

How Wealth Inequality Shapes Our Future



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Liz, Mary, and Howard are three teenagers in the 1980s.¹ Although unrelated, their families have much in common: stable two-parent households, at least one parent completed high school (though none of them went to college), and all three are white. They differ in one important aspect: their parents command quite different levels of wealth (here measured as net worth, that is, the total sum of financial and real assets minus debt). Liz's parents own less than \$700 (inflation adjusted to 2013 dollars), meaning that Liz grows up at the bottom of the wealth distribution. Still, she is far from living in poverty thanks to her parents' annual income of about \$50,000. Mary's parents have a somewhat higher income, about \$70,000, but also markedly more wealth than Liz's parents: their net worth of roughly \$60,000 puts them at about the national median of the time. Also unlike Liz's parents, they are homeowners. Howard is lucky enough to grow up in affluence. Not in terms of income, given that his

parents have a household income of only about \$40,000, but they have considerable wealth. With a net worth of nearly a quarter million dollars, Howard's parents are in the top 20 percent of wealth holders. They, too, own their home.

Liz (Low parental wealth), Mary (Middle parental wealth), and Howard (High parental wealth) graduate high school in the late 1980s and establish their own households in the early 1990s. They are off to distinct life paths. Liz marries, gives birth to a son, and does not work outside the home for several years. She takes up a job as a nursing aid in the early 2000s and stays in this occupation for a few more years. She never goes back to school. Liz and her husband manage to accumulate some wealth, but lose it during the two most recent recessions. Because they lost most of their financial resources during the dot-com bubble of 2001, their debt is larger than their assets. They recover to about \$20,000 of net worth in

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1. The individuals mentioned here represent clusters of individuals drawn from the Panel Study of Income Dynamics (PSID) and its Child Development Supplement to represent life stories that are consistent with results from quantitative analyses. Although we base our description of these life stories on publicly available data, to avoid data disclosure the stories do not represent specific PSID respondents.

2007 only to lose it again in the aftermath of the Great Recession. By 2013 they are in their mid-forties, their son is beginning to ask them whether he can afford college, and their net worth is negative \$5,000. Complicating their lives further, they lost their house and, for the first time as an adult, Liz becomes a renter. In terms of her relative position among American families, she is back to where her parents were three decades earlier: among the bottom 15 percent of families in terms of wealth.

Mary attends a one-year educational program after high school, gets married, and becomes a technician in a laboratory, an occupation she works in for the next two decades. She earns a decent wage—her average annual earnings over the last five years are about \$45,000—and thanks to her husband's salary family income is nearly \$170,000 in 2013. They have been homeowners ever since they moved in together and their home's value has appreciated continuously over the years, though it has plateaued since the Great Recession at about \$200,000. Although they took out a second mortgage on the house in 2009, their accumulated home equity still accounts for more than half of their total net worth in 2013 (\$60,000). Like her parents in the 1980s, Mary has arrived at a typical level of family wealth, about the median.

Finally, Howard goes to college straight from high school. He earns a bachelor's degree and begins a career as a teacher. He later earns a master's degree, which gives his earnings a considerable boost; they average \$85,000 over the last five years. His family income in 2013 is still below Mary's, however. The house he owns lost some value during the Great Recession and is now valued at about \$250,000—not much more than Mary's. However, unlike Mary, Howard has accumulated more home equity (about \$80,000). Even more important, he holds several other highly valued assets: about \$30,000 in financial assets, about \$60,000 in other real assets, and about \$100,000 as an individual retirement account (IRA). Given his resulting total net worth of close to \$300,000, Howard has surpassed his parents' wealth level in real terms and is just within the top quarter of wealthiest Americans in 2013.

Liz, Mary, and Howard thus all end up about where their parents were when it comes to their rank in the wealth distribution. However, although their relative position in the wealth structure is largely unchanged, the wealth gap between the three has widened compared to that between their parents. Especially the distance between Howard and the other two has increased, reflecting the growing polarization of the wealth distribution. That Howard commands more wealth than his parents but is still lower in the overall wealth structure than his parents were shows that the wealthiest—above Howard's level—have been pulling away. The polarization of the wealth distribution is also visible in comparing the wealth position of Liz with that of her parents. Both end up similarly situated in the wealth distribution, but whereas Liz's parents held a few hundred dollars in assets, she is in net debt.

WEALTH TRANSMISSION AND RACE

Like Liz, Mary, and Howard, Lakesha and Mike are teenagers in the 1980s and come from households with a married mother and father who have high school degrees. But Lakesha and Mike are black.

Lakesha grows up at the bottom of the wealth distribution, her parents owning less than \$500, putting them—like Liz's parents—into the bottom 15 percent. Lakesha's family income is lower than that of Liz's—\$35,000 versus about \$50,000. Still, Lakesha manages to go to college. However, she attends just three years and never receives a bachelor's degree. Her occupational path is less stable than those described so far but marked by a relatively linear progression from clerical work in sales and bookkeeping to jobs with supervisory function. Lakesha marries in her early twenties. Her marriage, which produces two children, lasts only a few years. As a single working mother, she purchases a home in the late 1990s. Her home equity grows continuously—though her home value does not rise over the years. During the Great Recession, Lakesha loses her home. By 2013, her net worth is negative: her net debt is more than \$30,000, mostly accounted for by her remaining student debt, which has been growing—not shrinking—in

recent years. In the end, despite some postsecondary education, a long-term occupational career, and home ownership without a supporting spouse, Lakesha has fallen further in the wealth distribution, to the bottom 10 percent.

Joining her at the bottom, with about \$15,000 in net debt in 2013, is Mike. His wealth position, however, implies considerable intergenerational downward mobility. In the 1980s, his parents had about \$80,000 in net worth, which put them just above the national median. What happened? Mike had one year of education after high school. Though he held several occupations, including as a construction worker and a delivery man, Mike was employed continuously—until 2013, when he stopped working. The home Mike owns in 2013 is worth about \$150,000, just about two-thirds of its value before the collapse of the housing market in 2007. This sharp decrease in his home value leaves him with negative home equity. Owing \$20,000 more in mortgage than the home is worth, Mike is underwater. Whether he will ever emerge seems unlikely: he has no job, he is saddled with additional debt that includes about \$10,000 in credit card debt, and his car is his sole notable asset.

THE FAR REACH OF WEALTH INEQUALITY

In the 1980s, Lakesha and Howard grow up at different ends of the wealth distribution—and that is where they also end up in 2013. The intergenerational persistence in family wealth that Lakesha and Howard have, however, extends further: into both the future and the past.

Lakesha has two children. Her first child struggles in school, is held back early on, and has a number of behavioral problems. In contrast, Howard's son shows no behavioral problems and scores at the top of the distribution in a standardized cognitive assessment. Lakesha's daughter scores in the bottom 20 percent of all children nationally.

Remember, Lakesha and Howard come from in many respects similar households: intact families, high school-educated parents, comparable household income. But Howard's family had an order of magnitude more wealth than Lakesha's, more than five hundred times

the net worth. Given that Lakesha and Howard were both born in the late 1960s, their parents can very much be counted as part of the civil rights generation. Lakesha's parents may have marched against racial discrimination, for instance, as practiced through residential redlining as one overt mechanism of excluding blacks from asset accumulation. Although the civil rights battle celebrated many victories, that three generations later we observe engrained disadvantage for black children—their grandchildren—should remind us of the long reach of wealth inequality. The effects of discriminatory restrictions to build wealth for Lakesha's parents live on in their granddaughter.

BACKGROUND AND GOALS OF THIS ISSUE

The experiences of Lakesha, Liz, Mike, Mary, and Howard—and the papers in this volume—illustrate that wealth and wealth inequality are intertwined with almost all aspects of social and economic life: child development, education and human capital, success in the labor market, marriage and divorce, health, consumption, retirement decisions and policies, macroeconomic conditions, and historical events. One goal of this volume is to address many of these dimensions together in one publication to underscore the broad set of causes and consequences of wealth inequality. To that end, the authors bring perspectives from a range of academic disciplines, including economics, sociology, political science, history, demography, and health sciences.

The ten manuscripts were identified through an open competition sponsored by the Russell Sage Foundation. Proposals were reviewed and each manuscript went through the normal peer review process. Although all of the ten articles are described here, the goal of this introduction is not to simply summarize the findings of those manuscripts. Instead, it is intended as a broad and hopefully accessible overview of relevant research and provides as well some original analyses to describe why wealth inequality is a central factor influencing the nation's economic, social, and political outcomes and processes and why it therefore deserves the increased attention of scholars, policymakers, and the public.

WEALTH INEQUALITY AS AN ECONOMIC AND SOCIAL CONCERN

Distribution of Opportunity

Equal opportunity is the quintessential American ideal (Reeves 2015). As a principle, it is engrained in our attitudes and expectations but at the same time is squarely at odds with life in America today (Hochschild 1995). Lakesha, Liz, Mike, Mary, and Howard did not choose their parents. But parents' resources are a crucial factor in determining children's success in many spheres of life. Parents' resources heavily influence their children's health, cognitive and academic achievement, and socio-emotional development (Bradley and Corwyn 2004), factors that in turn heavily influence children's well-being throughout their lives. Here we focus on two channels through which the good fortune of being born into affluence determines success in life: human capital accumulation and direct cash or in-kind transfers.

Human Capital

Human capital, and education in particular, translates into more favorable outcomes in the labor market, higher income, greater wealth, and a longer life. One more year of schooling leads to roughly 10 percent higher earnings each year (Card 1999). The wealth of college graduates is three times higher than that of high school graduates (Bricker et al. 2015). Life expectancy is six years higher for college graduates than for high school graduates (Rostron, Boies, and Arias 2010) and this gap is increasing (Montez and Zajacova 2013; Olshansky et al. 2012).

Wealth allows parents to purchase a variety of resources that enhance human capital development: high-quality day care, books and learning tools at home, enrichment activities, and access to better elementary and secondary schools (Duncan and Murnane 2011). The evidence is perhaps most alarming at the postsecondary level. College graduation is strongly related to parental wealth (Conley 2001). The college graduation rates of young adults whose parents are in the top 20 percent of the wealth distribution are more than 40 percentage points higher than among those whose parents are in the bottom 20 percent, and this gap has

grown substantially across recent cohorts (Pfeffer 2016).

Elite private colleges are responding to these disparities by increasing need-based grants, providing financial assistance to fully meet the federally determined financial need amount. This is an important development allowing talented youth greater access to the most prestigious educational institutions. However, these elite colleges enroll a very small share of college students in the United States, suggesting that this effort will have negligible effects on disparities at the national level. Many middle-class families who do not qualify for substantial need-based financial assistance may find the price tag too high.

The quantity and quality of formal education is important, but formal education is just one form of human capital. Some individuals are better than others at accumulating assets thanks to better knowledge of and skills in managing their finances (Lusardi, Michaud, and Mitchell 2013). Preferences for risk-taking and saving versus spending may also matter. Parents who have these valuable skills and qualities likely pass them on to their children (Dohmen et al. 2012), although evidence suggests that the intergenerational transmission of risk preferences per se does not account for much of the intergenerational correlation in wealth (Charles and Hurst 2003). Even if it did, an argument could be made that a strong intergenerational transmission of these preferences and skills also goes against common understandings of equality of opportunity: if Liz's failure to accumulate wealth were caused by lack of foresight, why should we consider that an outcome arising from individual shortcoming if foresight is fostered in family lineages with wealth (Roemer 1998; Dworkin 2000; England 2016)?

Direct Economic Assistance

In many families, assistance from parents continues through young adulthood and beyond. Between the ages of eighteen and thirty, the economic transfers received from parents and family—including the value of housing and food, assistance with college, and direct financial transfers—averages \$50,000 in 2015 dollars across all young adults, including those who

received no such transfers (Schoeni and Ross 2005). Children lucky enough to be born into more affluent families receive substantially more assistance. Young adults whose parents have income that puts them in the top quarter of parents receive \$95,000, and those in the bottom quarter receive \$31,000. Emily Rauscher (this issue) finds that transfers received from parents for schooling are more than eleven times larger among children whose parents are in the top quarter of the wealth distribution compared to children from the bottom half. She shows that financial transfers from parents for their children's education have the intended positive influence on their attainment outcomes. However, these transfers have not only become more common over time but also increasingly connected to parental wealth, tightening the link between wealth inequality and inequalities in opportunities.

Government transfers and programs offset, to some degree, the large disparity in investment in children across families by providing education and other resources to children whose parents earn lower incomes. However, it is unlikely—especially in the United States, where public support for such investments appears to be relatively low—that public resources will ever come close to making up for the private investments made by families who have the means. For example, Head Start provides an important early investment for disadvantaged children, but children from more affluent families can afford even higher quality developmental opportunities.

Individuals save today so they have the assets to weather periods of unemployment and make ends meet when faced with unfortunate events such as an expensive health procedure or treatment, divorce, or a vehicle or home repair. Such savings are an important buffer to these life events (see Thompson and Conley, this issue). Young adults with wealthy parents may use their parents as a source of insurance when they experience such events, reducing the negative consequences of life's challenges. Parental assets may also enhance children's economic position even if the parents never actually give them a dime. Just knowing that their parents are there for them in case they run into financial challenges may encourage

young adults to pursue riskier, high-payoff educational pathways and careers (Shapiro 2004; Destin and Oyserman 2009; Pfeffer 2011; Pfeffer and Hällsten 2012). Furthermore, the psychological stress of making such decisions is reduced if young adults know they will be bailed out if they need to be.

Intergenerational Transmission

Parental wealth heavily influences children's development and success through these and other channels, leading to substantial intergenerational transmission of wealth status (Charles and Hurst 2003; Pfeffer and Killewald, forthcoming). Among adult children in the United States whose parents were in the top 20 percent in terms of wealth holdings, 44 percent ended up in the top 20 percent in their own generation's wealth distribution, and nearly 70 percent ended in the top 40 percent; only 6 percent fell to the bottom 20 percent. At the other end of the economic ladder, among adult children whose parents were in the bottom 20 percent, 35 percent stayed there, and fewer than 6 percent made it to the top 20 percent within their generation (Pfeffer and Killewald, forthcoming). Put differently, the odds of becoming part of the wealthiest 20 percent of Americans are more than 700 percent greater if your parents were in the top 20 percent instead of the bottom. The five individuals described in the beginning of this introduction, who ended up in quite similar places as their parents in the wealth distribution, thus represent quite typical biographies marked by the persistence of wealth positions across generations.

Many Challenges, Not Just for the Next Generation

Unequal Political Representation

Our democratic principle of equal representation is at risk when increased concentration of wealth is combined with laws that allow individuals to make unlimited political contributions. Through February 2016, super-PACs had raised \$607 million. 112 donors gave at least \$1 million, and their donations accounted for 64 percent of all contributions (Narayanswamy, Williams, and Gold 2016).

Research indicates that U.S. senators' voting

decisions are influenced by the preferences of their constituents, but only their more affluent constituents. Preferences of the least affluent one-third have no influence on their representative's voting (Bartels 2010). The wealthiest Americans—roughly the top 1 percent—are very active in politics and their views of taxation, regulation, and social welfare are much more conservative than the public as a whole (Page, Bartels, and Seawright 2013). Concentrated political power driven by concentrated control of economic resources can lead to policies that protect and enhance the position of those with power, arguably leading to even greater concentration and inefficient policies targeted to benefit a narrow few (Acemoglu and Robinson 2012; Stiglitz 2012). This type of inequality in turn increases the likelihood of political upheaval and regime change (Boix 2003).

The 2015 Noble Laureate in Economics stated it clearly:

If democracy becomes plutocracy, those who are not rich are effectively disenfranchised. Justice Louis Brandeis famously argued that the United States could have either democracy or wealth concentrated in the hands of a few, but not both. The political equality that is required by democracy is always under threat from economic inequality, and the more extreme the economic inequality, the greater the threat to democracy. If democracy is compromised, there is a direct loss of well-being because people have good reason to value their ability to participate in political life, and the loss of that ability is instrumental in threatening other harm. The very wealthy have little need for state-provided education or healthcare; they have every reason to support cuts in Medicare and to fight any increase in taxes. They have even less reason to support health insurance for everyone, or to worry about the low quality of public schools that plagues much of the country. They will oppose any regulation of banks that restricts profits, even if it helps those who cannot cover their mortgages or protect the

public against predatory lending, deceptive advertising, or even the repetition of the financial crash. To worry about the consequences of extreme inequality has nothing to do with being envious of the rich and everything to do with the fear that rapidly growing top incomes are a threat to the well-being of everyone else. (Deaton 2015, 213)

Economic Growth

The primary argument in favor of inequality is that it leads to innovation, creativity, and productivity because it provides financial reward for such behavior, which in turn leads to greater macroeconomic growth. For many, this argument aligns strongly with their priors and personal experiences. Indeed, labor economists find that financial incentives do change behavior of employees (for recent reviews, see Oyer and Schaefer 2011; Bloom and Van Reenen 2011).

Skeptics question whether monetary rewards are the only or even the most important factor determining productivity and innovation and conclude that the effects of financial incentives depend on the context (Heyman and Ariely 2004) and can have important side effects such as decreased motivation (Festinger and Carlsmith 1959), change in feelings of competence into feelings of being controlled (Deci and Ryan 1985), and various productivity-reducing distortions (Bloom and Van Reenen 2011).

Furthermore, skeptics question just how much inequality is needed to generate innovation. Innovation may in fact be stymied by large inequality if only those at the top of the ladder can afford the ability to be creative. Alex Bell and his colleagues show that likely innovators—namely, those filing for new patents—overwhelmingly come from the upper end of the parental income distribution and that those with similar skills but from less advantaged backgrounds are far less likely to end up being inventors (2016).

At the macro level, empirical support for the claim that large inequalities produce better economic outcomes is lacking.² Economic

2. Jared Bernstein (2013) provides a thorough, accessible review of the ways in which inequality can affect economic growth.

growth is not higher in more unequal societies (Aghion, Caroli, and García-Peñalosa 1999; Benabou 1996). In fact, the empirical evidence indicates that more unequal societies tend to show lower economic growth than more equal societies (Aghion, Caroli, and García-Peñalosa 1999; Kenworthy 2004; Ostry, Berg, and Tsangarides 2014). Moreover, more redistributive policies have, if anything, beneficial effects on macroeconomic growth (Easterly and Rebelo 1993; Kenworthy 2004) unless redistribution is extreme (Ostry, Berg, and Tsangarides 2014).

Economic growth is driven by strong consumer demand for goods and services (Schwartz, this issue). The fraction of each additional dollar of income used to purchase goods and services is higher for low-income and low-wealth families, particularly families with few liquid assets and living “hand-to-mouth” (Jappelli and Pistaferri 2014; Kaplan, Violante, and Weidner 2014; Johnson, Parker, and Souleles 2004) because any additional income is likely to be spent if families are living on the edge. Families with substantial liquid assets and not living hand to mouth, in contrast, have access to financial resources at relatively low cost, so fluctuations in income are less likely to alter consumption. This pattern explains why tax cuts and increased public spending designed to stimulate aggregate demand would be more efficient if targeted toward less-affluent families and, perhaps, families living hand to mouth even if they have significant nonliquid assets.

It has also been argued that public angst over inequality will lead to inefficient economic policies such as “trade protections, restrictions on immigration, union protections, other anti-competitive measures, and government subsidies” (Posner 2013). In this view, greater redistribution is warranted to avoid these and other “costs” of inequality.

Earlier we argued that the unequal distribution of wealth can inhibit investment in education, which in turn reduces wages and earnings of these workers. But macroeconomic growth also benefits from a highly educated workforce (see, for example, Barro 2000); that my neighbor cannot make optimal investments in edu-

cation harms not only her, but also me, the entire neighborhood, and beyond (Putnam 2015).

The contrary case for the beneficial effects of inequality on economic outcomes has mostly been made in reference to labor market earnings and wages: inequality serves as a motivator to achieve a higher salary and thus makes everybody work harder. In this perspective, the attainment of wealth may serve as an equally effective motivator. Who does not want the big house and the big savings account? Yet, when considering the attainment of wealth, the main flaw of the functional notion of inequality becomes even more readily apparent (see also Tumin 1953): inequality in wealth has the best chance to serve as an incentive for hard and ingenious work if the only way to attain great wealth was in fact hard and ingenious work. That wealth can also be gained through inheritance or direct transfers from parents and thus ultimately through the lottery of birth should thus be concerning even from this perspective (Beckert 2007; Gates and Collins 2004). The normatively problematic and economically damaging link between inequality in wealth and the opportunity to attain it should thus be met by critique across the political spectrum. Finally, a defense of large inequalities in wealth has to grapple with the question of whether the current distribution indeed reflects the presumed ideal degree of inequality. That seems unlikely given that today’s wealth inequality lies far beyond that observed for many decades—as we show in the next section—and that those prior decades with lower wealth inequality were marked by generally greater macroeconomic health and growth.

WEALTH INEQUALITY TODAY AND IN THE PAST

What Is Wealth?

So far, we have defined wealth very briefly as net worth, that is, the sum of all assets less all liabilities. Assets include financial assets, which are typically relatively easy to cash in, and nonfinancial assets. The most commonly held financial asset is a transaction account,

Table 1. Net Worth Distribution

	1989	1992	1995	1998	2001	2004	2007	2010	2013
Median	85.1	80.8	87.7	102.5	113.9	114.8	135.9	82.5	81.4
Mean	342.3	303.9	323.5	405.5	522.1	553.9	625.2	530.4	528.4
% with 0 or less	11.4%	10.3%	9.7%	10.4%	9.5%	8.9%	9.7%	13.1%	12.9%
Share of household wealth owned by									
Top 1%	29.9%	30.1%	34.8%	33.8%	32.1%	33.2%	33.6%	34.1%	35.5%
Top 5%	54.2%	54.4%	56.1%	57.2%	57.4%	57.4%	60.3%	60.9%	62.9%
Top 10%	67.0%	66.9%	67.9%	68.6%	69.6%	69.4%	71.4%	74.4%	75.0%
Top 20%	80.7%	80.1%	80.5%	81.4%	82.5%	82.9%	83.4%	86.7%	87.0%
Bottom 50%	3.0%	3.3%	3.6%	3.0%	2.8%	2.6%	2.5%	1.2%	1.1%
Gini coefficient	0.790	0.786	0.791	0.800	0.805	0.809	0.816	0.846	0.850
Ratio of percentiles									
50/25	8.3	6.8	5.8	7.2	6.8	7.0	8.6	9.3	9.3
75/50	3.1	3.0	2.8	2.9	3.3	3.5	3.1	3.9	3.9
95/75	4.7	4.5	4.3	4.3	4.6	4.3	5.1	6.2	5.9
95/50	14.7	13.4	11.8	12.6	15.2	15.4	15.7	24.2	23.0
No. of observations	3,143	3,906	4,299	4,305	4,442	4,519	4,417	6,482	6,015

Source: Authors' tabulations using the SCF (Survey of Consumer Finances 2013).

Note: All dollar values in thousands of 2013 dollars.

such as a checking or savings account. Other financial assets include certificates of deposit, savings bonds, bonds, stocks, pooled investment funds, cash value of life insurance, and retirement accounts. Retirement savings, which half of households hold (Bricker et al. 2015), include IRAs, Keogh accounts, and many employer-sponsored accounts such as 401(k) and 403(b). Most measures of wealth, including ours, do not include defined-benefit retirement benefits, that is, benefits paid out on a monthly basis with a fixed formula when workers retire (Devlin-Foltz and Sabelhaus 2015; Devlin-Foltz, Henriques, and Sabelhaus, this issue). Nor do they include the present value of the expected stream of Social Security benefits that one would receive when retired. Non-financial assets include residential property, nonresidential property, vehicles, business equity, and other assorted assets. Any payment still owed on those assets, such as mortgages and car loans, is subtracted from the market value to obtain the net value. Finally, aggregate net worth also takes into account any other

(noncollateralized) debt, such as credit card debt, student loans, medical debt, and other financial obligations.

How Unequal Is the Wealth Distribution?

The gold standard when it comes to the measurement of household wealth is the Survey of Consumer Finances (SCF), a representative household survey typically conducted every three years. The most recent estimates are for 2013, which we report in table 1, along with estimates for every third year since 1989.

Much of the recent focus on wealth inequality has been on the top 1 percent, who owned 35.5 percent of all American household wealth in 2013. Wealth is further concentrated even within the top 1 percent. Estimates vary across data sources, but somewhere between 14 percent and 22 percent of household wealth was held by the 0.1 percent wealthiest households in 2012–2013 (Bricker et al. 2015; Saez and Zucman 2014). Forbes reports 536 billionaires in the United States in 2015. The richest twenty have more wealth than the combined wealth

of half of all Americans, some fifty-seven million households (Collins and Hoxie 2015).

Still, a focus solely on the very top of the wealth distribution misses the tremendous and growing disparities throughout the distribution. Median wealth in 2013 was \$81,400, and 12.9 percent of households had no wealth or were in debt. Twenty-five percent of households had less than \$8,800 and another 25 percent had at least \$316,800. Ten percent had at least \$942,200 and 5 percent at least \$1.87 million. Put a different way, a family at the 95th percentile of the wealth distribution had twenty-three times the wealth of a family at the middle, who in turn had more than nine times that of families at the 25th percentile.

Among families with modest wealth, most is not liquid but instead held as equity in their home. Many families live on the edge, with little savings to accommodate unexpected health expenditures, divorce, or unemployment. Even taking unemployment benefits into account, many families would not be able to maintain their level of consumption for more than a few months if they lost their job (Pew Charitable Trusts 2015a, 2015b) and just about half of all families report that they would be able to cover an unexpected expense of just \$400 without selling something or borrowing money (Board of Governors 2015).

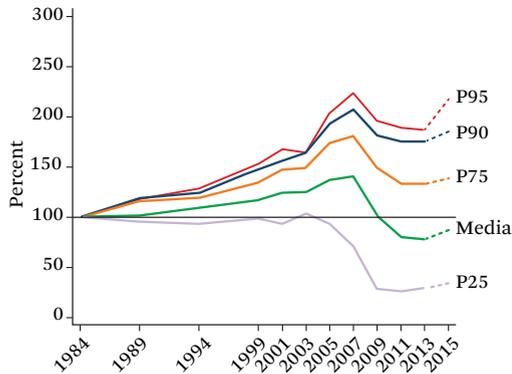
Wealth differs substantially across socio-demographic groups. Perhaps most troubling is the gap between racial and ethnic groups (Oliver and Shapiro 2006), differences that Thomas Shapiro and his colleagues at Brandeis University's Institute on Assets and Social Policy have studied extensively. The most recent estimates indicate large and growing gaps between whites and blacks and Hispanics. Average net worth among whites in 2013 was \$687,701; the totals for blacks and Hispanics were \$95,036 and \$112,116, respectively. That is, white families have 7.2 times more wealth than black families and 6.1 times more wealth than Hispanic families. These gaps increased substantially in the wake of the Great Recession, with gaps in 2007 of 5.0 for blacks and 3.6 for Hispanics (Thompson and Suarez 2015; see also Sykes and Maroto in this issue). Given that housing equity is the largest component of wealth among lower and middle-class families,

Alexandra Killewald and Brielle Bryan (this issue) estimate the causal effects of home equity on wealth accumulation with a focus on how this relationship differs by race and ethnicity. They find large racial differences in the wealth returns to home ownership—with the yearly return to wealth for African Americans and Hispanics being just 48 percent and 62 percent of the return for whites, respectively. That one of the main vehicles of asset accumulation in the United States is not only less accessible but also less effective for minority groups is one important explanation for the continued racial disparities in wealth.

Racial gaps in wealth are also tied to racial differences in damaging life events such as incarceration and health shocks. Bryan Sykes and Michelle Maroto (this issue) show that the incarceration of a family member reduces the wealth of the family outside bars. The severe racial inequalities in incarceration therefore suggest possible spillover effects from the justice system to the racial structure of economic well-being, in particular when it comes to the racial wealth gap. Jason Thompson and Dalton Conley (this issue) find that health shocks induce wealth losses for both whites and blacks, but such shocks also widen the black-white wealth gap. Given the lower starting level of wealth among African Americans, health shocks are more likely to cause financial turmoil to these households.

The appreciation for the magnitude and importance of wealth inequality is relatively recent in comparison with income inequality. This delayed interest is certainly not justified by the magnitude of disparities. Wealth inequality dwarfs income inequality (Keister and Moller 2000). The Gini coefficient of wealth—0 representing perfect equality, 1 perfect inequality—is roughly 0.85, versus 0.45 for after-tax income and 0.40 for consumption in 2013 (Fisher et al. this issue). The average income of college graduates is roughly three times that of high school graduates, and mean net worth is five times greater. Annual income of non-Hispanic whites is twice that of other racial-ethnic groups, but their net worth is on average three and a half times that of other racial-ethnic groups (Bricker et al. 2015). Carefully considering the commonalities and differences across

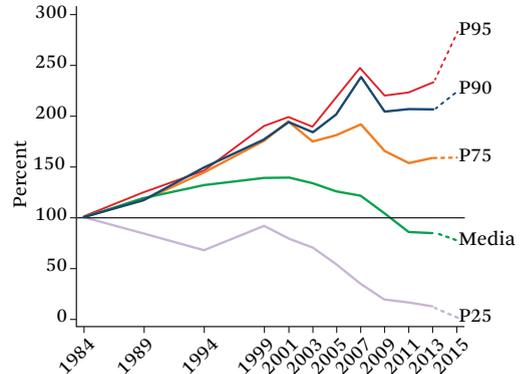
Figure 1. Relative Changes in Net Worth Including Housing Wealth



Source: Authors' calculations using the PSID (Panel Study of Income Dynamics 2013).

Note: Adjusted for inflation. 2015 estimates (dotted lines) are based on adjusted early release data (see appendix for details).

Figure 2. Relative Changes in Net Worth Excluding Housing Wealth



Source: Authors' calculations using the PSID (Panel Study of Income Dynamics 2013).

Note: Adjusted for inflation. 2015 estimates (dotted lines) are based on adjusted early release data (see appendix for details).

wealth, income, and consumption, Jonathan Fisher and his colleagues (this issue) conclude that wealth inequality is the most serious dimension of economic inequality in today's society.

Rising Wealth Inequality

To provide a complete picture of changes in wealth inequality throughout the wealth distribution, we report several different indicators of wealth disparities: the Gini coefficient, shares of wealth held by the top 1 percent, top 5 percent, top 10 percent, top 20 percent, and bottom 50 percent, and ratios of various percentiles of the distribution—50th to 25th, 75th to 50th, 95th to 75th, and 95th to 50th. For each of these ten measures, we report estimates for every available survey year of the SCF since 1989, that is, every third year, in table 1 (for an assessment of trends in wealth inequality in yet earlier years based on predecessors to the SCF, see Wolff, this issue). All measures indicate substantial increases in inequality between the early to mid-2000s and 2013. The share of wealth of the top 1 percent increased from 32.1 percent in 2001 to 35.5 percent in 2013. The share of the bottom 50 percent fell from 2.8 percent to 1.1 percent. The disparities within the bottom half of the distribution in-

creased substantially: in 2001, families at the middle of the distribution had 6.8 times more wealth than families at the 25th percentile, and 9.3 by 2013. Most astounding is the dramatic and rapid increase in the disparity between families at the 95th percentile and those at the middle of the wealth distribution. Between 1989 and the mid-2000s, families at the 95th percentile owned twelve to fifteen times the wealth of families at the middle, but by 2010 this gap had risen to 24.2, and it stayed at a similar level in 2013.

Figures 1 and 2 offer another display of the spreading out of the wealth distribution since the 1980s, this time based on Panel Study of Income Dynamics (PSID) data. They report net worth levels (inflation adjusted) at selected percentiles—the 25th, median, 75th, 90th, and 95th—for each PSID wave with wealth data (every five years between 1984 and 1999 and every other year since then) and expressed relative to 1984 levels (for earlier and additional analyses, see also Pfeffer, Danziger, and Schoeni 2013). In figure 1, which reports estimates for net worth (including housing wealth), we observe a relatively steady increase in the wealth of the typical U.S. family between 1984 and 2007, by about 40 percent in total. Increases further up in the distribution were much

larger, net worth at the 90th and 95th percentiles more than doubling between the 1980s and late 2000s. In contrast, wealth at the 25th percentile remained quite stable through 2003 but then began to decline, several years before the Great Recession. During the Great Recession, relative losses in net worth occurred across the wealth distribution and were sustained for several years. Even through 2013, we observe no signs of recovery at any of these distributional points. However, relative losses were less sustained at the top. In 2013, the 90th and 95th percentile are still higher than they were in 2003, and still 75 percent and 87 percent higher, respectively, over 1984 levels. In contrast, the net worth of the typical family in 2013 is about 20 percent below what it was in 1984 and wealth at the 25th percentile fell to just about a quarter of what it was in 1984.

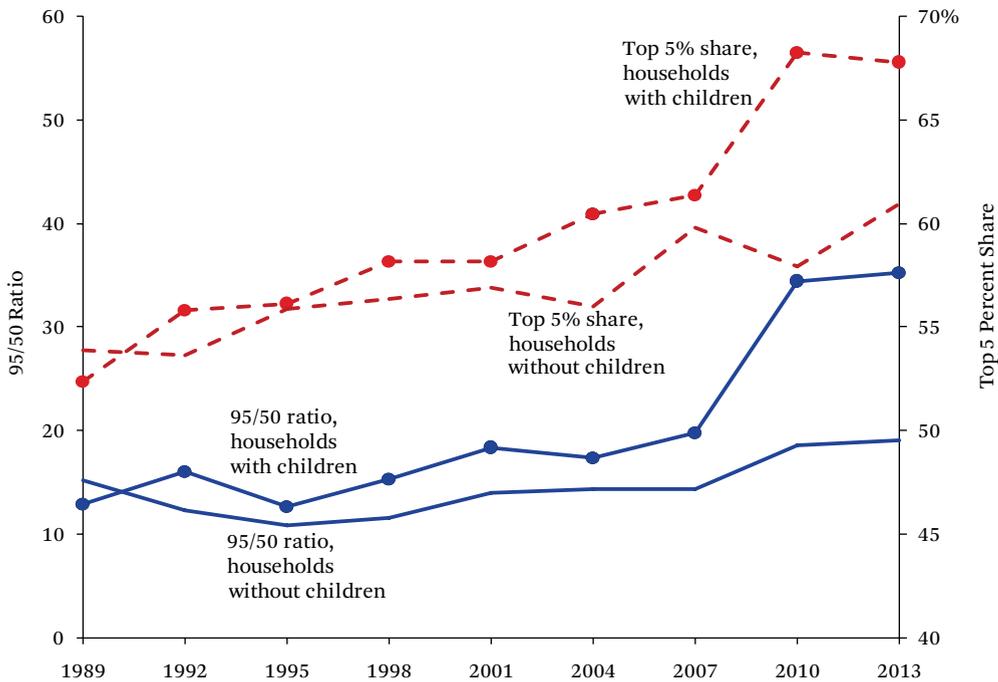
The long-awaited recovery of families' wealth appears to finally materialize in 2015. Based on early release data from the 2015 PSID (for a detailed description of how we use those data to provide the best possible early estimate of trends, see the appendix), it appears that for the first time since the Great Recession, wealth holdings across the distribution are recovering. However, once again, inequality is increasing further as recovery at the 95th percentile outpaces that at lower ranks of the wealth distribution. This striking trend awaits confirmation based on final data release from the PSID and SCF, which is at time of writing still several months away. The early signs of wealth recovery presented here, however, suggest that the celebration of the most recent trend of wealth recovery may be dampened by the fact that it seems to go along with even further wealth concentration at the top.

In addition, for most of the distribution, the recovery of wealth appears to be driven by the recovery of the housing market. Figure 2 presents trends for net worth excluding housing wealth (that is, the net value of owner-occupied housing as well as real estate holdings). The early 2015 estimates suggest that recovery of nonhousing wealth in fact occurred only at the 90th and 95th percentiles. In fact, at the 95th percentile, nonhousing wealth in 2015 surpasses even prerecession levels; at the same time, the typical family's nonhousing wealth has continued to decrease through 2015. We also observe that nonhousing wealth for the typical U.S. family had begun to erode at the turn of the millenium, a trend largely masked by the fast growth and ultimate bubble of the housing market.

For trends in inequality prior to 1989, the article by Edward Wolff in this volume reports an increase between 1962 and 1989 in the Gini (from 0.803 to 0.832) and share of wealth held by the top 1 percent (from 33.4 percent to 37.4 percent), though this rise was not monotonic throughout the twenty-seven years.³ Emmanuel Saez and Gabriel Zucman provide annual estimates of inequality from 1917 through 2012 (2014). The wealthiest 10 percent of families owned roughly 80 percent of household wealth around 1920; the century's lowest share of 63 percent came in 1986. Since that time, though, the increase has been steady and continuous. In 2012, the share was 77 percent, roughly the inequality of the 1920s.

Given the role of parents' wealth in child and adolescent development described earlier, it is important to also assess changes in wealth and wealth inequality, specifically, among households with children. In 2013, the median wealth

3. The estimates provided by Wolff (this issue) diverge from ours (table 1) and those provided by the Federal Reserve (for example, Bricker et al. 2015) for several reasons, including that Wolff relies on a net worth measure that excludes vehicle wealth. Another source may be Wolff's adjustments to SCF estimates geared at matching national balance sheets and at making the earliest SCF waves as comparable as possible to SCF's predecessors from the 1960s (personal communication with John Sabelhaus and Edward Wolff). We consider Wolff's estimates most attractive to allow for a comparison of wealth concentration between the 1960 and 1980s, but focus on our and the Federal Reserve's estimates for later periods. Overall, though, Wolff offers similar interpretations of trends; for example, when he indicates "that mean wealth grew about twice as fast as the median between 1983 and 2007, indicating widening inequality of wealth over these years" (7) and that the growth in wealth inequality was "not limited to the increased gap between the top one percent and everyone else but occurred across the full wealth distribution" (10).

Figure 3. Wealth Inequality and Children in Household

Source: Authors' calculations using the SCF (Survey of Consumer Finances, 2013).

of households with children was \$43,200, versus \$105,400 for those without children. This gap is not surprising and exists primarily because parents of children are younger and have had less time to accumulate assets. What is surprising and troubling is that wealth inequality is higher and has risen faster among households with children than households without them. Figure 3 displays the 95th to 50th percentile ratio and the share of wealth controlled by the wealthiest 5 percent from 1989 through 2013, separately for households with and without children under eighteen. Inequality was fairly similar across these households at the beginning of this period but substantially higher among households with children by the end. The 95th to 50th ratio more than doubled for households with children, with wealth of families at the 95th percentile thirty-five times larger than middle-wealth families.

Extensive research has demonstrated that socioeconomic factors influencing child development have particularly large effects in the first few years of life (Duncan, Ziol-Guest, and Kalil 2010; Heckman 2006). Young children (up

to six years old) are in households with much lower wealth than teenagers (thirteen through seventeen): median wealth of \$24,800 versus \$82,200 in 2013 (authors' tabulations using the SCF, not shown). This pattern is again not surprising because teenagers tend to have older parents who have had more time to accumulate wealth. However, inequality in household wealth—whether measured by the 95th to 50th ratio, top 5 percent share, or Gini—is higher for households with young children than those with older children (ages seven through sixteen).

The takeoff in wealth inequality among children and especially young children occurred mostly during the latest recession. In this sense, we can expect the effects of the Great Recession to remain with us for a long time, as the children who are being exposed to remarkably high levels of inequality grow up.

Causes of Rising Inequality

Direct evidence on the causes of the rise in wealth inequality is sparse, at least relative to evidence on the causes of the rise in income

and earnings inequality since the 1970s. Given that sufficient income allows one to accumulate wealth, the factors driving increases in income inequality are most likely also important drivers of wealth inequality. Research identifies several reasons for increases in income inequality, and inequality in labor market earnings in particular (for a recent and thorough review, see Congressional Budget Office 2011). This list includes increases in the returns to labor market skills and education (that is, skill-biased technological change), reductions in the presence and influence of unions, and globalization of consumer markets, which led to a substantial increase in imports of products manufactured by lower skilled-workers, thereby lowering the demand for domestic production of these products and the workers who produced them.

Research has shown that a substantial share of the rise in inequality in market income in the last few decades is due to particularly high growth among the households in the top 1 percent of income (Congressional Budget Office 2011; Saez and Zucman 2014). These factors may be responsible, at least in part, for increases in the top 1 percent, but additional factors are likely also important. These include reductions in top tax rates (Alvaredo et al. 2013), the superstar effect (Rosen 1981; Kaplan and Rauh 2010, 2013), managerial power (Bebchuk and Fried 2009), increases in market capitalization of large companies (Gabaix and Landier 2008), and the “infectious” takeoff in executive compensation (DiPrete, Eirich, and Pittinsky 2010). This is an important, active area of research, but a consensus has not yet emerged (Congressional Budget Office 2011).

Explanations for growing wealth inequality per se include Thomas Piketty’s argument that the rate of return to capital has been greater than the rate of economic growth (2014). This claim has generated a great deal of reaction among social scientists, some of it critical (see Dodd 2014; Moretti 2015).

Recent tax cuts on major assets including inheritances likely also caused some of the increase at the top (Shapiro, Meschede, and Sullivan 2010). Saving rates are substantially higher for wealthier households, and this differential increased substantially in the last few

decades. Saving rates in the wealthiest 1 percent of households have stayed at roughly 35 percent for most of the last century. Rates for the bottom 90 percent, which were historically around 5 percent, began to fall in the mid-1980s and were 0 percent in 2012—potentially as an outcome of the stagnation and loss in real earnings and incomes for large parts of the population. This pattern of rising inequality in saving rates is one cause of increases in wealth inequality (see Saez and Zucman 2014).

Several recent analyses of trends in wealth inequality shed light on the specific period just prior to, during, and after the Great Recession (see Wolff, this issue). Before the Great Recession, wealthier households were more likely to have wealth in the stock market. The stock market recovered rather quickly after the recession, allowing these households to return close to 2003 levels of net wealth by 2011. Less wealthy households prior to the Great Recession, however, held most of their wealth in the form of their home and were highly leveraged. To date, the housing market is still recovering, and, as a result, households at the bottom of the distribution remain substantially below their prerecession levels of wealth (Pfeffer, Danziger, and Schoeni 2013).

Because of the tremendous upheaval and slow recovery from the Great Recession, many low- and middle-income and wealth households were forced to draw down their limited financial assets to get by (Wolff, this issue). These families were more likely to cash out their limited stock holdings during the Great Recession and therefore were less likely to benefit from the subsequent recovery of the stock market. At the same time, investors with substantial wealth holdings—who were less likely to lose their jobs or foreclose on their homes—were less likely to cash out, thereby riding out the recession and benefiting from the subsequent recovery (Chen and Stafford 2016; Devlin-Foltz, Henriques, and Sabelhaus, this issue). This pattern widened wealth inequality following the Great Recession. At the same time, families in the middle and upper parts of the income and wealth distribution were not immune. They too experienced substantial turbulence in wealth holdings and consumption (Devlin-Foltz and Sabelhaus 2015).

Assets held in retirement accounts are a large share of household wealth—roughly 30 percent—and have increased in recent decades. The shift has also been substantial toward defined-contribution (DC) plans and away from defined-benefit (DB) plans. Sebastian Devlin-Foltz, Alice Henriques, and John Sabelhaus (this issue) examine the extent to which these developments account for changes in wealth inequality. They conclude that the growth in retirement wealth as a share of total household wealth kept wealth inequality from increasing more than it otherwise would have because retirement wealth is more equally distributed than nonretirement wealth. At the same time, the shift from DB to DC plans is causing a modest increase in wealth inequality because DC wealth is more unequally distributed.

Herman Mark Schwartz (this issue) offers a new argument on the socio-legal determinants of wealth inequality. He discusses and empirically traces the central role of monopolies created by intellectual property rights (IPR) in contributing to rising inequality. Many firms with valuable IPRs are able to outsource physical capital and nonessential labor, leaving the IPR-holding firm with a small and highly paid workforce. Over time, these developments increased inequality among firms in terms of their market capitalization and profitability and among households in income and wealth. In turn, increases in inequality among firms reduced corporate investment, and increases in inequality among households reduced consumer demand, dampening macroeconomic growth.

One way to reduce wealth inequality is to increase savings and asset accumulation among less-affluent families. Eric Hilt and Wendy Rahn's creative and detailed historical study in this issue of the success of one of the largest and most successful public programs to increase personal savings—the Liberty Bond drives of World War I—offers valuable lessons for current efforts to increase savings rates at the lower end of the wealth distribution. Doing so is important since there is an active group of scholars and policymakers with a focus on asset-building among disadvantaged families (for example, Blank and Barr 2009; Shanks Wil-

liams 2014; Sherraden 1991) and new federal programs to support it (such as *myRA* savings accounts). However, many of the current programs lack the features Hilt and Rahn consider the key ingredients to the success of the Liberty Bond program, such as coordinated promotional efforts by community groups, businesses, churches, and related organizations.

CONCLUSION

Much of the academic and public debate on wealth inequality has focused on the extreme level of wealth concentration at the very top of the distribution. Although this increasing concentration is concerning for a range of reasons—including the risks it poses to representative democracy—we should not lose sight of the fact that wealth inequality and its effects on society pertain to the full distribution of wealth. Even below the very top, such as the top 1 percent, wealth is distributed highly unequally, much more unequally than (for instance) income. Particularly in the last ten to fifteen years, families who are wealthy but not in the top 1 percent are pulling away from the average family, and the average family is pulling away from less-wealthy families. This development has unique and widespread consequences, such as increasing inequality in opportunity among the next generation, that may in some ways be even more troubling than the rise of the 1 percent. Worries about the long-term consequences of this rise are compounded by the fact that wealth inequality is higher and has risen much more sharply among households with children, particularly young children, as shown here.

Today's extreme levels of wealth inequality stand to shape the future of these children in many ways. Their parents' wealth facilitates their own educational attainment, eases their early labor market transitions, facilitates access to home and business ownership, supports marriage, especially with partners from similar family wealth backgrounds, and sustains the stability of marriage (Eads and Tach, this issue). Before parental wealth is transferred through bequests, it has already exerted much of its beneficial effects on the economic well-being of the next generation. In other words, a great deal of wealth persists across

generations even before it is passed on at death (Pfeffer and Killewald, forthcoming).

The association between wealth inequality and inequality in opportunity suggests a moral argument against today's extreme levels of wealth inequality. But an important economic argument also has merit: current levels of wealth inequality are likely impediments to economic growth and fertile ground for social unrest that interferes with economic activity. The redistributive policies of even the earliest Bismarckian welfare state were motivated much less by moral considerations than by those about social conflict that would eventually upend the existing social order and economic structure. The recent surge in wealth inequality appears to add weight to a similar economic argument for the efficiency of wealth redistribution.

One way of reining in wealth inequality is to address its roots. As we have suggested, a number of explanations for the growth in wealth inequality have been proposed, including those offered to explain rising income inequality (skill-bias technological change, union decline, global competition, and others), the historically high returns on capital, changes in industrial organization and corporate practices, and the ways in which differential asset portfolios determined the extent of losses during the Great Recession and the pace of recovery following it. Of course, a more direct way of reducing wealth inequality could be the direct taxation of wealth. Emerging evidence suggests that taxation of wealth or bequests at the level considered by policy analysts may have limited redistributive effects (Wolff 1995; Kopczuk 2013; Elinder, Erixson, and Waldenström 2015; Gale, Kearney, and Orszag 2016; Quiggin 2016). However, any assessment of the potential of changes to wealth taxation needs to take into account several important considerations. First, although their redistributive effects are debatable, the impact of wealth and inheritance taxes on public budgets are large (Wolff 1995). They could, in the end, provide resources to fund the public goods that support child development and human capital acquisition and maintenance the same way private wealth currently does: high-quality early childcare and K-12 public schools,

public support for colleges, labor market policies that smooth unemployment trajectories, and many more. Second, some components of the existing tax system increase rather than decrease wealth inequality. A myriad of exemptions in the current tax code tend to favor those who already have accumulated large amounts of wealth (Howard 1999; Faricy 2015). Third, tax evasion—not least by off-shoring large private wealth holdings, in some cases legally, thanks to regulatory loopholes, in other cases illegally—is also more pervasive than formerly believed (Zucman 2015; Harrington 2016; see also the Panama Papers investigation by the International Consortium of Investigative Journalists).

Wealth inequality has only recently become a major focus of the scientific and policy research community. The contributions in this issue make important inroads, assessing the extent and development of wealth inequality, its sources, and its consequences. But more needs to be done. More research is needed on the causes of changes in wealth inequality throughout the wealth distribution, not just the top 1 percent. How have changes in tax policy, monetary policy, industrial organization, savings preferences and decisions, and banking practices and availability altered the distribution of wealth? What are the consequences of increased wealth concentration for disparities in the quality of education, health and longevity, residential segregation, assimilation and integration of immigrants, community cohesion, and political representation and public decision-making at the state and local level?

As is often the case, even as scientific research seeks to provide answers to these questions, political debate and decisions march on. In fact, the run-up to the impending presidential election featured much commentary on wealth by presidential hopefuls. Particular focus was again put on the top of the wealth distribution, a candidate from one side decrying the top 1 percent and a candidate from the other boasting about his own membership in it. The ideological distance between these poles of the waging political debate is large. If our volume can contribute in any way to this debate, it is by encouraging discussion about and providing evidence for the broad impor-

tance of wealth for the rest of families below the top 1 percent in terms of their economic well-being, their health, their marriages, their own future, and that of their children.

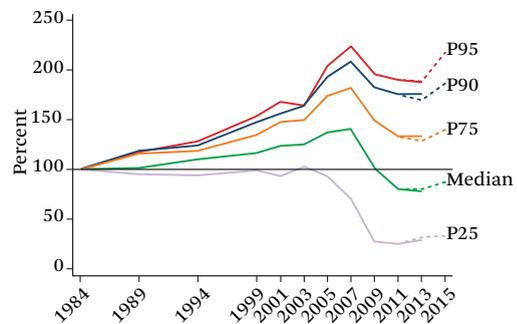
APPENDIX

The Panel Study of Income Dynamics is an attractive data source for the assessment of wealth inequality and its consequences (see also Pfeffer et al. 2016), perhaps most importantly because it is the only nationally representative survey that provides regular and long-term longitudinal information on families' wealth holdings. Another particularly attractive feature, however, is that the PSID releases a preliminary version of its wealth data within a few weeks of the close of data collection, which occurs every other calendar year. These PSID early release files first became available for the 2009 wave and were devised specifically in response to the Great Recession, which was in full swing during the 2009 data collection. Our report of the most recent trends in wealth inequality through the year 2015 includes data from the early release file for 2015.

The PSID invests substantial resources in the editing of its data, including the reliable determination of family relationships among all household members through individual look-ups, the editing of values based on interviewer notes and data consistency checks, the imputation of missing values, and the construction of generated variables—such as net worth. The early release files contain none of these edits and instead provide raw data as collected in the field.

As one would expect, estimates based on early release (ER) data therefore diverge somewhat from those based on final release (FR) data. However, we know by how much they diverged in the past given that both ER and FR data are now available for a number of waves (2009, 2011, and 2013). We use this information to adjust current ER data. That is, to adjust 2015 ER data, we take into account the divergence between ER and FR data in the prior wave. We scale each estimated percentile by the degree of ER-FR divergence at that percentile in the 2013 wave. For instance, median net worth in the 2013 FR data was 4.8 percent

Figure A1. Relative Changes in Net Worth



Source: Authors' calculations using the PSID (Panel Study of Income Dynamics 2013).

Note: Adjusted for inflation. Dotted lines are based on adjusted early release data.

higher than in the 2013 ER data (54,500 versus 52,000), leading us to adjust the 2015 ER net worth median upwards by 4.8 percent (from 59,989 to 60,777 in 2013 dollars).

We have used these kinds of adjustments for ER data for prior analyses (Pfeffer, Danziger, and Schoeni 2014). Figure A1 displays how closely the adjusted 2013 ER data (adjusted by the factor of divergence between 2011 ER and FR data) approximated the FR results for 2013: the estimates for net worth at the median and the 25th percentile based on adjusted 2013 ER data are very close to those based on the eventual 2013 FR data, especially for the purpose of assessing long-term historical trends in the wealth distribution. Adjusted 2013 ER data provided slight underestimates of wealth at the 75th and 90th percentiles for 2013 (though the adjustments still moved the estimates in the right direction: for example, for the 75th percentile, the raw ER data provided an estimate of roughly \$250,000, the adjusted ER data of roughly \$260,000, and the FR data of roughly \$270,000). Finally, our adjustments were most successful at the 95th percentile, providing a near perfect match between the early and final release data. Knowing that the adjustment at that percentile was particularly successful is reassuring because the size of adjustment is also particularly large here, inflating the estimate by a full 14 percent. But the size of this adjustment has remained remarkably stable

across the last two waves (divergence of 14.3 percent based on 2011 and of 14.8 percent based on 2013).

Although the final word on wealth trends through 2015 will naturally depend on final release data (in several months after this publication), the analyses provided here thus add to our confidence in describing long-term wealth trends, including the steep recovery of wealth at the 95th percentile in 2015, arguably one of the most striking findings of our analysis of the 2015 ER data.

REFERENCES

- Acemoğlu, Daron, and James Robinson. 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Crown Publishing.
- Aghion, Philippe, Eve Caroli, and Cecilia García-Peñalosa. 1999. "Inequality and Economic Growth: The Perspective of the New Growth Theories." *Journal of Economic Literature* 37(4): 1615–60.
- Alvaredo, Facundo, Anthony B Atkinson, Thomas Piketty, and Emmanuel Saez. 2013. "The Top 1 Percent in International and Historical Perspective." *Journal of Economic Perspectives* 27(3): 3–20.
- Barro, Robert J. 2000. "Education and Economic Growth." *Annals of Economics and Finance* 14(2): 301–28.
- Bartels, Larry. 2010. *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton, N.J.: Princeton University Press.
- Bebchuk, Lucian A., and Jesse Fried. 2009. *Pay Without Performance: The Unfulfilled Promise of Executive Compensation*. Cambridge, Mass.: Harvard University Press.
- Beckert, Jens. 2007. *Inherited Wealth*. Princeton, N.J.: Princeton University Press.
- Bell, Alex, Raj Chetty, Xavier Jaravel, Neviana Petkova, and John Van Reenen. 2016. "The Lifecycle of Inventors." Unpublished manuscript, Harvard University.
- Benabou, Roland. 1996. "Inequality and Growth." In *NBER Macroeconomics Annual 1996*, vol. 11, edited by Ben S. Bernanke and Julio J. Rotemberg. Cambridge, Mass.: MIT Press. Accessed May 10, 2016. <http://www.nber.org/chapters/c11027.pdf>.
- Bernstein, Jared. 2013. "The Impact of Inequality on Growth." Center for American Progress. Accessed June 6, 2016. <https://www.americanprogress.org/wp-content/uploads/2013/12/BerensteinInequality.pdf>.
- Blank, Rebecca, and Michael Barr. 2009. *Insufficient Funds: Savings, Assets, Credit, and Banking Among Low-Income Households*. New York: Russell Sage Foundation.
- Bloom, Nicholas, and John Van Reenen. 2011. "Human Resource Management and Productivity." In *Handbook of Labor Economics*, vol. 4(B), edited by David Card and Orley Ashenfelter. Amsterdam: Elsevier.
- Board of Governors of the Federal Reserve System (Board of Governors). 2015. "Report on the Economic Well-Being of U.S. Households in 2014." Washington: Federal Reserve System.
- Boix, Carles. 2003. *Democracy and Redistribution*. Cambridge: Cambridge University Press.
- Bradley, Robert, and Robert Corwyn. 2004. *Socioeconomic Status and Child Development*. Weinheim: Wiley-VCH.
- Bricker, Jesse, Alice Henriques, Jake Krimmel, and John Sabelhaus. 2015. "Measuring Income and Wealth at the Top Using Administrative and Survey Data." *Finance and Economics Discussion Series* 2015(30): 1–63.
- Card, David E. 1999. "The Causal Effect of Education on Earnings." In *Handbook of Labor Economics*, vol. 3, edited by David Card and Orley Ashenfelter. Amsterdam: Elsevier.
- Charles, Kerwin Kofi, and Erik Hurst. 2003. "The Correlation of Wealth Across Generations." *Journal of Political Economy* 111(6): 1155–82.
- Chen, Bing, and Frank P. Stafford. 2016. "Stock Market Participation. Family Responses to Housing Consumption Commitments." *Journal of Money, Credit, and Banking* 48(4): 635–59.
- Collins, Chuck, and Josh Hoxie. 2015. "Billionaire Bonanza: The Forbes 400 and the Rest of Us—IPS." Washington, D.C.: Institute for Policy Studies. Accessed May 10, 2016. <http://www.ips-dc.org/billionaire-bonanza/>.
- Congressional Budget Office. 2011. "Trends in the Distribution of Household Income Between 1979 and 2007." Washington: Government Printing Office. Accessed May 10, 2016. https://www.cbo.gov/sites/default/files/112th-congress-2011-2012/reports/10-25-HouseholdIncome_0.pdf.
- Conley, Dalton. 2001. "Capital for College. Parental Assets and Postsecondary Schooling." *Sociology of Education* 74(1): 59–72.
- Deaton, Angus. 2015. *The Great Escape: Health,*

- Wealth, and the Origins of Inequality*. Reprint edition. Princeton, N.J.: Princeton University Press.
- Deci, Edward L., and Richard M. Ryan. 1985. "The General Causality Orientations Scale: Self-Determination in Personality." *Journal of Research in Personality* 19(2): 109–34
- Destin, Mesmin, and Daphna Oyserman. 2009. "From Assets to School Outcomes: How Finances Shape Children's Perceived Possibilities and Intentions." *Psychological Science* 20(4): 414–18.
- Devlin-Foltz, Sebastian, Alice Henriques, and John Sabelhaus. 2016. "Is the U.S. Retirement System Contributing to Rising Wealth Inequality." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.04.
- Devlin-Foltz, Sebastian, and John Sabelhaus. 2015. "Heterogeneity in Economic Shocks and Household Spending." *Finance and Economics Discussion Series* 2015(49): 1–43. doi: 10.17016/FEDS.2015.049.
- DiPrete, Thomas A., Gregory M. Eirich, and Matthew Pittinsky. 2010. "Compensation Benchmarking, Leapfrogs, and the Surge in Executive Pay." *American Journal of Sociology* 115(6): 1671–712.
- Dodd, Nigel, ed. 2014. "Special Issue: Piketty Symposium." *British Journal of Sociology* 65(4): 589–747.
- Dohmen, Thomas J, Armin Falk, David Huffman, and Uwe Sunde. 2012. "The Intergenerational Transmission of Risk and Trust Attitudes." *Review of Economic Studies* 79(2): 645–77.
- Duncan, Greg J., and Richard J. Murnane, eds. 2011. *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*. New York: Russell Sage Foundation.
- Duncan, Greg J., Kathleen M. Ziol-Guest, and Ariel Kalil. 2010. "Early-Childhood Poverty and Adult Attainment, Behavior, and Health." *Child Development* 81(1): 306–25.
- Dworkin, Ronald. 2000. *Sovereign Virtue: The Theory and Practice of Equality*. Cambridge, Mass.: Harvard University Press.
- Eads, Alicia, and Laura Tach. 2016. "Wealth and Inequality in the Stability of Romantic Relationships." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.10.
- Easterly, William, and Sergio Rebelo. 1993. "Fiscal Policy and Economic Growth: An Empirical Investigation." *Journal of Monetary Economics* 32(3): 417–58.
- Elinder, Mikael, Oscar Erixson, and Daniel Waldenström. 2015. "Inheritance and Wealth Inequality: Evidence from Population Registers." *Uppsala Center for Fiscal Studies* working paper no. 3. Uppsala, Sweden: Uppsala University.
- England, Paula. 2016. "Sometimes the Social Becomes Personal Gender, Class, and Sexualities." *American Sociological Review* 81(1): 4–28.
- Faricy, Christopher G. 2015. *Welfare for the Wealthy: Parties, Social Spending, and Inequality in the United States*. New York: Cambridge University Press.
- Festinger, Leon, and James M. Carlsmith 1959. "Cognitive Consequences of Forced Compliance." *Journal of Abnormal and Social Psychology* 58(2): 203–10.
- Fisher, Jonathan, David Johnson, Jonathan P. Latner, Timothy Smeeding, and Jeffrey Thompson. 2016. "Inequality and Mobility Using Income, Consumption, and Wealth for the Same Individuals." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.03.
- Gabaix, Xavier, and Augustin Landier. 2008. "Why Has CEO Pay Increased So Much." *NBER* working paper no. 12365. Cambridge, Mass.: National Bureau of Economic Research. Accessed May 10, 2016. <http://www.nber.org/papers/w12365>.
- Gale, William G., Melissa S. Kearney, and Peter R. Orszag. 2015. "Would a Significant Increase in the Top Income Tax Rate Substantially Alter Income Inequality?" Washington, D.C.: Brookings Institution. Accessed May 10, 2016. <http://www.brookings.edu/~media/research/files/papers/2015/09/28-taxes-inequality/would-top-income-tax-alter-income-inequality.pdf>.
- Gates, William H., and Chuck Collins. 2004. *Wealth and Our Commonwealth: Why America Should Tax Accumulated Fortunes*. Boston, Mass.: Beacon Press.
- Harrington, Brooke. 2016. *Capital Without Borders. Wealth Managers and the One Percent*. Cambridge, Mass.: Harvard University Press.
- Heckman, James J. 2006. "Skill Formation and the Economics of Investing in Disadvantaged Children." *Science* 312(5782): 1900–2. doi: 10.1126/science.1128898.
- Heyman, James, and Dan Ariely. 2004. "Effort for Payment: A Tale of Two Markets." *Psychological Science* 15(11): 787–93.
- Hilt, Eric, and Wendy M. Rahn. 2016. "Turning Citi-

- zens into Investors: Promoting Savings with Liberty Bonds During World War I. *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.05.
- Hochschild, Jennifer L. 1995. *Facing Up to the American Dream. Race, Class, and the Soul of a Nation*. Princeton, N.J.: Princeton University Press.
- Howard, Christopher. 1999. *The Hidden Welfare State*. Princeton, N.J.: Princeton University Press.
- Jappelli, Tullio, and Luigi Pistaferri. 2014. "Fiscal Policy and MPC Heterogeneity." *American Economic Journal: Macroeconomics* 6(4): 107–36.
- Johnson, David S., Jonathan A. Parker, and Nicholas S. Souleles. 2004. "Household Expenditure and the Income Tax Rebates of 2001." *NBER* working paper no. 10784. Cambridge, Mass.: National Bureau of Economic Research.
- Kaplan, Greg, Giovanni Violante, and Justin Weidner. 2014. "The Wealthy Hand-to-Mouth." *NBER* working paper no. 20073. Cambridge, Mass.: National Bureau of Economic Research.
- Kaplan, Steven N., and Joshua Rauh. 2010. "Wall Street and Main Street: What Contributes to the Rise in the Highest Incomes?" *Review of Financial Studies* 23(3): 1004–50.
- . 2013. "It's the Market: The Broad-Based Rise in the Return to Top Talent." *Journal of Economic Perspectives* 27(3): 35–55.
- Keister, Lisa A., and Stephanie Moller. 2000. "Wealth Inequality in the United States." *Annual Review of Sociology* 26: 63–81.
- Kenworthy, Lane. 2004. *Egalitarian Capitalism: Jobs, Incomes, and Growth in Affluent Countries*. Rose Series in Sociology. New York: Russell Sage Foundation.
- Killewald, Alexandra, and Brielle Bryan. 2016. "Does Your Home Make You Wealthy?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.06.
- Kopczuk, Wojciech. 2013. "Taxation of Intergenerational Transfers and Wealth." In *Handbook of Public Economics*, vol. 5, edited by Alan J. Auerbach, Raj Chetty, Martin Feldstein, and Emmanuel Saez. Amsterdam: Elsevier.
- Lusardi, Annamaria, Pierre-Carl Michaud, and Olivia S. Mitchell. 2013. "Optimal Financial Knowledge and Wealth Inequality." *NBER* working paper no. 18669. Cambridge, Mass.: National Bureau of Economic Research.
- Montez, Jennifer Karas, and Anna Zajacova. 2013. "Trends in Mortality Risk by Education Level and Cause of Death among US White Women from 1986 to 2006." *American Journal of Public Health* 103(3): 473–79.
- Moretti, Enrico, ed. 2015. "Symposium on Wealth and Inequality." *Journal of Economic Perspectives* 29(1): 3–88.
- Narayanswamy, Anu, Aaron Williams, and Matea Gold. 2016. "Meet the Wealthy Donors Who Are Funneling Millions into the 2016 Elections." *Washington Post*, April 15, 2016. Accessed May 10, 2016. <https://www.washingtonpost.com/graphics/politics/supercpac-donors-2016>.
- Oliver, Melvin, and Thomas Shapiro. 2006. *Black Wealth / White Wealth: A New Perspective on Racial Inequality*, 2nd ed. New York: Routledge.
- Olshansky, S. Jay, Toni Antonucci, Lisa Berkman, Robert H. Binstock, Axel Boersch-Supan, John T. Cacioppo, Bruce A. Carnes, Laura L. Carstensen, Linda P. Fried, Dana P. Goldman, James Jackson, Martin Kohli, John Rother, Yuhui Zheng, and John Rowe. 2012. "Differences in Life Expectancy Due to Race and Educational Differences Are Widening, and Many May Not Catch Up." *Health Affairs* 31(8): 1803–13.
- Ostry, Jonathan David, Andrew Berg, and Charalambos G. Tsangarides. 2014. *Redistribution, Inequality, and Growth*. International Monetary Fund.
- Oyer, Paul, and Scott Schaefer. 2011. "Personnel Economics: Hiring and Incentives." In *Handbook of Labor Economics*, vol. 4(B), edited by David Card and Orley Ashenfelter. Amsterdam: Elsevier.
- Page, Benjamin I., Larry M. Bartels, and Jason Seawright. 2013. "Democracy and the Policy Preferences of Wealthy Americans." *Perspectives on Politics* 11(1): 51–73.
- Panel Study of Income Dynamics. 2013. Public use dataset produced and distributed by the Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, Mich. (downloaded 2015).
- Pew Charitable Trust. 2015a. "The Precarious State of Family Balance Sheets." Washington, D.C.: Pew Charitable Trust.
- . 2015b. "The Role of Emergency Savings in Family Financial Security." Washington, D.C.: Pew Charitable Trust.
- Pfeffer, Fabian T. 2011. "Status Attainment and Wealth in the United States and Germany." In *Persistence, Privilege, and Parenting*, edited by Timothy M. Smeeding, Robert Erikson, and

- Markus Jäntti. New York: Russell Sage Foundation.
- . 2016. "Growing Wealth Gaps in Education." *National Poverty Center* working paper no. 16-06.
- Pfeffer, Fabian T., Sheldon H. Danziger, and Robert F. Schoeni. 2013. "Wealth Disparities Before and After the Great Recession." *Annals of the American Academy of Political and Social Science* 650(1): 98–123.
- . 2014. "Wealth Levels, Wealth Inequality, and the Great Recession." *Recession Brief*. New York: Russell Sage Foundation. Accessed May 10, 2016. <http://www.russellsage.org/blog/wealth-levels-wealth-inequality-and-great-recession>.
- Pfeffer, Fabian T., and Martin Hällsten. 2012. "Mobility Regimes and Parental Wealth: The United States, Germany, and Sweden in Comparison." *Population Studies Center* research report no. 12-766. Ann Arbor: University of Michigan.
- Pfeffer, Fabian T., and Alexandra Killewald. Forthcoming. "Intergenerational Correlations in Wealth." *Economic Mobility: Research and Ideas on Strengthening Families, Communities, and the Economy*. St. Louis, Mo.: Federal Reserve Bank of St. Louis.
- Pfeffer, Fabian T., Robert F. Schoeni, Arthur Kennickell, and Patricia Andreski. 2016. "Measuring Wealth and Wealth Inequality: Comparing Two U.S. Surveys." *Journal of Economic and Social Measurement* 41(2): 103–20.
- Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Posner, Richard. 2013. "Does Redistributing Income from Rich to Poor Increase or Reduce Economic Growth or Welfare?" *The Becker-Posner Blog*, December 29, 2013. Accessed May 10, 2016. <http://www.becker-posner-blog.com/2013/12/does-redistributing-income-from-rich-to-poor-increase-or-reduce-economic-growth-or-welfare-posner.html>.
- Putnam, Robert D. 2015. *Our Kids: The American Dream in Crisis*. New York: Simon & Schuster.
- Quiggin, John. 2016. "Would a Significant Increase in the Top Income Tax Rate Substantially Alter Income Inequality?" *Crooked Timber*, October 5, 2015. Accessed May 10, 2016. <http://crookedtimber.org/2015/10/05/would-a-significant-increase-in-the-top-income-tax-rate-substantially-alter-income-inequality/>.
- Rauscher, Emily. 2016. "Passing It On: Parent-to-Adult Child Financial Transfers for School and Socioeconomic Attainment." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.09.
- Reeves, Richard. 2015. "The Measure of a Nation." *The Annals of the American Academy of Political and Social Science* 657(1): 22–26.
- Roemer, John. 1998. *Equality of Opportunity*. Cambridge, Mass.: Harvard University Press.
- Rosen, Sherwin. 1981. "The Economics of Superstars." *American Economic Review* 71(5): 845–58.
- Rostron, Brian L., John L. Boies, and Elizabeth Arias. 2010. "Education Reporting and Classification on Death Certificates in the United States." *Vital and Health Statistics* 2(151): 1–14.
- Saez, Emmanuel, and Gabriel Zucman. 2014. "Wealth Inequality in the United States Since 1913. Evidence from Capitalized Income Tax Data." *NBER* working paper no. 20625. Cambridge, Mass.: National Bureau of Economic Research.
- Schoeni, Robert F., and Karen E. Ross. 2005. "Material Assistance from Families During the Transition to Adulthood." In *On the Frontier of Adulthood*, edited by Richard A. Settersten and Frank F. Furstenberg. Chicago: University of Chicago Press.
- Schwartz, Herman Mark. 2016. "Wealth and Stagnation: The Role of Industrial Organization and Intellectual Property Rights." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.11.
- Shanks Williams, Trina. 2014. "The Promise of Child Development Accounts: Current Evidence and Future Directions." *Community Investments* 26(2): 12–15.
- Shapiro, Thomas M. 2004. *The Hidden Cost of Being African American: How Wealth Perpetuates Inequality*. Oxford: Oxford University Press.
- Shapiro, Thomas M., Tatjana Meschede, and Laura Sullivan. 2010. "The Racial Wealth Gap Increases Fourfold." *IASP* Research and Policy Brief. Waltham, Mass.: Brandeis University.
- Sherraden, Michael W. 1991. *Assets and the Poor: A New American Welfare Policy*. Armonk, N.Y.: M. E. Sharpe.
- Stiglitz, Joseph E. 2012. *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W. W. Norton.
- Survey of Consumer Finances. 2013. Public use da-

- taset distributed by the Board of Governors of the Federal Reserve System (downloaded 2015).
- Sykes, Bryan L., and Michelle Maroto. 2016. "A Wealth of Inequalities: Mass Incarceration, Employment, and Racial Disparities in U.S. Household Wealth, 1996 to 2011." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.07.
- Thompson, Jason, and Dalton Conley. 2016. "Health Shocks and Social Drift: Examining the Relationship Between Acute Illness and Family Wealth." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.08.
- Thompson, Jeffrey P., and Gustavo A. Suarez. 2015. "Exploring the Racial Wealth Gap Using the Survey of Consumer Finances." *Finance and Economics Discussion Series* no. 2015-76. Washington: Board of Governors of the Federal Reserve System.
- Tumin, Melvin M. 1953. "Some Principles of Stratification: A Critical Analysis." *American Sociological Review* 18(4): 387-94.
- Wolff, Edward N. 1995. *Top Heavy: A Study of the Increasing Inequality of Wealth in America*. New York: Twentieth Century Fund Press.
- . 2016. "Household Wealth Trends in the United States, 1962 to 2013: What Happened over the Great Recession?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6). doi: 10.7758/RSF.2016.2.6.02.
- Zucman, Gabriel. 2015. *The Hidden Wealth of Nations*. Chicago: University of Chicago Press.