Measuring Poverty across the Age Distribution

To better understand the relationship between age and poverty, we look at the evolution of poverty across the age distribution since the early 1970’s. Previous work has found a “spike” in poverty among young adults based on the Official Poverty Measure (OPM).\(^1\) We extend these findings to other poverty measures, including the Supplemental Poverty Measure (SPM) and a Historical Supplemental Poverty Measure (Historical SPM), and look closer at the impact of social safety net programs on poverty for different age groups.

We find that young adult poverty has increased since the early 1970’s and is currently among the highest for any age group. In the last 30-40 years, anti-poverty efforts have lowered child poverty and elderly poverty, but have done much less to reduce poverty among young adults.

**Figure 1: Young adult poverty is among the highest for any age group**

**Percent in Poverty: Supplemental Poverty Measure (2009-2017 pooled)**

Source: Author’s calculations based on IPUMS-CPS, University of Minnesota, www.ipums.org.

Notes: The vertical range of each bar is the confidence interval (95%), which represents the plausible range of statistical values of poverty for each age group. Confidence intervals calculated using replicate weights. Due to data limitations, the 2009-2017 series is not based on a full business cycle.
A note on our methods: we evaluate poverty over time and by age group using the Current Population Survey, which contains a representative sample of the U.S. population, from both IPUMS and the Center on Poverty & Social Policy at Columbia University. We pool years by business cycle using dates from the National Bureau of Economic Research. By definition, these cycles include years of decline (recessions) and years of growth. This allows us to develop a clearer picture of the long-run trajectory of poverty while controlling for short-run cyclical fluctuations. It also gives us a sufficient sample size to examine our primary demographic of interest: young adults.

Poverty rates for young adults (18-24) are among the highest across the entire age distribution. Poverty, as measured by the SPM in Figure 1, is particularly acute for young adults: between 17 and 21 years old, poverty increases 8.3 percentage points. In the last decade, we find that about one-in-five young adults are in poverty. Using either a measure of deep poverty (50% of the poverty line) or the conventional measure (100% of the poverty line), 21-year-olds have among the highest poverty rates for the age groups we measure. Using 200% of the poverty line (a higher bar to determine whether a family is poor), poverty rates among children, particularly younger children, are generally similar to poverty rates among young adults.

A substantial jump in poverty occurs between ages 17 and 18. Using 100% of the poverty line for the SPM, poverty increases 4.1 percentage points between 17- and 18-year-olds (Figure 1). This increase is consistent across all poverty lines for the SPM, though the magnitude of the jump differs, particularly with deep poverty. This jump in poverty is likely due to the fact that many young adults move out of their childhood home, are less eligible for public benefits, and command low wages (for additional discussion, see the Technical Appendix [forthcoming]).

Figure 2: Young adult poverty has worsened while poverty among other age groups has improved

Notes: 2015 is the most recent year in the Historical Supplemental Poverty Measure data set.
The spike in young adult poverty only formed in recent decades (Figure 2). While earlier years showed a relatively small increase in poverty at 18 years old, the 2008-2015 spike covers more young adults, according to data from the Historical SPM. The poverty “gap” between 17-year-old poverty and 21-year-old poverty was negligible in 1970-1973. This gap, however, grew to 8.6 percentage points in 2008-2015, representing one indicator of the spike in poverty among young adults. Data from the OPM for 2008-2017 (Figure 3) show similar trends.

Poverty among 19-24-year-olds has increased since the early 1970’s. The increase in young adult poverty is especially notable, given the progress during the same period in bringing down poverty rates among children and seniors (Figure 2). Anti-poverty efforts were more successful in reducing child poverty than in bringing down young adult poverty.

Poverty among seniors has dropped significantly since the early 1970’s. Both the OPM and the Historical SPM show this reduction in poverty among the elderly population. Since both measures account for Social Security benefits, Figures 2 and 3 both highlight the large impact the retirement program has had on senior poverty rates in the past 40-50 years. In particular, for those 75 years or older, we see a substantial drop in poverty – rates have been cut by more than half as measured by either the OPM or the Historical SPM.

Figure 3: The jump in poverty rates between youth and young adults is a more recent development

Source: Author’s calculations based on IPUMS-CPS, University of Minnesota, www.ipums.org.
Notes: The vertical range of each bar is the confidence interval (95%), which represents the plausible range of statistical values of poverty for each age group. Confidence intervals calculated using synthetic standard errors methodology: see Technical Appendix [forthcoming].
Figure 4: Proportion of young adults in poverty and in college on the rise

Since the late 1980’s, the share of young adults in full-time university programs and in poverty has increased. The increase in the number of college students in poverty has been offset to some degree by a decrease in the number of young adults in poverty and not in school. Among, 21-year-olds, between 1985-1990 and 2008-2015, the proportion not in school and in poverty decreased 2.9 percentage points while students of the same age in a full-time program and in poverty increased 4.7 percentage points (Figure 4).

College enrollment may partly be driving the jump in young adult poverty, but it is difficult to quantify its impact. While we can identify an increase in the proportion of young adults in college and in poverty over time, as shown in Figure 4, we cannot disentangle this from the general trend of increasing college enrollment over time. Something may be different about the college experience today than for previous generations, or college students may always have been a more poverty-prone group, whose numbers are only growing as college enrollment increases. It is possible that both are true: college students have always been more poverty prone, and in recent years, college attendance is even more likely to lead to poverty.

We cannot directly attribute the jump in young adult poverty to increases in student loan balances or the general trend in increasing tuition costs since the OPM, SPM, and Historical SPM do not count debt or education expenses when calculating family resources. We also find that the spike in poverty among young adults is likely not being driven by well-off college students who only appear to be in poverty in the data. As we show in the Technical Appendix [forthcoming], excluding college students who are not living with family and not working a significant portion of the year has little effect on our main results.
Figure 5: Young adults benefit comparatively less from the social safety net

The social safety net (i.e., all taxes and transfers) has had the greatest impact on poverty among the youngest and oldest. As illustrated in Figure 5, working-age individuals benefit comparatively less from the social safety net. Assuming people make no behavioral adjustments in response to receiving benefits, the social safety net reduces poverty 10.3 percentage points for newborns and a full 45.5 percentage points for individuals age 75 or older. In stark contrast, the social safety net reduces poverty by only 4.8 percentage points for 21-year-olds.

The Earned Income Tax Credit’s (EITC) anti-poverty impact is highest among children. The benefit structure of the EITC is designed around families, which makes it a particular potent anti-poverty tool benefitting children. As Figure 5 shows, the anti-poverty benefits of the EITC also fade out over the age distribution. One straightforward explanation for this trend is that seniors age 65 or older without qualifying children are ineligible for the EITC. The credit may also decline among working-age adults younger than age 65 because of fewer qualifying children in the family.

The effect of the EITC on young adult poverty is lower than for other ages, but still apparent. Without the EITC, poverty would be 1.8 percentage points higher among 21-year-olds and 2.5 percentage points higher among 35-year-olds, for example (Figure 5). While the difference is relatively small, it is likely due to the fact that, per federal rules, adults under the age of 25 are ineligible for the EITC unless they can claim a qualifying child.

Other transfers, specifically Social Security, have had the largest effect on senior poverty. In fact, without Social Security, senior poverty would be more than triple what it is today.
Figure 6: Since the 1980’s, declines in poverty have been concentrated among children, adults ages 25-40, and seniors aged 65+.

**Percent in Poverty: Historical Supplemental Poverty Measure**

The spike in young adult poverty formed in the 1990’s both because of the increasing share of 20-24-year-olds in poverty and because of the declines in poverty among children and adults in their late 20’s and early 30’s. Comparing the business cycle immediately before the 1990’s – when the spike in young adult poverty first becomes apparent – and the most recent business cycle encompassing the Great Recession (Figure 6), the trend is clear. Between 1980-1990 and 2008-2015, the poverty rate flattened across the age distribution. The most notable exception to this flattening is the spike in poverty that occurs among young adults in recent decades. The trend is partly due to increases in poverty concentrated among 20-, 21-, and 22-year-olds. We can also attribute the formation of the spike to a clear hallowing out of poverty among children and 25-40-year-olds.

**Why are so many young adults in poverty?**

The trends in this brief tell an important story: today, young adults have among the highest poverty rates, relative to the rest of the age distribution. But the descriptive analysis only tells us so much. What are the important social and economic forces driving these changes? We discuss a few key trends:

- **In the last fifty years, the U.S. economy has produced a labor market yielding unfavorable returns for the average worker, particularly those without college degrees.** Young adults, by virtue of being young, are more susceptible to the challenges facing low skill labor. They lack the labor market experience and human capital that can develop with age.

- **Given our current analysis, we cannot offer a strong conclusion on the effect of college attendance on poverty.** Student loans may be buttressing the standard of living for students in school; but, in the same vein, educational costs are certainly constraining available resources for many young adults. Neither are included in the poverty measures we examine here. While we cannot conclude that college...
attendance is driving poverty rates among young adults, we do find more young adults in college and in poverty over time – a statistic that is not completely offset by the decline in individuals out of school and in poverty during the same period.

Young, working-age adults largely have been deprioritized from expansions in the social safety net. Some types of government assistance have helped young adults, with that amount increasing over time. For example, without government support through the EITC, poverty among young adults would be even worse than it is now. However, there is a stark difference between the impact of the EITC (and other government assistance) on youth versus young adults. In 2008-2015, government tax and transfer policies brought 17-year-old poverty down by an average of nearly double what it did for 21-year-olds, 9.1 percentage points and 4.8 percentage points, respectively.

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Notes and References

4 Specifically, we start each business cycle in the March immediately following the month of the business cycle peak to correspond with the March data available through the Current Population Survey’s Annual Social and Economic Supplement. We end each business cycle in the March on or before the peak. We also combine the two 1980’s cycles into a single cycle.
5 This increase in young adult poverty mirrors the findings reported in Marchand and Smeeding (2016), who document the formation of a “spike” in poverty among 20-24-year-olds starting in the 1990’s using the OPM.
6 While we bin all individuals over 75 into one age groups in our results, it is plausible that some individual ages within this group have higher poverty rates than 21-year-olds.
8 While the difference is less pronounced relative to 1967-1969, which encompass the earliest years of available data, we highlight the early 1970’s as the primary comparison group because it encompasses the earliest complete business cycle for which data is readily available.
10 Young adults can be claimed as a qualifying child by their parents if they are a full time student and at least 19 years old but younger than 24. For more information, see: United States Department of the Treasury, Internal Revenue Service. 2018. “Publication 596: Earned Income Credit (EIC).” https://www.irs.gov/pub/irs-pdf/p596.pdf.