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ABSTRACT

Inequality differentially affects demographic groups, and the socioeconomic measure we use matters quite a lot when understanding how inequality differentially affects demographic groups. We examine the demography of inequality using age, race, education, and family type for children, and we show how the demography of inequality depends on the resource measure used: income, consumption, or wealth. Children and the elderly are worse off than non-elderly adults in income terms, but only children and their parents are increasingly and disproportionately found in the lower reaches of the wealth and consumption distributions. For some groups, all lenses show the same picture, as children in single parent households, blacks, and those with less than a high school education are worse off in terms of all resource measures - income, wealth or consumption.
Introduction
Growing interest in economic inequality continues to dominate the headlines. In 2013, President Obama spoke about inequality and mobility, reiterating a theme from earlier speeches. He said: “…this increasing inequality is most pronounced in our country, and it challenges the very essence of who we are as a people.” And Janet Yellen (2014), in a speech to the Boston Federal Reserve Bank, suggested that both income and wealth inequality were rising in the United States. In terms of consumption, the preferred welfare measure for most economists, Bill Gates (Gates, 2014), commenting on Piketty (2014) suggested that “It’s not that we should ignore the wealth and income data. But consumption data may be even more important for understanding human welfare.”

Most research shows, and Yellen (2014) stresses, there has been a large increase in income and wealth inequality. Saez and Zucman (2014) and Wolff (2014) stress that income and wealth inequality are highly related. Piketty (2014) makes this point more dramatic that the increase in income inequality yields more wealth inequality, which in turn increases income inequality. Fisher, Johnson, and Smeeding (2015) find that consumption inequality is about 80 percent large as disposable income inequality and that the rise in consumption inequality was two-thirds that of income inequality in the United States from 1985 to 2011. Not only is there great interest in these three dimensions of inequality -- income, wealth and consumption, there is evidence that inequality is increasing in all three dimensions. And the relationship between income and wealth inequality is critical, and these two in turn determine consumption inequality.

The differences in income, consumption and wealth across the income distribution provide some insight. Figure 1 confirms other research (e.g. Fisher, et al., 2015) that the average propensity to consume (APC) falls with income and is extremely high for the low-income households. Alternatively, wealth increases with income, and yields wealth to income ratios of
over fourteen at the highest percentiles. As a result, consumption inequality is less than income inequality, and income inequality is less than wealth inequality. Figure 1 indicates that households at the bottom of the income distribution appear relatively better off using consumption because consumption exceeds income. And, high-income households are better off using wealth to measure relative well-being. The takeaway is that our perception of relative well-being changes depending on whether we use consumption, income, or wealth. We take this idea further and examine how our perception of relative well-being by the demographics of the population – age, family structure, education and race/ethnicity – are differentially impacted by these distributions. Then we investigate whether increasing inequality has differentially impacted these demographic groups between 1989 and 2016.

Many have estimated the flow value of wealth to add to income in order to incorporate wealth into a measure of economic well-being (Burkhauser, et al., 2012; Smeeding and Thompson, 2011). Regardless of the flow values, the build-up of stocks of wealth presents opportunities and advantages (or in the case of debt, disadvantages) that may in the end be more important than any flows, as Piketty (2014) argues. Wealth buildup takes place when large shares of national income go to top income families who have average propensities to consume (APC’s) below 0.5. Hence, with high wealth and high income but not translated in into relatively high consumption, the question is what happens to this income and how is economic well-being affected for these high-income and high-wealth households. None of the current analyses of inequality have captured the full effect of net worth on consumption and income by considering all three measures of well-being simultaneously for the same households. We know, however, that each gives a differing and important perspective on the distribution of economic well-being when considering the effects of inequality on say education, intergenerational mobility, or health.
Regardless, if the distribution of the population across the distributions of income, wealth and consumption are the same, one can summarize the demography of inequality—where various groups reside in the distribution—by considering just one measure. But they are not the same and therefore multiple dimensions need to be considered. The most obvious demographic where income, consumption, and wealth paint a different picture is age. As shown in Figure 2, all three measures display a hump-shaped age profile, with income rising until middle age and then falling, and consumption following a similar, although less pronounced, hump-shaped pattern. With these patterns, younger ages have consumption greater than annual income, which suggests that consumption is a better proxy for unobserved permanent income. Similarly, older ages consume more than their annual income, again suggesting that consumption is a preferred measure. While the peak for income and consumption is just before age 50, the peak for net worth occurs later in life. These patterns suggest that evaluating the differences by age for all three measures is critical in determining household’s economic well-being.

This paper examines the demography of the distribution of income, wealth, and consumption using data that obtains measures of all three measures for the same individuals. This paper develops a set of inequality measures that show increases in inequality during the 1989-2016 period, using the Survey of Consumer Finances (SCF). Our analysis addresses the demographic groups (e.g., by age and race) that are relatively worse off and whether the recent increase in inequality differentially affected different demographic groups. We also study how the results differ using income, consumption, and wealth and investigate further when the results differ depending on the resource measure. Each resource measure provides useful information by themselves and in combination with one another.
Methodology and Data

Given the different definitions of income and consumption in the literature, it is important to use a consistent theoretical framework to define these measures. The most comprehensive concept of income and consumption is drawn from the suggestions of Haig and Simons where income represents the capacity to consume without drawing down net worth. Economists have used the equation that income (Y) equals consumption (C) plus the change in net worth (ΔW) as the working definition of Haig-Simons income. No studies use this definition to the fullest extent because no household survey has the necessary variables to create a full measure of Haig-Simons income. Our research goal is to have measures of disposable income, consumption, and net worth that are accurate and as closely linked as possible given the data limitations to compare the demographic characteristics of household by resource measure.

No one survey has a long-time series of income, consumption, and wealth. The SCF has high quality measures of income and wealth but only limited consumption measures, while the Consumer Expenditure Survey has the highest quality measure of consumption. We impute consumption to the SCF using the CE Survey (Fisher, Johnson, Smeeding, and Thompson, 2017) to have income, consumption, and wealth for the same households. Below we describe the SCF along with a brief discussion of the imputed consumption data.

The Survey of Consumer Finances

We use data from the nine waves of the Federal Reserve Board’s triennial Survey of Consumer Finances (SCF) conducted between 1989 and 2016. Several features of the SCF make it appropriate for addressing the questions of interest. The survey collects very detailed information about households’ financial assets and liabilities, and has employed a consistent

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2 Smeeding and Thompson (2011) discuss the Haig-Simons income measure and construct a “More Complete Income” measure that attempts to account for the realized and unrealized returns on asset income.

3 The Panel Study of Income Dynamics also includes a comprehensive consumption measure, but only since 2005.
instrument and sample frame since 1989. As a survey of household finances and wealth, the SCF
includes some assets that are broadly shared across the population (bank savings accounts) as
well some that are held more narrowly and that are concentrated in the tails of the distribution
(direct ownership of bonds). To support estimates of a variety of financial characteristics as well
as the overall distribution of wealth, the survey employs a dual-frame sample design.

A national area-probability (AP) sample provides good coverage of widely spread
characteristics. The AP sample selects household units with equal probability from primary
sampling units that are selected through a multistage selection procedure, which includes
stratification by a variety of characteristics, and selection proportional to their population.
Because of the concentration of assets and non-random survey response by wealth, the SCF also
employs a list sample which is developed from statistical records derived from tax returns under
an agreement with the IRS. This list sample consists of households with a high probability of
having high net worth. The weighting design adjusts each sample separately, and final weights
are adjusted so that the combined sample is nationally representative of the population and
assets. These weights are used in all results.

The unit of analysis in the SCF is the “primary economic unit” (PEU) which refers to a
financially-dependent related (by blood, marriage, or unmarried partners) group living together.
This concept is distinct from either the household or family units employed by the Census
Bureau but is conceptually closer to the consumer unit used in the CE data.

The SCF contains high quality, detailed information on household assets as well as
income. The after-tax concept is reported income less taxes, a version of disposable personal
income. For consumption, we use the imputed consumption values from Fisher, Johnson,
Smeeding, and Thompson (2017), which imputes the components of consumption not already
asked in the SCF. Reported SCF consumption items account for approximately 40 percent of consumption. Fisher, et al. (2017) use a multiple imputation approach to consumption, following the SCF’s own multiple imputation approach for missing components of income. Fisher, et al. (2017) provide a detailed description of the quality of the imputed consumption data.

The Levels and Trends in Inequality of all Three Measures

To illustrate the issues that are concerning, we begin by exploring inequality in the United States. If the purpose is to argue that inequality in the United States is rising or not, all income measures regardless of source yield the same conclusion. If the question is by how much it is rising, that depends on the series used. Figure 3 (updated from Johnson and Smeeding, 2014) shows three measures of income inequality from 1979 through the most recent data available for each series, and measures of wealth and consumption inequality. The U.S. Census Bureau's money income measure includes cash incomes received on a regular basis (exclusive of certain money receipts such as capital gains) and before payments for personal income taxes, but gross of income transfers such as social security. This is the most commonly referenced income measure and the longest series, dating back to 1967 for households, with adjustments for household size. This measure suggests the income inequality Gini for the United States increased from .39 in 1979 to .44 in 2007 and .46 in 2016.

The other two income measures shown in Figure 3 are from the U.S. Congressional Budget Office (CBO, 2018). The CBO merges CPS household survey data with tax records, so it gives us a more accurate picture of incomes at the very top of the distribution. According to this measure, the Gini for market income increased from .47 in 1979 to .58 in 2007 and to .60 in 2014 (the latest available). However, the CBO measure of inequality after taxes and transfers

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4 All measures are adjusted for family size using equivalence scales.
5 This series is adjusted to remove the break in series between 1992-1993 due to survey changes (see Atkinson et al. (2011)).
increases from .35 in 1979 to .46 in 2007, with a fall after the recession and a recent rise. The CBO series with the more comprehensive income and an accurate top end suggests a steeper rise in inequality than all the other series. If the top incomes are driving inequality, then the CBO series is the one to use for comparisons since the early 1990s. Note that while this CBO suggests the importance of capital income and capital gains, it also makes the case for why wealth is an important course of growing inequality.

Figure 3 also shows consumption inequality from the CE. Between 1985 and 2006, it increases along with income inequality (increasing 11 percent), but consumption inequality fell during the Great Recession and has only started to increase again in the last few years, similar to the after tax and transfer income measure from CBO.

Finally, Figure 3 shows a Gini coefficient, from Fisher, et al. (2017), for wealth that shows much higher inequality than income, but a similar increasing trend. From 1989 to 2016, wealth inequality increased 9 percent, and has continued to increase after the recession.

In summary, all three measures of well-being matter, with wealth inequality higher than income inequality, which is higher than consumption inequality. Consumption and income inequality have diverged since 2007 (Fisher, Johnson, Smeeding, 2015), which may in large part be due to the housing market collapse in 2007. Consumption from assets rose in the early 2000s and then fell sharply after the financial crisis (Cooper and Dynan, 2013). The role of assets, debts, and changes in net worth are the key missing element that connects these elements to produce a complete picture of economic inequality. The rise, fall, and change in wealth (net worth) over the past 25 years has been instrumental in financing consumption generally, and schooling, health care, and retirement especially.
The Demographics

To get a better understanding of the dispersion of income, wealth and consumption, we examine the relative distributions for a variety of demographic groups. Similar to Mather and Jarosz (2014), we focus on age, family status, race/ethnicity and educational attainment. We first focus on the three age groups—children, adults, and the elderly. These groups are all of policy importance. Indeed public support for children vs the elderly may depend on which group is deemed better off, both today and over the past 27 years. Following Johnson, et al. (2005), we compare the distribution of the three major age groups relative to the distribution of the total population. We examine how adults (ages 18-64), the elderly (ages 65+) and children (ages 0-17) have fared relative to the total population by looking at the quintile distribution of each group relative to quintiles for the total population. We also examine differences in education, and race, along with differences by family type for children.

A comparison of one group with the total population is basically a zero-sum game, that is, if one group does relatively better than the general population, then another must do relatively worse. We create quintiles for the entire population using each economic variable -- income, wealth and consumption, and then examine the distribution of various groups within these same quintiles. As a result, for each period the quintile break points are the same for all individuals within a resource measure. So, for instance, if age and household type do not influence the household’s relative economic position, then we would expect that 20 percent of each age group or family type would reside in each quintile. If, however, certain age groups have fewer resources than other groups, they will be overrepresented in the bottom quintiles and underrepresented at the top. We start with a simple overall comparison for 2016. Then we turn to the trends in these and other relationships
In Figure 4, we document how the demography of income, consumption and wealth differ by age. It focuses on where adults, elderly, and children are located in each distribution (equivalence scale adjusted) in 2016, and all figures are weighted by people so that they represent the distribution of people in these age categories.

As a reminder, the goal is to understand how our perception of the well-being of a group changes when we use our three measures of well-being. The initial quick takeaway is that elderly in particular are located in very different parts of the distribution in terms of wealth and consumption compared to income. Older households are more likely to be in the bottom two quintiles of the income distribution than in the bottom two quintiles of consumption or wealth, suggesting that consumption from wealth is an important component of elderly well-being. While over 35 percent of elderly are in the bottom 40 percent of the income distribution, less than 18 percent of elderly are in the bottom 40 percent of the wealth distribution.

The position of children in the income distribution is more similar, but not identical to the consumption or the wealth rankings where they are over represented in the bottom 40 percent, leading perhaps to concerns about their upward mobility compared to the advantaged children who are located at the top of the wealth and consumption distribution. Children look worse off when using consumption and wealth than when using income alone.

This first snapshot is meant to be tantalizing—clearly exhibiting our primary finding that the measure of well-being matters, particularly for children and elderly. Has the elderly position changed over time? Why are children at the bottom and have they always been there? How does education race and family type figure in? The following figures show the trends in the percentage of people for each demographic that are in each quintile over the three years highlighted – 1989, 2001, and 2016. We chose these three periods because they correspond to
our first year of data for all three sources, a middle point in our inequality data, and our last year of data. The first year, 1989, serves as a baseline to compare to future years. Then 2001 is the approximate middle point for our inequality comparisons. We examine the whether the change in inequality affected each group differently. If the change in inequality affected each group equally, then we should expect to see little or no change in the representativeness of our demographic groups in different quintiles between 1989, 2001, and 2016.

**Trends in the Demography of Inequality by Age.** Here we focus on the trends and whether increasing inequality in the three measures affected one group differentially. Figure 5 shows that the elderly are improving their position in all three measures of well-being. A lower percentage of elderly are in the bottom of the income distribution in 2016 than in 1989, and more are in the top of the income distribution. This pattern also occurs in the consumption and wealth distributions. Elderly are increasingly able to finance their consumption in ways not available to families with children or younger adults, such as spending from accumulated assets. This suggests that accumulated wealth (financial, as well as housing wealth) is an important determinant of elderly consumption. The elderly’s relative position in the consumption distribution improved between 2001 and 2016 despite the fact that they likely rely on wealth more than adults and children for their consumption. The loss of wealth caused by the Great Recession would be expected to hurt the elderly more because the elderly rely on wealth for consumption more than younger ages, but the elderly’s relative position in the consumption distribution actually improved over this time. In a series of recent articles, Gustman, Steinmeier and Tabatabai (2010, 2012, 2014) show that the elderly and near elderly weathered the stock market meltdown and rebound quite nicely.
As these distributions are all relative to the overall population, they yield zero-sum games. Hence, the relative improvements to the elderly must come at the expense of the younger generations. Children and their parents are overrepresented in the bottom two quintiles of disposable income, wealth, and consumption. In fact, children’s relative position using consumption shows much larger percentages in the lower two quintiles than that using income. Over time, the relative position of all children has diminished, especially for those in the middle of the distribution.

Children are therefore worst off using all three resource measures. They are worst off using consumption, followed by net worth, and least badly off when ranked by income. Those who are often reminded of the relative and absolute income poverty of children, can take note that if we were using consumption or wealth to represent well-being, they would be even worse off. Indeed Yellen (2014, Figure 8) shows that the mean net worth of the top 5 percent of families with children is greater than $3.0 million in 2013, compared to $500 or less for the bottom half of all families with children. As we show below, children may be becoming worse off over time because of increases in percent of single mother and other household units as compared to children living with married parents.

It also must be noted that these changes over time are all relative to the overall distribution. We have not yet discussed whether their absolute position in the consumption, wealth, or income distributions has improved or deteriorated. The evidence on this matter does not seem encouraging for children’s incomes have flattened in the 2000’s below their 1999 peak. Indeed, low income children (in the bottom two quintiles) are now the majority of students in the U.S. public education system (Southern Education Foundation, 2015). The current evidence also suggests that wealth position of those under 35 compared to the rest of the population have
steadily declined since 1989, while those 35-44 have also suffered a lesser decline since 1989 (Wolff, 2014). Moreover, Yellen (2014) suggests a precipitous decline in mean wealth for the bottom half of the wealth distribution, which is clearly where most U.S. children and their parents can be increasingly found.

**The Role of Family Type.** When we disaggregate children by family type, we create three groups: children in married couple households, children in single parent households, and the residual category of other households. Those in married couple households are definitely better off than all other children, as expected. Those in married couple households are underrepresented in the bottom quintile of income, consumption, and wealth, and they overrepresented in the middle of all three distributions (Figure 6).

Children in single parent households are worst off by all three distributions (Figure 6), with dramatic overrepresentation in the bottom quintile. Though they do seem to be getting better since 1989, especially moving out of the bottom quintile of consumption and net worth, they don’t seem to move very far up the respective distribution. This likely reflects the generosity of the safety net for working families, especially in 2016 (Hardy, et al., 2018; Haveman, et al., 2015). Children in single parent units are consistently and deeply underrepresented in the two top rungs of the income, consumption, and net worth distributions across all three periods.

Children in other households, all those not a single parent or married couple such as those in multi-generation households or those where there is at least one non-parent adult in the household (such as cohabiting partners), are more like children in single parent households, but not as extreme in the tails. Children in other households appear better off using net worth and
income than consumption, possibly because of co-residence with a grandparent. They do not seem to be improving or worsening over time.

**The Roles of Race/Ethnicity and Education.** We present two additional ways to disaggregate our groups: race and educational status of the head. Non-Hispanic whites of all ages are consistently and increasingly overrepresented in the top quintiles of income, consumption, and wealth (Figure 7). There has been little change in the relative position of whites since 1989. In contrast, non-Hispanic blacks are worse off using all three resource measures. While they do seem to be improving slightly over time in all three measures, blacks are hugely overrepresented in the bottom two quintiles of each distribution, with over 50 percent of all blacks in each of the bottom two quintiles regardless of the measure employed. In short, no one measure shows a good outcome for black households. Hispanics are worse off using all three resource measures, but with the greatest improvement in their net worth situation by 2016.

The overall race and ethnicity picture here is troubling in one important respect. Perhaps most important, the racial and ethnic make-up of today’s children is changing rapidly. In 2011, for the first time, less than half of the children born in America were born to two white non-Hispanic partners. Hispanic and multiracial populations are expected to double in size over the next 40 years, as the result of immigration, higher birth rates among minority populations already here and more interracial marriages (Frey, 2014). While these changes will challenge the nation’s legal, political, and economic systems, they are already beginning to affect the youngest of the emerging majority who are just now entering our school systems and appear disadvantaged in terms of income, but also consumption and wealth. The majority growing ethnic and racial make-up of students in the US public education system are also likely driving the public school low income results mentioned above (Southern Education Foundation, 2015)
The combination of this explosion with the diminishing of the white non-Hispanic baby boomers will produce generational competition in future decades over both public resources and governmental priorities (see Brownstein and Taylor, 2013).

Perhaps the most interesting results are found when we rank according to educational attainment of the householder. High school dropouts are worst off using all three measures, and their position has become worse between 1989 and 2016 (Figure 8). Income may show high school dropouts in the worst position compared to consumption and wealth, but they are definitely concentrated at the bottom of all three distributions. The good news is that they are shrinking as a percent of the population.

High school graduates (terminal) are more likely to be in the three middle quintiles and less likely in the extremes, except for net worth (Figure 8). For net worth, high school grads are much less likely to be in the top quintile. Relative to a terminal high school degree, some college (but less than a four-year degree) gets you out of the bottom two quintiles to the middle of the distributions but not many are in the top quintile, and the percent in the top quintile is decreasing over time for all three measures. Those with some college are beginning to more closely mimic the distribution of high school graduates and less like college graduates.

Terminal college graduates are disproportionately found in the top quintiles and much less likely to be in the bottom three quintiles under any of the measures. While a college degree doesn’t quite guarantee a well-being floor, it is increasingly correlated with being in the top two quintiles in any of the distributions where we consistently found over 65 percent of all college graduates. The patterns here are the same for all three measures.

Having a graduate degree exacerbates the inequality even more than having a bachelor’s degree. Over 50 percent of those with a graduate degree are in the top quintile of income,
consumption, or wealth. Very few are in the bottom two quintiles of any distribution (Figure 8). These patterns are all consistent with a world where wages for most education groups, other than those with college and advanced degrees have declined since 1989 or at best have become flat since the Great Recession (Autor, 2014).

By evaluating income, consumption and wealth, we can be confident about the levels and trends in well-being when all three agree. As we have shown, there are certain populations that are economically vulnerable – children in single parent families, people without a high school degree, and blacks. Considering the relative consumption and wealth positions of blacks makes their economic status even worse than when we consider income alone. Ranking children family status we find even more skewed results; children who are being raised by single parents are predominately in the bottom 40 percent in each distribution. Perhaps the most differential rankings have to do with the educational status of adults’ high school dropouts are most heavily clustered in the bottom 40 percent of each distribution.

*Transition matrices*

Not only are children more likely to be in the bottom quintiles for income, consumption and wealth, they are also more likely to be in the bottom quintiles of the joint distributions. Figure 9 shows the transition matrices for income and consumption and income and wealth for children and the elderly. For example, these figures show the percentage of children in the bottom (or any) income quintile who are also in the bottom (or any) consumption quintile (on the left) and in the bottom (or any) wealth quintile (on the right). Over 57 percent of all children in the bottom income quintile are also in the bottom consumption quintile, and over 38 percent are in the bottom wealth quintile.
Elderly, on the other hand, are much less likely to be in the bottom two quintiles of both income and consumption or income and wealth. Only 22 percent are in the bottom 40 percent for both income and consumption, and only 13 percent for both income and wealth.

**Regression results**

As shown above, family status is an important factor in determining whether children or the elderly in the top or bottom quintiles. But family status is also correlated with other demographic characteristics that are correlated with being in the bottom quintiles, such as education and race. To determine the separate impacts of these demographic factors on the relative position of children and the elderly, we use regressions determining the probability of being in the bottom and top quintiles. The dependent variable equals one if the child (or elderly) is in the bottom quintile of a given distribution, such as income. The independent variables include the age of the household head, family size, race, education, and family status. We also include dummy variables indicating quintile of another resource measure. When presence in the bottom income quintile is the dependent variable, this means we have four dummy variables indicating position in the wealth quintile as independent variables.

These regressions confirm the graphical results above, but highlight the importance of marital status for children in the bottom quintile. Being in a single parent household has a large impact on the likelihood of children being in bottom quintile of each outcome; it is the single largest coefficient for consumption and second largest for income and wealth (Table 1). This result does not mean that other demographic characteristics are not important. Having a household head that did not complete high school is the largest coefficient in the income regression, and black household head is the largest coefficient in the wealth regression.
At the top of the distribution, college graduation of household head has the largest marginal impact for children being in the top quintile of income, consumption, and wealth.

For the elderly, education is also an important correlate with being in the bottom quintile of income, consumption, and wealth (Table 2). Having a household head without a high school degree has the largest marginal impact on being in the bottom quintile of income, and the second-largest impact for consumption and wealth. Having an unmarried family head also has a large impact on being in the bottom quintile of income, while the race of the household head is particularly important for the likelihood of being in the bottom quintiles of consumption and wealth. Being a college graduate has the largest positive impact on being in the top quintiles of income, consumption, and wealth.

Conclusions

Inequality differentially affects different groups and the index by which we view inequality can matter quite a lot. Children and the elderly are worse off than non-elderly adults in income terms, but only children and their parents are increasingly and disproportionately found in the lower reaches of the wealth and consumption distributions. And sometimes all lenses show the same picture, as children in single parent households, blacks, and those with a high school education are worse off in terms of all resource measures - income, wealth or consumption.

There is a definite age pattern as well. The relative positions of children and elderly can and do differ when using consumption or net worth instead of income. For example, the elderly are in a worse relative position than children using income, but the elderly are in a much better relative position than children using consumption and especially wealth. Even starker, children are worse off using consumption than they are using income, while the elderly are considerably
better off using consumption than income. Intergenerational patterns of asset transfer in vivos, inheritances, and bequests reinforce these patterns for the children and grandchildren of the high wealth elderly. Thus, the relatively poor position of the elderly in the income distribution is not as concerning because they are relatively well off in the consumption and wealth distributions.

Income inequality and consumption inequality increased between 1989 and 2010, and wealth inequality from 2000-2010 and beyond. These changes in inequality have differentially affected some groups. The consumption of blacks and children in single parent units has improved marginally relative to whites over this period, although more than 60 percent of blacks and 65 percent of children in single parent families are still in the bottom two consumption quintiles. The relative position of children in married households using income, wealth or consumption has improved marginally as well, even if this is the best off group of children that we show. Because these improvements must be zero-sum when we are looking at relative changes, not absolute changes, the other groups are doing worse. The relative position of adults using consumption has worsened over the last 25 years.

References


Figure 1: Consumption to Income and Wealth to Income Ratios by Percentile of Income, 2016

Source: Survey of Consumer Finances
Figure 2: Median Income, Consumption, and Wealth by Age, 2016

Source: Survey of Consumer Finances
Figure 3: Gini coefficients for various measures, 1989-2016

Source: Updated from Johnson and Smeeding (2014)
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Figure 5: Children, Elderly and Adults: Ranked by Income, Consumption and Net Worth: 1989, 2001, and 2016
Figure 5 continued
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Figure 6 continued

[Graph showing Children in Other Households across years for Income, Consumption, and Net Worth]
Figure 7: Racial and Ethnic Groups Ranked by Income, Consumption and Net Worth: 1989, 2001, and 2016.
Figure 7 continued
Figure 8: Education Groups Ranked by Income, Consumption and Net Worth 1989-2016
Figure 8 continued
Figure 8 continued
Figure 9: Percentage of Children and Elderly by Income and Consumption quintiles, and Income and Wealth Quintiles, 2016
Table 1: Regression results for households with children

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<th>Household in Bottom Quintile</th>
<th>Household in Top Quintile</th>
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<td>Some College</td>
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<td>-0.0642</td>
</tr>
<tr>
<td>College-plus</td>
<td>-0.0627</td>
<td>-0.106</td>
</tr>
<tr>
<td>Not married with children</td>
<td>0.123</td>
<td>0.118</td>
</tr>
<tr>
<td>Quintile (of income or wealth)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second quintile</td>
<td>-0.0770</td>
<td>-0.271</td>
</tr>
<tr>
<td>Third quintile</td>
<td>-0.124</td>
<td>-0.463</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>-0.156</td>
<td>-0.514</td>
</tr>
<tr>
<td>Fifth quintile</td>
<td>-0.138</td>
<td>-0.513</td>
</tr>
<tr>
<td>Constant</td>
<td>0.0814</td>
<td>0.562</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.146</td>
<td>0.341</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses. Sample size is 10,350. The dependent variable equals one if the household is in the given quintile of the given distribution. For example, the dependent variable in column 1 equals one if the household is in the bottom quintile of the income distribution.
### Table 2: Regression results for households headed by someone 65 years or older

<table>
<thead>
<tr>
<th></th>
<th>(1) Household in Bottom Quintile</th>
<th>(2) Household in Top Quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income</td>
<td>Consumption</td>
</tr>
<tr>
<td>Age of Household Head</td>
<td>0.00313</td>
<td>-0.000278</td>
</tr>
<tr>
<td></td>
<td>(0.000533)</td>
<td>(0.000427)</td>
</tr>
<tr>
<td>Family Size</td>
<td>-0.0985</td>
<td>0.0116</td>
</tr>
<tr>
<td></td>
<td>(0.00446)</td>
<td>(0.00352)</td>
</tr>
<tr>
<td>Race/Ethnicity of Household Head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.00558</td>
<td>0.136</td>
</tr>
<tr>
<td></td>
<td>(0.0140)</td>
<td>(0.0111)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.0759</td>
<td>-0.00555</td>
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<tr>
<td></td>
<td>(0.0185)</td>
<td>(0.0145)</td>
</tr>
<tr>
<td>Other race</td>
<td>0.118</td>
<td>-0.0233</td>
</tr>
<tr>
<td></td>
<td>(0.0250)</td>
<td>(0.0201)</td>
</tr>
<tr>
<td>Education of Household Head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>0.185</td>
<td>0.0866</td>
</tr>
<tr>
<td></td>
<td>(0.0131)</td>
<td>(0.0106)</td>
</tr>
<tr>
<td>Some College</td>
<td>-0.0377</td>
<td>-0.0330</td>
</tr>
<tr>
<td></td>
<td>(0.0137)</td>
<td>(0.0109)</td>
</tr>
<tr>
<td>College-plus</td>
<td>-0.135</td>
<td>-0.0493</td>
</tr>
<tr>
<td></td>
<td>(0.0107)</td>
<td>(0.00899)</td>
</tr>
<tr>
<td>Household head not married with children</td>
<td>0.146</td>
<td>0.0241</td>
</tr>
<tr>
<td></td>
<td>(0.0198)</td>
<td>(0.0160)</td>
</tr>
<tr>
<td>Quintile (of income or wealth)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second quintile</td>
<td>-0.0968</td>
<td>-0.143</td>
</tr>
<tr>
<td></td>
<td>(0.0206)</td>
<td>(0.0115)</td>
</tr>
<tr>
<td>Third quintile</td>
<td>-0.0874</td>
<td>-0.252</td>
</tr>
<tr>
<td></td>
<td>(0.0185)</td>
<td>(0.0114)</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>-0.268</td>
<td>-0.333</td>
</tr>
<tr>
<td></td>
<td>(0.0176)</td>
<td>(0.0116)</td>
</tr>
<tr>
<td>Fifth quintile</td>
<td>-0.420</td>
<td>-0.326</td>
</tr>
<tr>
<td></td>
<td>(0.0176)</td>
<td>(0.0122)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.524</td>
<td>0.353</td>
</tr>
<tr>
<td></td>
<td>(0.0446)</td>
<td>(0.0357)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.285</td>
<td>0.226</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses. Sample size is 8,310. The dependent variable equals one if the household is in the given quintile of the given distribution.
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