

Annual Report on U.S. Consumption Poverty: 2018

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Introduction

This report presents estimates of consumption and income based poverty in the United States derived from information collected in the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey and the U.S. Census Bureau's Current Population Survey. A poverty rate visualization tool, additional results and resources can be found at povertymeasurement.org.

Summary of findings

- Simple adjustments to account for well-known flaws with the official poverty measure make clear that poverty in America has fallen sharply over the past 50 years.
- Using the standard of living of the poor in 1980, the consumption poverty rate fell by more than 10 percentage points, from 13.0 percent in 1980 to 2.8 percent in 2018, while the official poverty rate fell by only 1.2 percentage points over that period.
- If, on the other hand, one uses the standard of living of the poor in 2015, the consumption poverty rate fell from 32.9 percent in 1980 to 10.8 percent in 2018.
- Three factors explain why consumption poverty shows a long-term decline but the official poverty measure does not. First, the official federal poverty line is adjusted over time using a price index with well-documented flaws. The official poverty line for a family of four in 1980 was \$8,351. Today it is \$25,465. If one corrects for the flaws in how the poverty line is adjusted for inflation, based on the 1980 standard, the threshold today would be about \$18,000. Second, the official poverty measure is based on cash income only, which fails to capture all the resources available to a family including tax credits and in-kind transfers. Finally, the official measure of family resources is biased due to under-reporting of certain types of income that are commonly received by those with low reported income.
- Using the higher 2015 standard, both income and consumption based poverty fell by about 1 percentage point between 2017 and 2018.

Measuring Poverty

The Office of Management and Budget established the procedure for measuring the official poverty rate in the United States through a Policy Directive in 1978. This official rate is determined by comparing the pre-tax money income of a family or a single unrelated individual

to poverty thresholds that vary by family size and composition. For example, in 2018, the poverty threshold for a two-parent, two-child family is \$25,465 (Appendix Table 1). The underlying data on pre-tax money income come from the Current Population Survey Annual Social and Economic Supplement. If a family has income below the poverty cutoff for that size family, all family members are classified as poor. Except for a few minor changes, the only adjustment to these thresholds over the past five decades has been for inflation using the Consumer Price Index for all Urban Consumers (CPI-U).

The release of this report is motivated by several longstanding criticisms of the Official Poverty Measure (OPM). Many criticisms can be found in sources such as Citro and Michael (1995), Blank (2008), and U.S. Census Bureau (2016b), but two are probably of greatest importance. First, the price index that the OPM relies on to adjust the poverty thresholds for inflation, the CPI-U, is known to overstate the extent of inflation (e.g. Hausman 2008, Moulton 2018). This problem can be addressed by using an unbiased price index. To see the significant effect that this price index bias has on the poverty thresholds, consider the change in the official two-parent, two-child thresholds as shown in Appendix Figure 1 and Appendix Table 1. The official threshold for this family type was \$8,351 in 1980 and \$25,465 in 2018, a growth of 205 percent. This growth, however, significantly exceeds the actual growth in prices. After correcting for bias in the CPI-U, prices grew by 116 percent between these two years, suggesting that, if you want to hold the bar for being out of poverty constant, the threshold in 2018 should be \$18,058. Relying on a biased price index means that the poverty cutoffs rise too quickly over time, leading more and more people to be below the cutoff in the absence of countervailing increases in income.

Second, the OPM does not reflect in-kind transfers and tax credits that have grown over time, such as the Supplemental Nutrition Assistance Program (SNAP), housing benefits and the Earned Income Tax Credit (EITC). Consequently, the OPM fails to reflect the full array of resources, cash and noncash, that families can use to meet their needs.

A potential solution to the second problem is to include SNAP, housing, tax credits, and other benefits in the measure of income used to determine poverty status. This is the approach taken in the Census Bureau's Supplemental Poverty Measure (SPM). Unfortunately, the third problem with the OPM, income underreporting, plagues the SPM as well. The survey data sources for government benefits suffer from substantial reporting problems, and consequently they substantially understate the in-kind and tax benefits mentioned earlier: SNAP, housing benefits, the EITC (Meyer, Mok and Sullivan 2015; Meyer and Mittag 2019). Some forms of income included in the OPM are also sharply under-reported such as cash welfare, pension income (Bee and Mitchell 2017), and earnings for those at the very bottom (Meyer, Wu, Mooers and Medalia (2019). Thus, the SPM only addresses one of three major problems with the OPM, and because it makes a partial correction for one problem, while leaving the others in place it can do more harm than good (Meyer and Sullivan 2012; Meyer, Wu, Mooers and Medalia 2019).

The Case for Consumption

A better solution to this second problem is to use consumption to create a poverty measure. Consumption measures what families are able to purchase in terms of food, housing, transportation and other goods and services. Consumption offers several important advantages over income. First, conceptually speaking, consumption does a better job of capturing the material circumstances of individuals and families. For example, annual income will not reflect the standard of living of individuals who smooth consumption by drawing upon savings or by borrowing. Also, income-based measures of well-being will not capture differences over time or across households in wealth, ownership of durable goods such as houses and cars, or the ability to borrow. In addition, many anti-poverty programs provide insurance against income loss or high medical payments that may make households more secure in their spending decisions but will not be reflected in their income. The conceptual benefits of consumption are the subject of a large literature (Cutler and Katz 1991; Poterba 1991; Slesnick 1993, Meyer and Sullivan 2003, 2011, 2012a, 2012b).

A second advantage of consumption is that at the individual level it is a more reliable indicator of deprivation than income; in particular, material hardship and other adverse family outcomes are more severe for those with low consumption than for those with low income (Meyer and Sullivan 2003, 2011; Fisher et al. 2009). Third, consumption appears to be more accurately reported than income for the most disadvantaged families (Meyer and Sullivan 2003, 2011). While consumption data also suffer from some under-reporting, the problem is not as severe as that for income, and alternative methods using the well-measured components can be used to check results. Finally, changes in consumption-based poverty measures are more consistent with other indicators of long-run changes such as improvements in housing and mortality (Meyer and Sullivan 2011b, 2018). Consumption also does a better job than income of capturing short-run changes in other measures of well-being such as lack of housing problems or the ability to pay one's bills (Meyer and Sullivan 2018), and despite consumption being better suited to capture long-run, as opposed to short-run, changes in economic activity, it does at least as well as income in reflecting short-run changes in unemployment and GDP (Meyer and Sullivan 2011a).

Results

This report applies the best available methods to solve the problems discussed above. The main results can be seen in Table 1 and Figure 1. Column (1) of Table 1 reports the OPM, which relies on pre-tax money income data from the Current Population Survey (CPS) and accounts for inflation using the CPI-U. The official measure fell during the 1960s but had no clear trend after then. In 2018 the poverty rate was 11.8 percent, nearly the same value as in 1972. Between 1963 and 2018 the official poverty rate fell by only 7.7 percentage points.

The poverty series reported in Column (2) makes two important adjustments to the OPM. It accounts for taxes (but not in-kind benefits) and uses a price index that is close to unbiased based on the research on errors in price indices. Here we see a substantial fall in poverty over time, with the poverty rate falling from 13.0 percent in 1980 to 11.3 percent in 1990, 7.2 percent in

2000, and 6.4 percent by 2018. Between 1963 and 2018 this after-tax income poverty measure fell by 24.9 percentage points—more than 3 times the decline in official poverty.

We now turn to the consumption poverty measures reported in the last two columns. In Column (3), we report our measure that relies on all types of consumption. Over the long-term, consumption poverty fell from 30.1 percent in 1960/61 to 13.0 percent in 1980, 10.8 percent in 1990, 6.2 percent in 2000, 4.5 percent in 2010, and 2.8 percent in 2018. Consumption poverty showed a decline in each decade after 1960, and a decline in the years after 2010. Again, we note the arbitrary use of 1980 as our anchor year. Between 2017 and 2018, consumption poverty did not change significantly. Overall, since 2011, consumption poverty has fallen from 4.5 percent at the height of the Great Recession to 2.8 percent last year.

In the very last column, Column (4), we report a second consumption poverty series that only relies on the types of consumption that are measured well, including housing, food consumed at home, and automobiles (Bee, Meyer and Sullivan 2015). This series shows a similar pattern to the overall consumption poverty measure, with a steady decline but a noticeable upturn in the poverty rate during the Great Recession. This measure was unchanged in the most recent year.

To calculate the consumption poverty rates reported in Table 1, we set the threshold in 1980 to the value that yielded a poverty rate equal to the official poverty rate in 1980 (13 percent). We then adjusted these thresholds over time using a bias-corrected price index. This process yielded consumption-based poverty rates for recent years that are quite low by historical standards. As noted above, because the official poverty thresholds are adjusted using a biased price index, the bar for determining poverty status has risen over time. Anchoring our alternative estimates to the official rate in 1980 is arbitrary. In Table 2 and Figure 2, we re-estimated alternative poverty rates, anchoring the rates in 2015 rather than 1980. Anchoring our estimates to the official poverty rate in 2015 resulted in a high level of the poverty rate in recent years, but the general pattern over time is quite similar to our 1980-anchored series. It doesn't matter much which anchor year we choose, because either way, the declines in poverty are far larger for our consumption measure than for the OPM, and since 2000, than for the after-tax income measure.

Table 3 breaks down the after-tax and consumption poverty rates for the three major age groups, children under 18, those 18-64, and those 65 and older (using the thresholds anchored in 1980). In recent years, poverty rates for children are the highest, followed by those for non-aged adults, and then those 65 and older with the lowest rates. After-tax income poverty rates for children were steady in the 1980s, before falling sharply in the 1990s. There has been little trend since then, though the rate rose sharply in the recession. Consumption poverty rates for children steadily fell, though the fall accelerated in the 1990s and early 2000s, and was subsequently much slower.

The after-tax income poverty rates for non-elderly adults had a shallow U-shaped pattern from the mid-1980s through 2012, with the rate in 2012 almost the same as that in 1995. On the other hand, consumption poverty has shown a steady decline, falling each decade, though between 2016 and 2018 it has changed little.

The poverty rates for those 65 and older show the sharpest declines. The after-tax rate for the elderly fell through the Great Recession, but has risen somewhat since. For the elderly, the consumption poverty rate fell sharply in each decade. Starting at over 45 percent in 1960/61 it fell to 17.4 percent in 1980, 8.6 percent in 1990, and has continued that fall in recent years.

Explaining the trends

Several factors contributed to the sharp decline in poverty that we report using improved, consumption-based measures. Poverty has been sharply reduced through tax rate cuts and tax credits and the expansion of other anti-poverty programs. Increases in Social Security benefits have also played a large role, and rising educational attainment through its impact on earnings also accounts for some of the decline. However, these explanations cannot account for all of the improvement in economic well-being at the bottom, indicating that economic growth has played an important role in the sharp reduction in poverty. See Meyer and Sullivan (2012b) for more discussion.

Methods

Consumption poverty status was calculated by comparing a family's consumption to the poverty thresholds that vary by family size and composition. If a family's consumption was less than the poverty threshold, all members of the family were considered to be in poverty.

We adjusted our thresholds for family size and composition in a way suggested in the "Measuring Poverty" report from the National Academy of Sciences. We proportionately scaled, or anchored, our thresholds so that the consumption poverty rate matched the historical standards implied by the official poverty rates in either 1980 or 2015. Note that the standard implied by the official measure is changing over time because the thresholds are adjusted for inflation using a biased price index. The choice of year for the historical standard is arbitrary, as was the initial official standard, though there are well-established scientific methods to adjust poverty thresholds over time to maintain a constant absolute standard.

We adjusted the thresholds over time using a bias corrected price index rather than the CPI-U, which is known to overstate the extent of inflation. We obtained the bias corrected price index by subtracting 0.8 percentage points each year from the change in the BLS CPI-U-RS (research series). The adjustment was based on arguments found in Advisory Commission to Study the Consumer Price Index (1996), Hausman (2003), Berndt (2006) and related research. A recent review by a former senior government price index expert found a consensus bias that would suggest a slightly larger adjustment (Moulton 2018).

Instead of using pretax money income as the measure of resources at the disposal of a household, we used total consumption. We also considered an alternative consumption measure that we call well-measured consumption as a check on our estimates. Well-measured consumption consists of only those components that are reported at a high rate consistently over time when compared to national income account data and other sources.

Sources of the Estimates

We used two main sources for our data, the Consumer Expenditure (CE) Survey and the Current Population Survey Annual Social and Economic Supplement (CPS ASEC):

Consumer Expenditure Survey

The CE is a nationally representative survey primarily used to calculate expenditure shares for construction of the Consumer Price Index. We rely on it for data on income, expenditures, housing and vehicle ownership. The CE surveys about 7,500 households each quarter, yielding about 30,000 interviews over a calendar year. The survey provides data going back to 1960/61, though was intermittent until 1980/81. Data for households (referred to as consumer units) for calendar year 2018 were released on September 10, 2019.

Current Population Survey

The CPS ASEC is a nationally representative survey primarily used to collect employment data. It is also the source of official income and poverty statistics. We rely on it for data on income. The CPS ASEC is a sample of about 75,000 households conducted annually in the early months of the calendar year. It provides poverty data going back until 1959, though the data on individual households are only available beginning in 1963. Data for individual households for calendar year 2018 were released on September 10, 2019.

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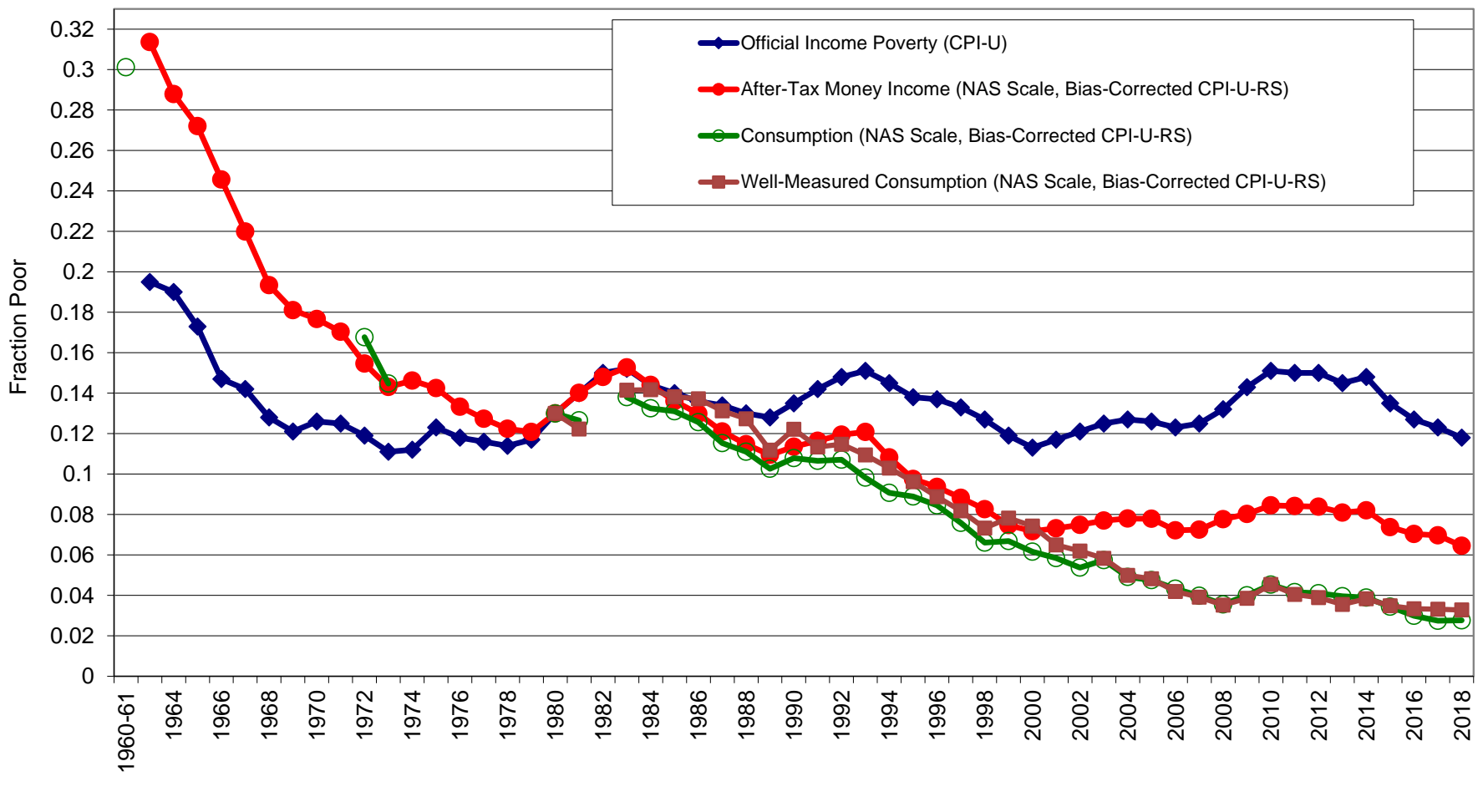
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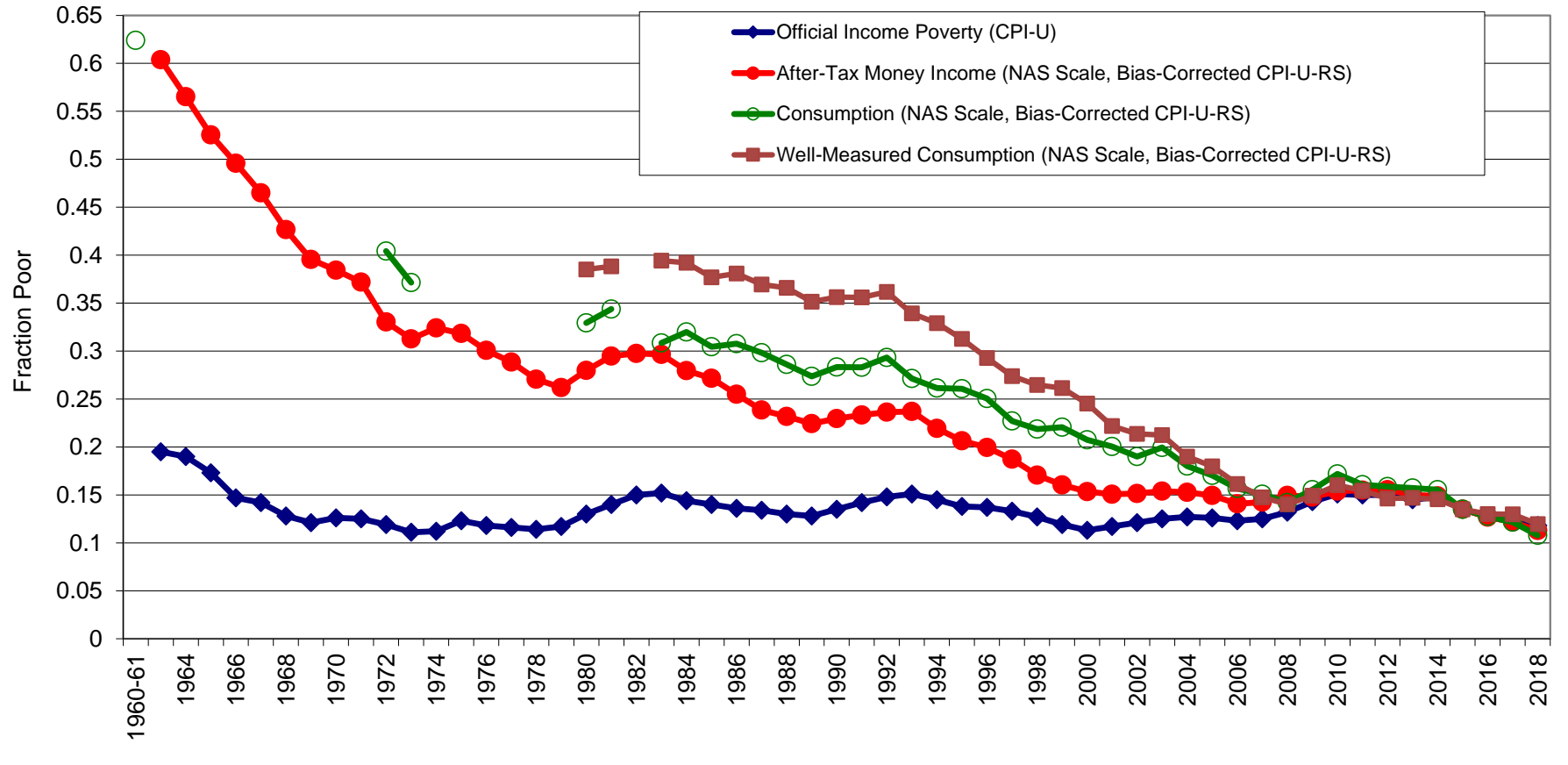
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Figure 1: Consumption and Income Poverty Rates, 1960-2018, Thresholds Anchored in 1980



Notes: Official Income Poverty follows the U.S. Census definition of income poverty using official thresholds. For measures other than the official one, the threshold in 1980 is equal to the value that yields a poverty rate equal to the official poverty rate in 1980 (13.0 percent). The thresholds in 1980 are then adjusted over time using the Bias-Corrected CPI-U-RS, which subtracts 1.1 percentage points from the CPI-U-RS each year from 1960-1977 and 0.8 percentage points from the CPI-U-RS each year from 1978-2018. Poverty status is determined at the family level and then person weighted. After-Tax Money Income includes taxes and credits (calculated using TAXSIM). Consumption data are from the CE and income data are from the CPS-ASEC/ADF. CE data are not available for the years 1962-1971, 1974-1979 and 1982-1983.

Figure 2: Consumption and Income Poverty Rates, 1960-2018, Thresholds Anchored in 2015



Notes: Official Income Poverty follows the U.S. Census definition of income poverty using official thresholds. For measures other than the official one, the threshold in 2015 is equal to the value that yields a poverty rate equal to the official poverty rate in 2015 (13.5 percent). The thresholds in 2015 are then adjusted over time using the Bias-Corrected CPI-U-RS. See Figure 1 for more details.

Table 1: Consumption and Income Poverty Rates, 1960-2018, Thresholds Anchored in 1980

Year	Percent in Poverty			
	Official Income Poverty (CPI-U)	After-Tax Money Income (NAS Scale, Bias-Corrected CPI-U-RS)	Consumption (NAS Scale, Bias-Corrected CPI-U-RS)	Well-Measured Consumption (NAS Scale, Bias-Corrected CPI-U-RS)
	(1)	(2)	(3)	(4)
1960-61/1963	19.5	31.4	30.1	
1972	11.9	15.5	16.8	
1973	11.1	14.3	14.5	
1980	13.0	13.0	13.0	13.0
1981	14.0	14.0	12.6	12.2
1982	15.0	14.8		
1983	15.2	15.3	13.8	14.1
1984	14.4	14.4	13.2	14.2
1985	14.0	13.6	13.1	13.8
1986	13.6	13.0	12.6	13.7
1987	13.4	12.1	11.5	13.1
1988	13.0	11.5	11.1	12.7
1989	12.8	11.0	10.3	11.2
1990	13.5	11.3	10.8	12.2
1991	14.2	11.6	10.7	11.3
1992	14.8	11.9	10.7	11.5
1993	15.1	12.1	9.8	10.9
1994	14.5	10.8	9.1	10.3
1995	13.8	9.8	8.9	9.6
1996	13.7	9.4	8.5	8.9
1997	13.3	8.8	7.6	8.2
1998	12.7	8.3	6.6	7.3
1999	11.9	7.5	6.7	7.8
2000	11.3	7.2	6.2	7.4
2001	11.7	7.3	5.8	6.5
2002	12.1	7.5	5.4	6.2
2003	12.5	7.7	5.7	5.8
2004	12.7	7.8	4.9	5.0
2005	12.6	7.8	4.8	4.8
2006	12.3	7.2	4.3	4.2
2007	12.5	7.2	4.0	3.9
2008	13.2	7.8	3.6	3.5
2009	14.3	8.0	4.0	3.9
2010	15.1	8.4	4.5	4.5
2011	15.0	8.4	4.2	4.0
2012	15.0	8.4	4.1	3.9
2013	14.5	8.1	4.0	3.5
2014	14.8	8.2	3.9	3.8
2015	13.5	7.4	3.4	3.5
2016	12.7	7.0	3.0	3.3
2017	12.3	7.0	2.7	3.3
2018	11.8	6.4	2.8	3.3
Change:				
1960*- 1972	-7.6	-15.9	-13.3	
1972 - 1980	1.1	-2.5	-3.8	
1980 - 1990	0.5	-1.7	-2.2	-0.8
1990 - 2000	-2.2	-4.2	-4.6	-4.8
2000 - 2018	0.5	-0.7	-3.4	-4.2
1980 - 2018	-1.2	-6.6	-10.2	-9.7
1960*- 2018	-7.7	-24.9	-27.3	

See notes to Figure 1.

Table 2: Consumption and Income Poverty Rates, 1960-2018, Thresholds Anchored in 2015

Year	Percent in Poverty			
	Official Income Poverty (CPI-U)	After-Tax Money Income (NAS Scale, Bias-Corrected CPI-U-RS)	Consumption (NAS Scale, Bias-Corrected CPI-U-RS)	Well-Measured Consumption (NAS Scale, Bias-Corrected CPI-U-RS)
	(1)	(2)	(3)	(4)
1960-61/1963	19.5	60.4	62.4	
1972	11.9	33.0	40.4	
1973	11.1	31.3	37.1	
1980	13.0	28.0	32.9	38.5
1981	14.0	29.5	34.4	38.8
1982	15.0	29.7		
1983	15.2	29.6	30.8	39.4
1984	14.4	28.0	32.0	39.2
1985	14.0	27.2	30.4	37.7
1986	13.6	25.5	30.8	38.1
1987	13.4	23.9	29.8	36.9
1988	13.0	23.2	28.6	36.6
1989	12.8	22.4	27.4	35.1
1990	13.5	23.0	28.3	35.6
1991	14.2	23.3	28.3	35.6
1992	14.8	23.6	29.3	36.2
1993	15.1	23.7	27.1	33.9
1994	14.5	21.9	26.1	32.9
1995	13.8	20.6	26.1	31.3
1996	13.7	19.9	25.1	29.3
1997	13.3	18.7	22.7	27.4
1998	12.7	17.0	21.9	26.5
1999	11.9	16.0	22.1	26.2
2000	11.3	15.3	20.7	24.5
2001	11.7	15.1	20.0	22.2
2002	12.1	15.1	19.0	21.4
2003	12.5	15.4	19.9	21.2
2004	12.7	15.3	18.0	19.0
2005	12.6	14.9	17.0	18.0
2006	12.3	14.1	15.7	16.1
2007	12.5	14.3	15.1	14.8
2008	13.2	14.9	14.2	14.0
2009	14.3	14.8	15.5	14.9
2010	15.1	15.4	17.2	16.0
2011	15.0	15.5	16.1	15.4
2012	15.0	15.6	15.9	14.6
2013	14.5	15.0	15.7	14.7
2014	14.8	14.9	15.5	14.6
2015	13.5	13.5	13.5	13.5
2016	12.7	12.7	12.7	13.0
2017	12.3	12.2	12.1	13.0
2018	11.8	11.3	10.8	12.0
Change:				
1960*- 1972	-7.6	-27.4	-22.0	
1972 - 1980	1.1	-5.0	-7.5	
1980 - 1990	0.5	-5.0	-4.6	-2.9
1990 - 2000	-2.2	-7.6	-7.6	-11.1
2000 - 2018	0.5	-4.1	-10.0	-12.6
1980 - 2018	-1.2	-16.7	-22.2	-26.5
1960*- 2018	-7.7	-49.1	-51.6	

See notes to Figure 2.

Table 3: Consumption and Income Poverty by Age Group, 1960-2018, Thresholds Anchored in 1980

Year	Percent in Poverty					
	Under 18		18-64		65+	
	After-Tax Income	Consumption	After-Tax Income	Consumption	After-Tax Income	Consumption
	(1)	(2)	(3)	(4)	(5)	(6)
1960-61/1963	31.8	35.4	29.3	23.6	49.7	45.3
1972	19.3	20.3	11.6	12.8	25.1	27.5
1973	18.1	18.6	10.8	10.6	22.5	23.2
1980	18.5	16.8	10.1	10.4	14.9	17.4
1981	20.2	16.4	11.2	10.3	14.1	15.9
1982	21.9		12.0		12.9	
1983	22.8	20.4	12.5	11.4	12.5	11.0
1984	22.1	18.4	11.7	11.1	10.8	12.3
1985	20.7	18.2	11.2	11.1	10.3	12.2
1986	20.2	17.7	10.5	10.4	9.9	11.9
1987	18.9	17.3	9.6	9.4	10.1	9.4
1988	17.8	17.1	9.3	9.0	8.9	8.5
1989	17.2	16.1	8.8	7.9	8.2	9.0
1990	18.2	16.1	9.0	8.9	8.2	8.6
1991	18.6	16.2	9.4	8.7	8.0	8.0
1992	18.8	16.4	9.7	8.8	8.3	7.0
1993	19.0	15.2	9.9	7.9	7.9	7.3
1994	17.1	13.4	8.8	7.6	6.8	6.2
1995	15.4	13.3	8.1	7.5	5.7	6.2
1996	14.5	13.1	7.8	7.1	6.0	4.7
1997	13.9	11.4	7.3	6.5	5.4	4.0
1998	12.7	10.0	6.9	5.7	5.5	3.2
1999	10.9	9.9	6.5	5.8	4.8	4.0
2000	10.5	9.0	6.2	5.5	4.9	3.6
2001	10.4	8.6	6.5	5.3	5.1	2.8
2002	10.3	7.5	6.8	4.9	5.1	3.1
2003	11.0	8.4	6.9	5.1	5.1	3.1
2004	10.7	7.1	7.1	4.5	5.2	2.4
2005	11.2	6.5	7.0	4.4	4.9	2.8
2006	10.1	6.4	6.5	3.8	4.8	2.4
2007	10.4	5.8	6.5	3.5	4.7	2.6
2008	11.2	4.9	7.0	3.3	4.9	2.2
2009	11.1	5.5	7.5	3.9	4.3	1.7
2010	12.1	6.3	7.9	4.3	4.1	2.3
2011	11.9	6.0	8.1	3.8	3.7	2.2
2012	11.9	6.2	8.0	3.8	4.3	1.9
2013	10.8	5.7	7.9	3.7	4.3	2.0
2014	10.9	5.6	7.9	3.6	5.1	2.1
2015	10.2	5.2	7.1	3.1	4.2	1.8
2016	9.5	4.0	6.7	2.8	4.6	2.2
2017	9.4	3.5	6.6	2.8	4.7	1.3
2018	8.0	3.7	6.1	2.8	5.5	1.1
Change:						
1960*- 1972	-12.6	-15.1	-17.6	-10.7	-24.6	-17.8
1972 - 1980	-0.7	-3.5	-1.5	-2.5	-10.2	-10.1
1980 - 1990	-0.3	-0.8	-1.1	-1.5	-6.7	-8.8
1990 - 2000	-7.7	-7.1	-2.8	-3.4	-3.3	-5.0
2000 - 2018	-2.5	-5.2	-0.1	-2.6	0.5	-2.5
1980 - 2018	-10.6	-13.1	-4.0	-7.5	-9.5	-16.3
1960*- 2018	-23.9	-31.7	-23.1	-20.7	-44.3	-44.2

Notes: Poverty status is determined at the family level and then person weighted. For each measure, thresholds are the same as those used in Figures 1-3. Thus, thresholds are anchored in 1980 for the full sample, rather than for each age group. Thresholds are adjusted over time using the Bias-Corrected CPI-U-RS. Consumption data are from the CE and income data are from the CPS-ASEC/ADF. Each series is adjusted using the NAS recommend equivalence scale. See notes to Figures 1 for additional details.

Appendix Table 1: Poverty Thresholds Anchored in 1980

Year	Official Income Poverty (CPI-U)	After-Tax Money Income (NAS Scale, Bias-Corrected CPI-U-RS)	Consumption (NAS Scale, Bias-Corrected CPI-U-RS)	Well-Measured Consumption (NAS Scale, Bias-Corrected CPI-U-RS)
	(1)	(2)	(3)	(4)
1960-61/1963	3,104	3,921	3,948	2,867
1972	4,241	4,760	4,792	3,480
1973	4,505	5,005	5,039	3,660
1980	8,351	8,181	8,236	5,982
1981	9,218	8,888	8,948	6,499
1982	9,783	9,354	9,416	6,839
1983	10,098	9,678	9,743	7,076
1984	10,527	10,004	10,071	7,315
1985	10,903	10,267	10,336	7,507
1986	11,113	10,365	10,434	7,578
1987	11,519	10,639	10,710	7,779
1988	11,997	10,938	11,011	7,997
1989	12,575	11,329	11,404	8,283
1990	13,254	11,797	11,876	8,625
1991	13,812	12,131	12,212	8,870
1992	14,228	12,336	12,418	9,019
1993	14,654	12,548	12,632	9,175
1994	15,029	12,710	12,795	9,293
1995	15,455	12,914	13,001	9,442
1996	15,911	13,155	13,243	9,618
1997	16,276	13,334	13,423	9,749
1998	16,530	13,408	13,498	9,804
1999	16,895	13,586	13,677	9,933
2000	17,463	13,938	14,032	10,191
2001	17,960	14,224	14,319	10,400
2002	18,244	14,334	14,430	10,481
2003	18,660	14,545	14,643	10,635
2004	19,157	14,822	14,921	10,837
2005	19,806	15,205	15,307	11,117
2006	20,444	15,576	15,681	11,389
2007	21,027	15,894	16,000	11,621
2008	21,834	16,377	16,487	11,974
2009	21,756	16,189	16,297	11,837
2010	22,113	16,327	16,436	11,937
2011	22,811	16,710	16,822	12,218
2012	23,283	16,931	17,044	12,379
2013	23,624	17,046	17,161	12,464
2014	24,008	17,199	17,314	12,575
2015	24,036	17,091	17,205	12,496
2016	24,339	17,174	17,289	12,557
2017	24,858	17,406	17,523	12,727
2018	25,465	17,691	17,810	12,935

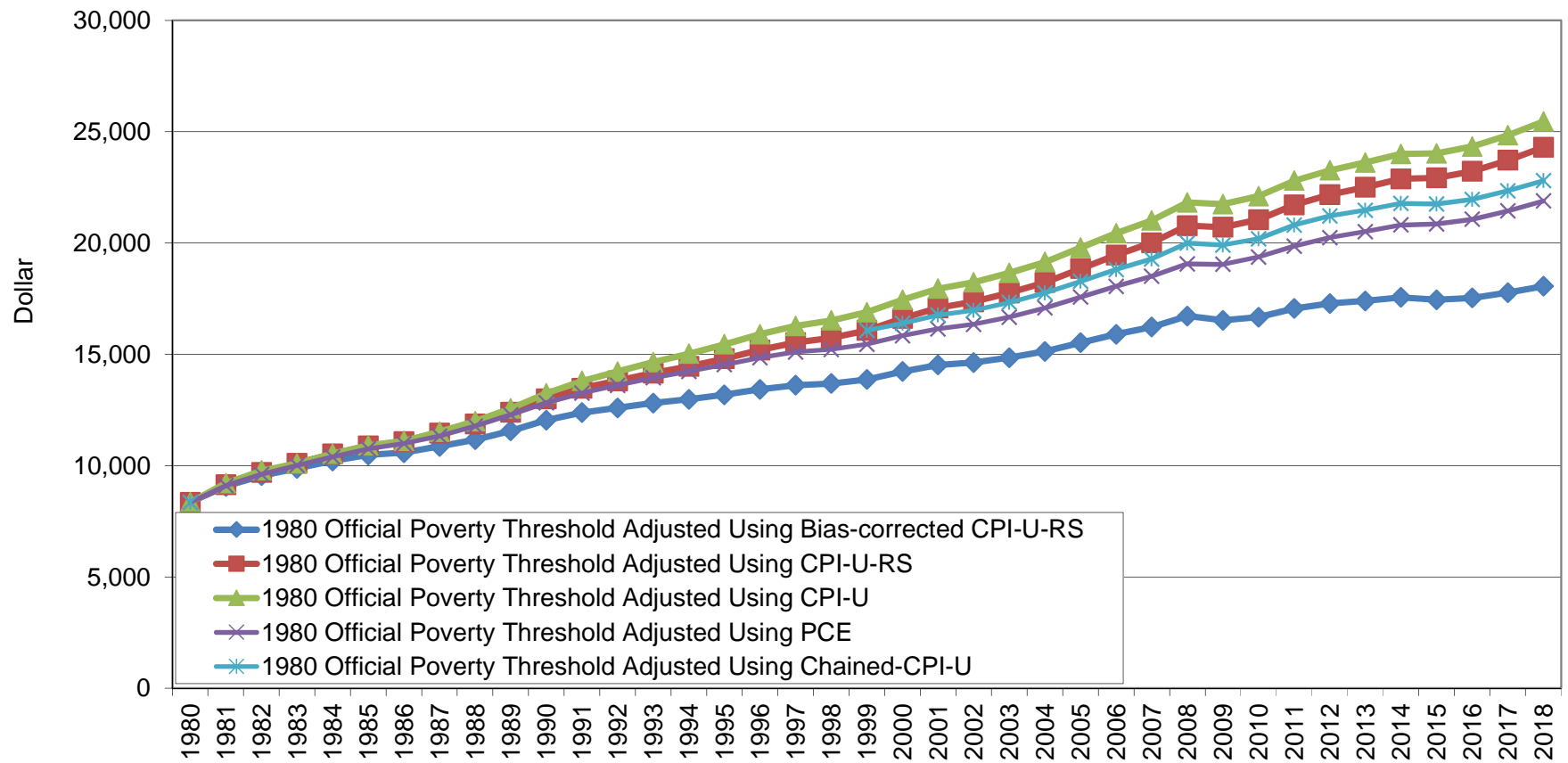
Note: Column 1 reports the official poverty thresholds for a family of two adults and two children. For years prior to 1980, the poverty thresholds varied by sex of head and farm residence and we report the poverty thresholds for a family with a non-farm male head (<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>). Columns 2-4 report the thresholds anchored to the official poverty rate in 1980 (13.0 percent), adjusted for inflation using the Bias-Corrected CPI-U-RS.

Appendix Table 2: Poverty Thresholds Anchored in 2015

Year	Official Income Poverty (CPI-U)	After-Tax Money Income (NAS Scale, Bias-Corrected CPI-U-RS)	Consumption (NAS Scale, Bias-Corrected CPI-U-RS)	Well-Measured Consumption (NAS Scale, Bias-Corrected CPI-U-RS)
	(1)	(2)	(3)	(4)
1960-61/1963	3,104	6,105	5,891	4,387
1972	4,241	7,412	7,152	5,326
1973	4,505	7,795	7,522	5,601
1980	8,351	12,740	12,294	9,154
1981	9,218	13,842	13,357	9,946
1982	9,783	14,566	14,056	10,466
1983	10,098	15,071	14,543	10,829
1984	10,527	15,580	15,034	11,194
1985	10,903	15,990	15,429	11,489
1986	11,113	16,141	15,576	11,598
1987	11,519	16,567	15,987	11,904
1988	11,997	17,033	16,436	12,238
1989	12,575	17,642	17,024	12,676
1990	13,254	18,369	17,725	13,198
1991	13,812	18,891	18,229	13,573
1992	14,228	19,210	18,537	13,803
1993	14,654	19,540	18,855	14,040
1994	15,029	19,793	19,099	14,221
1995	15,455	20,110	19,405	14,449
1996	15,911	20,485	19,767	14,719
1997	16,276	20,764	20,037	14,919
1998	16,530	20,879	20,147	15,002
1999	16,895	21,155	20,414	15,201
2000	17,463	21,706	20,946	15,596
2001	17,960	22,151	21,375	15,916
2002	18,244	22,321	21,539	16,038
2003	18,660	22,651	21,858	16,275
2004	19,157	23,082	22,274	16,585
2005	19,806	23,678	22,849	17,013
2006	20,444	24,256	23,406	17,428
2007	21,027	24,751	23,884	17,784
2008	21,834	25,504	24,611	18,325
2009	21,756	25,209	24,326	18,113
2010	22,113	25,424	24,534	18,268
2011	22,811	26,020	25,109	18,696
2012	23,283	26,366	25,443	18,945
2013	23,624	26,545	25,615	19,073
2014	24,008	26,782	25,843	19,243
2015	24,036	26,614	25,682	19,123
2016	24,339	26,744	25,807	19,216
2017	24,858	27,106	26,157	19,476
2018	25,465	27,548	26,583	19,794

Note: Column 1 reports the official poverty thresholds for a family of two adults and two children. For years prior to 1980, the poverty thresholds varied by sex of head and farm residence and we report the poverty thresholds for a family of non-farm male head (<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>). Columns 2-4 report the thresholds anchored in the official poverty rate in 2015 (13.0 percent), adjusted for inflation using the Bias-Corrected CPI-U-RS.

Appendix Figure 1: 1980 Official Poverty Thresholds for Two Adults and Two Children Families Adjusted Using Different Price Indices



Notes: Poverty thresholds are from <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>. Chained-CPI-U index is from <https://www.bls.gov/cpi/data.htm>. The initial value for the series that is adjusted using the Chained-CPI-U is set to match the threshold in 1999 for the CPI-U-RS series.