56
One adult, one child			
Income < poverty threshold	5.71	11.35	33.47
Poverty threshold < income < 185%	7.10	11.88	37.41
185% < Income	18.54	33.72	35.48
Income missing	3.68	8.03	31.43
One adult, 2 or more children			
Income < poverty threshold	12.89	26.00	33.14
Poverty threshold < income < 185%	7.81	12.87	37.77
185% < Income	11.48	18.55	38.23
Income missing	4.15	6.25	39.90
Two adults, no children			
Income < poverty threshold	1.23	3.39	26.62
Poverty threshold < income < 185%	1.79	5.58	24.29
185% < Income	17.56	56.85	23.60
Income missing	3.14	10.45	23.11
Two adults, one child			
Income < poverty threshold	2.20	5.51	28.53
Poverty threshold < income < 185%	2.91	7.02	29.31
185% < Income	22.82	48.45	32.02
Income missing	3.73	7.35	33.66
Two adults, two or more children			
Income < poverty threshold	4.08	6.38	39.01
Poverty threshold < income < 185%	6.51	11.48	36.19
185% < Income	22.41	39.00	36.49
Income missing	3.70	6.45	36.45
Three or more adults, no children			
Income < poverty threshold	1.53	4.30	26.24
Poverty threshold < income < 185%	2.13	6.87	23.67
185% < Income	15.34	54.57	21.94
Income missing	3.31	11.94	21.70

Table 3 continued

	Time poor	Not time poor	Time poverty rate
Three or more adults, one child			
Income < poverty threshold	2.30	4.38	34.43
Poverty threshold < income < 185%	3.11	11.67	21.04
185% < Income	16.94	46.29	26.79
Income missing	3.87	11.44	25.28
Three or more adults, two or more children			
Income < poverty threshold	5.62	12.82	30.48
Poverty threshold < income < 185%	7.18	17.25	29.39
185% < Income	13.19	30.28	30.34
Income missing	5.10	8.55	37.36

Time poverty defined as below 60% of the median of the population discretionary time distribution

For each group defined by employment status and household composition, the values (%) in columns 2 and 3 add to 100%

– Cell size too small to report

Table 4 Time poverty by income poverty: cell percentages and rates

	Percent time poor	Percent not time poor	Total	Time poverty rate			
				Time poverty rate	SE	90% Confidence interval minimum	90% Confidence interval maximum
Income poor	2.18	9.54	11.72	18.60	0.008248	18.5871	18.6143
Not income poor	15.56	58.34	73.90	21.06	0.002754	21.0510	21.0600
Income missing	2.61	11.76	14.37	18.16	0.008542	18.1488	18.1769
Total	20.35	79.64	99.99				

Time poverty defined as below 60% of the median of the population discretionary time distribution

Time poverty rates by household composition are provided in Table 5. Here we see that households without children have the lowest time poverty rates and, in some cases, rates that are half that of other households with the same number of adults. Interestingly, there is not a great deal of difference between the time poverty rates for households with one child or with two or more children, for a given number of adults. Of particular interest is the fact that there is little difference in time poverty rates between a person in a household with one child and one adult (28.69%), and a person in a household with one child and two adults (27.15%), and between a household with two or more children and one adult (30.57%) and with two or more children and two adults (31.85%). This indicates that an additional household adult on average does not add much to the time resources of the household. The fact that we did not distinguish between a spouse and another adult who could be living in the household, say, an adult child, may be influencing these results. However, this could also be due to differences in preferences regarding the amount of child care and housework that are "required" to be performed across one- and two- adult households. It could also be due to a consumption aspect of child care where two-adult households consume more than one-adult households (e.g., family time).

Table 5 Time poverty by household type: cell percentages and rates

	Time poor	Not time poor	Total	Time poverty rate
One adult, no children	12.95	87.05	100.0	12.95
One adult, one child	28.69	71.31	100.0	28.69
One adult, 2 or more children	30.57	69.42	100.0	30.57
Two adults, no children	15.83	84.16	100.0	15.83
Two adults, one child	27.15	72.85	100.0	27.15
Two adults, two or more children	31.85	68.16	100.0	31.85
Three or more adults, no children	16.88	83.11	100.0	16.88
Three or more adults, one child	21.06	78.95	100.0	21.06
Three or more adults, two or more children	25.59	74.40	100.0	25.59

Time poverty defined as below 60% of the median of the population discretionary time distribution

7.2 Multivariate Regression Analysis: Correlates of Discretionary Time and Time Poverty

Although the results in Tables 2, 3, 4, and 5 suggest that household composition and employment status are important correlates of discretionary time and time poverty, multivariate analyses better ascertain their importance. Table 6 shows Ordinary Least Squares (OLS) estimates from a discretionary time regression and maximum likelihood estimates from a time poverty probit. Similar to the descriptive results presented above, the estimated associations between the presence of an additional household adult and discretionary time and time poverty are quite minimal. The presence of an additional adult in a household is associated with only 6 min more discretionary time and a lower probability of being time poor of less than 0.01. An additional child, on the other hand, appears to be more important, with an additional child being associated with 35 fewer discretionary minutes and a greater probability of being time poor by 0.04. Being employed has the largest association, with an employed person having 188 min (over 3 h) less discretionary time and a 0.03 higher probability of being time poor than a non-employed person. Finally, consistent with the descriptive evidence, these multivariate regression results show that income is not generally associated with a person's discretionary time or the likelihood of being time poor when other factors are controlled.

7.3 Illustrative Example: Association of Time Poverty with Health Status

We present our time poverty thresholds with the expectation that they will be used to enlighten policy. We therefore provide a simple illustration as to how they might be used. In 2006 the Eating and Health (EH) Module was added to the ATUS. Among other things, this module included an individual's self-reported health status. While not a true outcome variable because it is measured at the same time as a person's time poverty status, we present an exploratory regression to ascertain whether time poverty is associated with an individual's health status. Table 7 shows the results of a simple probit where the dependent variable is an indicator variable for whether or not a person reports being in good health and the explanatory variables are an indicator for time poverty and the usual other

Table 6 Multivariate analyses: discretionary time continuous regression and time poverty probit

	Discretionary time continuous regression	Time poverty probit	
Number of adults	6.015*** (1.547)	−0.023** (0.011) [− 0.006]	
Number of children	−35.460*** (1.070)	0.155*** (0.007) [0.040]	
Employed dummy	−187.515*** (2.492)	0.914*** (0.019) [0.203]	
Income less than poverty threshold	5.478 (4.318)	0.028 (0.037) [− 0.007]	
Income greater than poverty threshold but less than 185% of threshold	6.852* (3.657)	−0.024 (0.024) [− 0.006]	
Missing income	3.413 (3.899)	−0.030 (0.037) [− 0.008]	
		Chi-squared	Prob > Chi-squared
Likelihood ratio test ($df = 6$)		74,295,512	<0.0001
R-squared	0.179		
Number of observations	57,816	57,816	

The model also includes an intercept. The omitted income category is greater than 185% of the income poverty threshold. *** indicates significance at the 1% level, ** indicates significance at the 5% level, and * indicates significance at the 10% level. Standard errors are in parentheses and marginal effects for the Probit model are in brackets. Those in time poverty are 18.22% of the observations

controls.[8] Gender, age, education, and income all have the expected associations. However, while we might expect the association between time poverty and good health to be negative, as a person who does not have enough time may not exercise or eat right, the data show that, controlling for several personal and household characteristics, it is positive. A time poor individual has a 0.03 higher probability of being in good health than someone who is not time poor. This result is likely due to the fact that employed individuals have, on average, better health status than those who are not employed, and are also more likely to be time poor. While this result is not definitive and a more thorough analysis that accounts for endogeneity and unobserved factors is beyond the scope of this paper, it highlights the potential relevance of time poverty to individual well-being. Additional research on the relation between time poverty and general health as well as other measures of well-being such as body mass index (BMI) would provide health policy- and program-relevant insight. Research on the relation between time poverty and food assistance program participation would help food assistance and nutrition programs identify and target individuals who are eligible but too time poor to participate.

[8] The Eating and Health Module asks if the respondent's physical health is excellent, very good, good, fair, or poor. We used excellent, very good, and good to represent good health in our analysis. We used the ATUS and EH Module data for 2006, a total of 12,035 observations.

Table 7 Multivariate analysis: good health probit

Time poor	0.129** (0.053) [0.029]
Female	0.101*** (0.034) [0.023]
Age 15–19	0.836*** (0.172) [0.134]
Age 40–64	−0.409*** (0.045) [− 0.094]
Age 65+	−0.743*** (0.056) [− 0.204]
Less than high school education	−0.350*** (0.057) [− 0.089]
Some college education	0.266*** (0.052) [0.058]
College degree	0.655*** (0.056) [0.125]
Advanced degree	0.720*** (0.079) [0.127]
Non-US citizen	−0.008 (0.067) [− 0.002]
Black	−0.104** (0.050) [− 0.024]
Asian	−0.322*** (0.119) [− 0.082]
Mixed race	−0.045 (0.162) [− 0.011]
Income less than poverty threshold	−0.540*** (0.059) [− 0.144]
Income above poverty threshold but below 185% of threshold	−0.282*** (0.058) [− 0.070]
Income missing	−0.218*** (0.050) [− 0.053]
Nonmetro	0.049 (0.044) [− 0.011]

Table 7 continued

	Chi-squared	Prob > Chi-squared
Likelihood ratio test ($df = 17$)	9,669,051,439	<0.0001
Number of observations	12,035	

The model also includes an intercept. The omitted age is 20–39 years old. The omitted income category is greater than 185% of the income poverty threshold. The omitted education category is high school education. The omitted citizenship category is citizen. The omitted race is white. The omitted region is metro. *** indicates significance at the 1% level, ** indicates significance at the 5% level, and * indicates significance at the 10% level. Standard errors are in parentheses and marginal effects are in brackets. Those in good health are 81.97% of the observations

8 Sensitivity Analyses

To determine the robustness of our results, we defined alternative thresholds for various subgroups in the population because even within a subgroup an individual will have different necessary and committed time requirements and different resources at his/her disposal. In Table 2 we presented a set of alternative thresholds defined by household composition group. Time poverty rates for different subgroups in the population that are based on these alternative thresholds are presented in Appendices 3 and 4. Although total time availability and commitments should be relatively similar for individuals in a particular type of household, financial resources and thus the ability to buy time will differ across individuals in this group. Thus, one can garner some information from an individual's position relative to these thresholds about his or her inability to buy time. For example, the time poverty rate for households with an employed respondent, second adult, and two or more children is 39% for those below the income poverty threshold (Appendix 3) and 36.5% for those with higher incomes (above 185% poverty threshold), suggesting that the ability to buy time reduces the rate for these households by 2.5 percentage points. The associated time poverty rates can be used to identify relative deprivation within a population subgroup.

Our second alternative set of thresholds is based on medians for groups defined by household composition and age of youngest child (see Appendix 5 for associated time poverty rates). The thought is that some modification must be made for child age because younger children require more care. Our third set of alternative thresholds is based on groups defined by household resources, that is, the number of adults in the household (potential time resource) and the household income level (money resource) (see Appendix 5). The fourth alternative set of thresholds we construct is based on medians for non-employed persons by household composition and income level so as to approximate Vickery's (1977) idea of a time poverty threshold (see Appendix 5). Our final alternative set of thresholds is based on medians calculated by group defined by household composition, income, and employment status (employed or not). Associated time poverty rates are also found in Appendix 5.

Interestingly, for the population thresholds presented in this paper and for four alternative sets described above, the summary time poverty rates are very similar. For example, assuming 60% of median thresholds, the overall time poverty rates range from 20.12 to 20.35%. This indicates that small changes in the way thresholds are defined produce qualitatively similar results at the total population level.

The set of thresholds which applies the medians for non-employed individuals to all individuals produces considerably higher time poverty rates than the others. According to the threshold based on 60% of the median, the overall time poverty rate is 33.45%. This is

as expected because those individuals who are employed have the added time requirement of market work that those who are not employed do not have.

9 Discussion

The time poverty thresholds and rates that we present in this paper confirm the idea that individuals in households with children have more demands on their time than those in households without children. However, this paper goes further and demonstrates and measures the extent to which this is true. Controlling for other factors, an additional household child reduces a person's daily discretionary time by 35 min. This paper also shows the surprising result that, while one might expect the necessary and committed activities required of an individual to be lessened by the presence of an additional adult in a household, the reduction, controlling for other factors, is minimal. Employment is also a big driver of time poverty, with employed persons having over 3 h less discretionary time per day and a 0.91 higher probability of being time poor, controlling for other factors. Surprisingly, income poverty is not clearly related to time poverty.

Traditionally, policymakers have used income poverty measures to identify individuals and households lacking sufficient material resources. However, time is also a scarce resource that affects individuals' well-being. For example, a lack of time to exercise or eat right may lead to obesity and its associated health problems. Recognition of the importance of time poverty could further improve analysis and policy-making in a wide variety of public assistance and public welfare contexts. If used jointly with existing monetary poverty thresholds, we expect that our time poverty thresholds and rates will offer policy researchers a clearer picture of individuals' well-being.

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Appendix 1: Necessary and Committed Activities

See Table 8.

Table 8 ATUS 2006 activity coding lexicon

6-Digit activity code	Activity
010101	Sleeping
010102	Sleeplessness
010199	Sleeping, nec[a]
010201	Washing, dressing and grooming oneself
010299	Grooming, nec[a]
010301	Health-related self care
010399	Self care, nec[a]
010401	Personal/private activities
010499	Personal activities, nec[a]
010501	Personal emergencies
010599	Personal care emergencies, nec[a]

Table 8 continued

6-Digit activity code	Activity
019999	Personal care, nec[a]
020101	Interior cleaning
020102	Laundry
020103	Sewing, repairing, & maintaining textiles
020104	Storing interior hh items, inc. food
020199	Housework, nec[a]
020201	Food and drink preparation
020202	Food presentation
020203	Kitchen and food clean-up
020299	Food & drink prep, presentation, & clean-up, nec[a]
020301	Interior arrangement, decoration, & repairs
020302	Building and repairing furniture
020303	Heating and cooling
020399	Interior maintenance, repair, & decoration, nec[a]
020401	Exterior cleaning
020402	Exterior repair, improvements, & decoration
020499	Exterior maintenance, repair & decoration, nec[a]
020501	Lawn, garden, and houseplant care
020502	Ponds, pools, and hot tubs
020599	Lawn and garden, nec[a]
020601	Care for animals and pets (not veterinary care)
020699	Pet and animal care, nec[a]
020701	Vehicle repair and maintenance (by self)
020799	Vehicles, nec[a]
020801	Appliance, tool, and toy set-up, repair, & maintenance (by self)
020899	Appliances and tools, nec[a]
020901	Financial management
020902	Household & personal organization and planning
020903	HH & personal mail & messages (except e-mail)
020904	HH & personal e-mail and messages
020905	Home security
020999	Household management, nec[a]
029999	Household activities, nec[a]
030101	Physical care for hh children
030102	Reading to/with hh children
030103	Playing with hh children, not sports
030104	Arts and crafts with hh children
030105	Playing sports with hh children
030106	Talking with/listening to hh children
030108	Organization & planning for hh children
030109	Looking after hh children (as a primary activity)
030110	Attending hh children's events
030111	Waiting for/with hh children

Table 8 continued

6-Digit activity code	Activity
030112	Picking up/dropping off hh children
030199	Caring for & helping hh children, nec[a]
030201	Homework (hh children)
030202	Meetings and school conferences (hh children)
030203	Home schooling of hh children
030204	Waiting associated with hh children's education
030299	Activities related to hh child's education, nec[a]
030301	Providing medical care to hh children
030302	Obtaining medical care for hh children
030303	Waiting associated with hh children's health
030399	Activities related to hh child's health, nec[a]
030401	Physical care for hh adults
030402	Looking after hh adult (as a primary activity)
030403	Providing medical care to hh adult
030404	Obtaining medical and care services for hh adult
030405	Waiting associated with caring for household adults
030499	Caring for household adults, nec[a]
030501	Helping hh adults
030502	Organization & planning for hh adults
030503	Picking up/dropping off hh adult
030504	Waiting associated with helping hh adults
030599	Helping household adults, nec[a]
039999	Caring for & helping hh members, nec[a]
050101	Work, main job
050102	Work, other job(s)
050103	Security procedures related to work
050104	Waiting associated with working
050199	Working, nec[a]
050201	Socializing, relaxing, and leisure as part of job
050202	Eating and drinking as part of job
050203	Sports and exercise as part of job
050204	Security procedures as part of job
050205	Waiting associated with work-related activities
050299	Work-related activities, nec[a]
050301	Income-generating hobbies, crafts, and food
050302	Income-generating performances
050303	Income-generating services
050304	Income-generating rental property activities
050305	Waiting associated with other income-generating activities
050399	Other income-generating activities, nec[a]
050401	Job search activities
050403	Job interviewing
050404	Waiting associated with job search or interview

Table 8 continued

6-Digit activity code	Activity
050405	Security procedures rel. to job search/interviewing
050499	Job search and Interviewing, nec[a]
059999	Work and work-related activities, nec[a]
180101	Travel related to personal care
180199	Travel related to personal care, nec[a]
180201	Travel related to housework
180202	Travel related to food & drink prep., clean-up, & presentation
180203	Travel related to interior maintenance, repair, & decoration
180204	Travel related to exterior maintenance, repair, & decoration
180205	Travel related to lawn, garden, and houseplant care
180206	Travel related to care for animals and pets (not vet care)
180207	Travel related to vehicle care & maintenance (by self)
180208	Travel related to appliance, tool, and toy set-up, repair, & maintenance (by self)
180209	Travel related to household management
180299	Travel related to household activities, nec[a]
180501	Travel related to working
180502	Travel related to work-related activities
180503	Travel related to income-generating activities
180504	Travel related to job search & interviewing
180599	Travel related to work, nec[a]

Source: Authors' definition based on Bureau of Labor Statistics American Time Use Survey Activity Lexicons for 2003–2006, http://www.bls.gov/tus/lexicons.htm

[a] *nec* Not elsewhere classified

Appendix 2

See Table 9.

Table 9 Time poverty rates for 50, 60, and 70% of medians

Thresholds	Population threshold			HH composition thresholds		
	50%	60%[a]	70%	50%	60%	70%
One adult, no children						
Income < poverty threshold	5.84	8.08	10.75	8.20	11.93	17.03
Poverty threshold < income < 185%	5.36	7.96	12.25	8.30	13.49	18.96
185% < Income	11.40	16.50	23.94	16.89	25.29	35.31
Income missing	6.90	12.02	17.81	12.42	19.05	26.41
One adult, one child						
Income < poverty threshold	17.14	21.34	30.05	11.09	17.14	21.34
Poverty threshold < income < 185%	22.38	32.47	39.41	18.01	22.66	32.24
185% < Income	22.74	32.78	42.96	16.40	22.88	32.46
Income missing	14.62	23.89	31.75	11.86	14.62	23.89

Table 9 continued

Thresholds	Population threshold			HH composition thresholds		
	50%	60%[a]	70%	50%	60%	70%
One adult, 2 or more children						
Income < poverty threshold	18.49	26.12	37.28	12.70	17.52	23.56
Poverty threshold < income < 185%	26.20	34.27	44.91	17.22	24.71	29.79
185% < Income	24.83	34.45	44.97	15.95	23.95	30.41
Income missing	28.43	35.30	44.63	15.49	26.76	33.27
Two adults, no children						
Income < poverty threshold	10.66	14.06	18.24	11.90	15.90	23.15
Poverty threshold < income < 185%	8.96	13.02	16.70	10.66	15.38	20.28
185% < Income	11.31	17.08	24.29	14.21	21.79	30.16
Income missing	8.89	13.28	19.61	11.02	17.11	24.30
Two adults, one child						
Income < poverty threshold	14.59	20.45	27.91	8.13	15.48	20.84
Poverty threshold < income < 185%	17.36	23.00	32.78	12.85	18.59	23.52
185% < Income	20.11	28.52	37.84	14.48	21.57	29.29
Income missing	21.33	29.22	37.92	15.90	23.82	29.57
Two adults, two or more children						
Income < poverty threshold	21.13	29.44	35.93	13.07	18.10	25.60
Poverty threshold < income < 185%	21.71	30.39	41.11	13.60	19.67	26.57
185% < Income	23.75	33.08	42.48	13.85	20.50	28.27
Income missing	22.77	31.19	40.99	14.07	19.43	26.83
Three or more adults, no children						
Income < poverty threshold	13.57	16.07	19.76	15.00	18.21	22.38
Poverty threshold < income < 185%	11.07	16.21	20.95	14.22	19.07	23.62
185% < Income	11.46	17.56	24.87	13.96	21.40	28.91
Income missing	8.61	14.95	23.24	11.12	19.02	27.89
Three or more adults, one child						
Income < poverty threshold	16.19	19.96	25.25	15.49	19.96	25.25
Poverty threshold < income < 185%	13.18	18.07	25.39	11.88	18.07	25.39
185% < Income	14.87	22.09	28.61	14.08	21.88	28.46
Income missing	15.36	20.98	30.59	13.93	20.09	30.59
Three or more adults, two or more children						
Income < poverty threshold	16.97	21.01	29.05	11.18	18.59	24.87
Poverty threshold < income < 185%	18.02	26.38	36.12	13.40	20.97	29.84
185% < Income	15.30	26.35	33.70	13.25	20.18	28.45
Income missing	24.18	29.44	35.43	18.33	25.42	32.65
All income poor	13.99	18.60	24.21	11.59	16.37	22.42
All not income poor	14.42	21.06	28.67	13.99	21.08	28.83
All missing	12.46	18.16	66.45	12.53	19.14	66.95
Total population rate	14.09	20.35	27.69	13.50	20.25	27.78

Population threshold, one threshold based on population median discretionary time

Household composition thresholds, thresholds based on household composition only, not income or employment

[a] Alternative presented in text

Appendix 3

See Table 10.

Table 10 Time poverty by employment status, household type, and household income

	Time poor	Not time poor	Time poverty rate
Panel A: Not employed			
One adult, no children			
Income < poverty threshold	1.94	24.58	7.32
Poverty threshold < income < 185%	1.01	23.79	4.07
185% < Income	1.36	29.10	4.46
Income missing	0.80	17.42	4.39
One adult, one child			
Income < poverty threshold	3.66	51.13	6.68
Poverty threshold < income < 185%	0.88	14.14	5.86
185% < Income	0.92	16.44	5.30
Income missing	–	–	–
One adult, 2 or more children			
Income < poverty threshold	6.59	60.14	9.88
Poverty threshold < income < 185%	0.98	9.13	9.69
185% < Income	–	–	–
Income missing	2.89	10.69	21.28
Two adults, no children			
Income < poverty threshold	0.62	8.67	6.67
Poverty threshold < income < 185%	1.01	14.51	6.51
185% < Income	2.55	51.90	4.68
Income missing	1.12	19.62	5.40
Two adults, one child			
Income < poverty threshold	1.11	18.43	5.68
Poverty threshold < income < 185%	1.35	15.27	8.12
185% < Income	3.90	48.05	7.51
Income missing	1.36	10.53	11.44
Two adults, two or more children			
Income < poverty threshold	2.94	24.95	10.54
Poverty threshold < income < 185%	1.91	20.93	8.36
185% < Income	3.01	36.32	7.65
Income missing	0.67	9.27	6.74
Three or more adults, no children			
Income < poverty threshold	1.00	13.22	7.03
Poverty threshold < income < 185%	0.86	11.80	6.79
185% < Income	4.02	51.65	7.22
Income missing	0.35	17.09	2.01
Three or more adults, one child			
Income < poverty threshold	1.00	17.50	5.41
Poverty threshold < income < 185%	2.41	17.56	12.07
185% < Income	1.87	43.88	4.09
Income missing	1.49	14.28	9.45

Table 10 continued

	Time poor	Not time poor	Time poverty rate
Three or more adults, two or more children			
Income < poverty threshold	2.13	28.97	6.85
Poverty threshold < income < 185%	3.74	19.37	16.18
185% < Income	2.59	29.39	8.10
Income missing	1.46	12.33	10.59
Panel B: Employed			
One adult, no children			
Income < poverty threshold	1.90	5.30	26.39
Poverty threshold < income < 185%	3.56	8.12	30.48
185% < Income	22.72	45.74	33.19
Income missing	4.69	7.97	37.05
One adult, one child			
Income < poverty threshold	4.70	12.36	27.55
Poverty threshold < income < 185%	5.08	13.90	26.77
185% < Income	12.90	39.35	24.69
Income missing	2.29	9.42	19.56
One adult, 2 or more children			
Income < poverty threshold	9.03	29.87	23.21
Poverty threshold < income < 185%	5.77	14.91	27.90
185% < Income	7.98	22.04	26.58
Income missing	3.11	7.29	29.90
Two adults, no children			
Income < poverty threshold	1.30	3.33	28.08
Poverty threshold < income < 185%	2.03	5.35	27.51
185% < Income	22.31	52.10	29.98
Income missing	3.92	9.67	28.84
Two adults, one child			
Income < poverty threshold	1.71	5.99	22.21
Poverty threshold < income < 185%	2.31	7.62	23.26
185% < Income	17.34	53.94	24.33
Income missing	3.04	8.05	27.41
Two adults, two or more children			
Income < poverty threshold	2.54	7.92	24.28
Poverty threshold < income < 185%	4.33	13.66	24.07
185% < Income	14.13	47.28	23.01
Income missing	2.36	7.78	23.27
Three or more adults, no children			
Income < poverty threshold	1.77	4.07	30.31
Poverty threshold < income < 185%	2.41	6.60	26.75
185% < Income	18.45	51.46	26.39
Income missing	4.21	11.04	27.61

Table 10 continued

	Time poor	Not time poor	Time poverty rate
Three or more adults, one child			
Income < poverty threshold	2.30	4.38	34.43
Poverty threshold < income < 185%	3.11	11.67	21.04
185% < Income	16.77	46.46	26.52
Income missing	3.69	11.63	24.09
Three or more adults, two or more children			
Income < poverty threshold	5.01	13.43	27.17
Poverty threshold < income < 185%	5.60	18.83	22.92
185% < Income	10.45	33.03	24.03
Income missing	4.35	9.30	31.87

Time poverty defined as below 60% of the median discretionary time for household composition groups

For each group defined by employment status and household composition, the values (%) in columns 2 and 3 add to 100%

– Cell size too small to report

Appendix 4

See Tables 11 and 12.

Table 11 Time poverty by income poverty: cell percentages and rates

	Time poor	Not time poor	Total	Time poverty rate
Income poor	1.92	9.81	11.73	16.37
Not income poor	15.58	58.33	73.91	21.08
Income missing	2.75	11.62	14.37	19.14
Total	20.25	79.76	100.01	

Time poverty defined as below 60% of median discretionary time for household composition groups

Table 12 Time poverty by household type: cell percentages and rates

	Time poor	Not time poor	Total	Time poverty rate
One adult, no children	20.10	79.90	100.0	20.10
One adult, one child	20.36	79.64	100.0	20.36
One adult, 2 or more children	21.36	78.64	100.0	21.36
Two adults, no children	19.96	80.05	100.0	19.96
Two adults, one child	20.86	79.13	100.0	20.86
Two adults, two or more children	19.88	80.11	100.0	19.88
Three or more adults, no children	20.52	79.48	100.0	20.52
Three or more adults, one child	20.80	79.21	100.0	20.80
Three or more adults, two or more children	20.73	79.26	100.0	20.73

Time poverty defined as below 60% of median discretionary time for household composition groups

Appendix 5

See Table 13.

Table 13 Time poverty rates calculated for different groups

Thresholds	HH comp and presence of young children			HH resources			Non-employed			HH comp, resources, & employment		
	50%	60%	70%	50%	60%	70%	50%	60%	70%	50%	60%	70%
One adult, no children												
Income < poverty threshold	7.83	10.75	15.54	8.20	12.73	17.90	12.12	18.65	25.61	10.50	15.72	22.31
Poverty threshold < income < 185%	7.67	12.25	17.62	9.14	15.01	21.11	14.05	21.29	29.36	11.07	16.59	23.70
185% < Income	15.83	23.94	33.88	11.40	16.85	23.97	26.91	38.28	49.18	12.63	18.62	26.68
Income missing	11.04	17.81	25.03	12.02	18.87	25.49	20.25	29.11	36.20	13.67	20.70	28.27
One adult, one child												
Income < poverty threshold	15.79	20.99	29.38	21.76	31.84	39.35	21.76	31.43	38.66	17.52	21.76	30.27
Poverty threshold < income < 185%	27.42	32.91	41.63	34.52	42.88	52.91	32.13	39.50	49.45	18.01	22.66	32.13
185% < Income	26.94	36.48	47.80	22.74	33.14	42.96	24.60	34.14	46.37	14.11	17.97	26.44
Income missing	20.13	25.31	38.10	23.89	32.75	44.95	30.66	41.77	55.47	11.86	15.79	24.23
One adult, 2 or more children												
Income < poverty threshold	16.44	25.00	32.00	27.75	40.34	50.04	22.40	31.21	43.05	14.43	19.59	27.22
Poverty threshold < income < 185%	25.86	37.24	44.57	37.13	49.57	59.23	26.20	36.13	46.57	15.39	20.02	27.97
185% < Income	25.84	38.02	46.75	24.83	34.56	44.97	30.66	42.11	52.10	14.30	19.93	26.27
Income missing	23.57	34.48	42.61	35.30	45.12	57.66	27.62	35.30	44.63	8.27	22.98	29.93
Two adults, no children												
Income < poverty threshold	10.96	14.53	20.09	10.82	14.51	19.14	20.87	29.48	36.11	14.06	20.09	27.82
Poverty threshold < income < 185%	9.34	13.68	17.92	8.58	13.02	16.70	16.70	24.15	35.66	13.11	18.49	25.00
185% < Income	12.02	18.36	26.36	9.17	14.27	20.48	24.94	36.66	45.74	12.66	19.68	27.49
Income missing	9.07	13.76	21.07	9.07	13.76	21.01	20.40	28.75	39.10	12.61	20.34	26.98

Table 13 continued

Thresholds	HH comp and presence of young children			HH resources			Non-employed			HH comp, resources, & employment		
	50%	60%	70%	50%	60%	70%	50%	60%	70%	50%	60%	70%
Two adults, one child												
Income < poverty threshold	9.69	14.58	20.27	14.97	20.84	27.91	20.84	29.84	38.55	14.59	20.84	27.91
Poverty threshold < income < 185%	12.95	20.35	27.05	16.56	22.71	32.60	23.52	36.00	42.82	15.95	22.47	30.31
185% < Income	15.12	23.79	31.96	16.61	24.44	33.28	23.28	33.98	44.63	13.61	20.18	27.26
Income missing	18.58	25.75	33.96	23.29	31.38	40.80	25.31	33.48	43.25	15.90	23.27	28.95
Two adults, two or more children												
Income < poverty threshold	14.24	21.18	27.32	21.53	29.85	36.45	19.53	28.47	35.01	14.65	22.28	29.85
Poverty threshold < income < 185%	15.64	24.37	31.64	21.29	30.39	40.85	21.08	29.65	40.06	12.92	19.61	26.41
185% < Income	17.33	26.45	34.97	19.61	28.44	37.58	21.23	30.63	40.21	13.10	19.61	27.24
Income missing	17.92	25.17	33.30	23.66	32.77	43.86	22.77	31.88	40.99	13.88	19.43	26.73
Three or more adults, no children												
Income < poverty threshold	14.05	17.98	21.67	15.12	19.05	23.33	19.40	25.60	35.48	17.74	21.67	27.62
Poverty threshold < income < 185%	13.64	18.77	21.74	10.86	16.21	20.95	21.44	31.92	43.28	14.13	19.07	22.90
185% < Income	12.32	20.01	27.14	11.56	18.36	25.41	27.07	38.50	47.56	13.03	20.56	28.48
Income missing	9.05	17.51	25.49	8.61	14.95	23.24	27.89	41.58	49.50	11.12	19.02	27.89
Three or more adults, one child												
Income < poverty threshold	14.15	19.86	23.42	17.84	23.52	29.23	23.52	30.07	41.69	17.41	22.91	27.32
Poverty threshold < income < 185%	11.57	17.21	25.68	11.88	18.07	25.39	21.41	31.99	43.22	13.18	18.87	25.39
185% < Income	15.21	22.50	29.46	14.87	22.55	28.94	27.99	38.81	49.08	13.93	20.52	27.96
Income missing	13.74	19.64	26.96	15.36	20.98	30.59	19.77	30.59	40.54	12.77	17.63	26.12
Three or more adults, two or more children												
Income < poverty threshold	13.38	19.76	22.90	19.13	27.97	33.80	20.30	28.24	34.58	16.92	21.01	29.05
Poverty threshold < income < 185%	15.44	23.35	31.46	15.77	25.72	36.12	24.39	36.00	43.86	13.03	18.27	26.38

Table 13 continued

Thresholds	HH comp and presence of young children			HH resources			Non-employed			HH comp, resources, & employment		
	50%	60%	70%	50%	60%	70%	50%	60%	70%	50%	60%	70%
185% < Income	15.80	23.33	33.73	15.82	26.63	35.35	28.53	39.95	49.41	13.25	20.18	28.45
Income missing	21.77	28.12	34.09	24.18	29.44	35.43	29.07	35.43	43.39	18.33	25.42	32.65
Income poor	12.11	17.14	22.34	15.86	22.17	28.05	18.93	26.85	34.61	11.68	17.75	24.38
Not income poor	13.87	21.19	28.99	13.16	19.84	27.14	24.07	34.74	44.45	10.57	16.15	23.42
Missing	12.25	18.58	66.89	13.72	19.92	28.06	22.76	32.15	79.60	10.02	15.31	22.42
Total	13.43	20.34	27.81	13.56	20.12	27.38	23.28	33.45	42.85	10.62	16.22	23.39

Household composition and presence of young children, thresholds based on medians for group defined by household composition and the presence of children under age 6. Resources, thresholds based on income group and the number of adults in a household. Non-employed, thresholds based on the medians for non-employed persons. Household composition, resources, and employment, thresholds based on household composition, income, and employment status

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