Washington Center forEquitable Growth

Building a Strong Foundation for the U.S. Economy

Understanding Whether and How Economic Inequality Affects Economic Growth

September 2014 Heather Boushey and Ed Paisley, Editors

www.equitablegrowth.org



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Acknowledgements

Heather Boushey would like to thank Bridget Ansel, Nick Bunker, David Evans, Elisabeth Jacobs, Alexandra Mitukiewicz, Ed Paisley, and Ben Zipperer.

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A Letter from Heather Boushey

The U.S. economy experienced several structural shifts over the past several decades, including a large increase in inequality across a variety of dimensions. Despite headlines about inequality as a single issue, there are several aspects to the phenomenon. To be sure, incomes are skyrocketing among the top earners, income growth for the middle class is slower than in the past, and income growth is all but stagnant for those at the bottom.

Yet income isn't the only dimension of inequality. We have seen increases in inequality in wages and salaries, access to quality jobs, educational attainment, family and household workplace policies, and, of course, wealth. Considered together, the top members of our society are quickly pulling away from the rest of us across a variety of dimensions, with those in the middle and the bottom of our society experiencing little to no gains.

We are not the only ones to notice these trends. Nor are we the only ones to be asking what this means for our society and for our economy. Last year, just after we launched the Washington Center for Equitable Growth, President Obama argued that inequality was "the defining challenge of our times."¹ Soon after, Sen. Marco Rubio (R-FL) and Rep. Raul Ryan (R-WI) called on policymakers to grapple with specific aspects of inequality and what it means for our nation.²

A robust set of academic research seeks to understand how the changes in income inequality affect our economy. Looking at the overall picture, this research suggests that in cases of extreme inequality, such as prior to the Great Depression in the 1920s as well as today in the United States, inequality is negatively associated with economic growth and stability.³ But this research on the overall relationship between inequality and growth does not necessarily help us understand why or how inequality affects the economy or provide policymakers with solutions to address these challenges.

Then, last spring, Paris School of Economics professor Thomas Piketty spurred an international debate with his book, "Capital in the 21st Century."⁴ He sought to understand the interrelations between rising inequality and economic growth. The publication of his book led to many an econo-geek sporting t-shirts with the now-famous, but still cryptic "r>g" equation. One of Piketty's fundamental conclusions is that so long as the rate of return on capital continues to be greater than the rate of economic growth—or, wage growth—then capital will become ever more concentrated.

There are for a variety of reasons to think that this calcification of wealth is not in the interest of long-term economic growth, which brings us to a set of empirical questions that Equitable Growth seeks to understand:

- What are the mechanisms through which inequality affects the economy?
- Which ones play out in the short term and which play out in the long term?
- Are they mostly on the supply side or on the demand side, or both?

We have prepared this report for our second annual conference on September 19, 2014, and have asked a diverse array of scholars and policymakers with expertise in issues such as human capital development, productivity growth, entrepreneurship, and wage growth to examine these developments across our economy. Because the trends—and their implications—play out differently across the income spectrum, we have organized our discussion around trends and policies focused on the bottom, the middle, and the very top of the income ladder.

We seek to begin a conversation that not only accelerates analysis on whether and how these factors affect economic growth and stability but also inspires policy solutions that reduce inequality and expand economic growth, mobility and opportunity for all.

Heather Boushey

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Executive Director and Chief Economist The Washington Center for Equitable Growth

Our Grantmaking

November

In our first request for proposals, which we announced at our first annual conference last November, we outlined four mechanisms through which we hypothesized inequality could affect economic growth and stability. These four mechanisms are human capital, consumption and demand, political and economic institutions, and entrepreneurship.

In July we awarded a total of \$610,000 to 16 grantees, including co-funding for two of those grantees by the Russell Sage Foundation, the century old foundation devoted to funding research in the social sciences. Equitable Growth's grants are designed to accelerate cutting-edge analysis into whether and how structural changes in the U.S. economy, particularly those related to the distribution of wealth and the provision of opportunity, affect economic growth.

Three grants will examine the role of human capital—the talent needed to boost our economy's productivity. Taken together these grants will explore whether and how inequality affects human capital, specifically examining the importance of public investments in early childhood and primary and secondary schooling.

Three grants will support research on the demand side of the economy, including both debt and consumption, in order to broaden our understanding of how demand drives growth by creating markets for goods and services and allowing investors to plan for the future. These grants focus on whether and how inequality affects patterns of indebtedness and consumption, which affects economic growth and stability.

Three grants will fund investigations into whether and how the quality of government and labor market institutions foster economic growth and stability. These grants will examine how labor market institutions and public policies affect employment and business outcomes and will inform a variety of employment policies at the local, state, and federal levels.

Outlined four mechanisms through which

we hypothesized

inequality could affect economic growth and stability



4 Entrepreneurs

Awarded

We also gave grants to six "young scholars"—either graduate students or newly minted Ph.Ds. Several of these researchers are beginning tenure-track positions at top universities beginning in the next academic year. Encouraging these up-and-coming academics to pursue these lines of inquiry will create a pool of scholars engaged early in their careers in investigating critical questions for understanding how to create equitable growth. —*Elisabeth Jacobs, Senior Director for Policy and Academnic Programs*

grantees

Q grants will examine the role of human capital

to

4 grants will support research on the demand side of the economy

 \mathbb{R} grants will fund investigations into government and labor market institutions

and finally 6 additional grants were made to "young scholars"

Understanding Economic Inequality and Growth at the Bottom of the Income Ladder

Whether and how the exclusion of low-wage workers from the benefits of economic growth poses challenges for the future growth and stability of our economy

oday the official poverty rate in the United States is back to levels we haven't seen in 20 years, and the incomes of families at or near the bottom of the income ladder are at the same level they were in the early 1970s.¹ Studies show poverty rates on the decline since the beginning of Great Society programs in the 1960s until the late 1990s, but seeing as wages have not improved, this decrease in poverty was almost entirely due to increased government transfers.²

Poverty is back up because wages at the bottom have stagnated or fallen. Over the past 40 years, workers in the bottom 40 percent of the wage spectrum experienced negligible wage growth, and wages have fallen for those in the bottom 10 percent, after accounting for inflation.³ The trends have been worse for men than women, in no small part because women's increased educational attainment and on-the-job experience have boosted their wages over the past few decades.

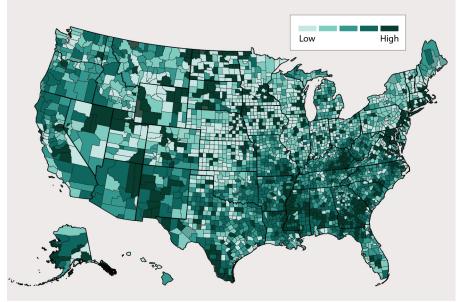
Researchers find that the lack of wage-and-income growth for families at the bottom of the income ladder in particular results in serious economic consequences. First, the continued lack of income growth harms low-income children's development, which affects our nation's future human capital. Second, a growing body of evidence suggests that the lack of income gains at the bottom have macroeconomic consequences because it either reduces consumption or encourages more debt, both of which are destabilizing.⁴

But there are remedies for these problems, such as raising the minimum wage. Research by economists Daniel Aaronson and Eric French at the Federal Reserve Bank of Chicago and Sumit Agarwal of the University of Singapore find that increasing the minimum wage boosts the consumption of affected workers.⁵ And a battery of other research shows that raising the minimum wage does not reduce local employment and reduces employee turnover.⁶

FIGURE 1

Poverty Rate across the United States in 2012

The official poverty rate by county varies substantially by geography. Poverty is concentrated in the southern part of the country, though throughout the nation there are counties with high poverty adjacent to counties relatively low poverty indicating segregation by income.



Source: Washington Center for Equitable Growth calculations from data from the Census Bureau's Small Area Income and Poverty Estimates ©2014 Washington Center for Equitable Growth

The three essays in this section of our conference report—by Christopher Wimer, a research scientist at Columbia Population Research Center, Arindrajit Dube, an associate professor of economics at the University of Massachusetts-Amherst, and Gavin Kelley, chief executive of the Resolution Foundation in the United Kingdom—look the overall exclusion of low-wage workers from the benefits of economic growth and how that affects the future growth and stability of our economy. They also consider whether the government should focus on raising market wages though policies such as the minimum wage, anti-poverty assistance or some better combination of the two approaches. —*Heather Boushey*

Over the past 40 years, workers in the bottom 40 percent of the wage spectrum experienced negligible wage growth, and wages have fallen for those in the bottom 10 percent.

Inequality and the Wellbeing of the Poor in the United States

Christopher Wimer

Research Scientist at the Columbia University School of Social Work, and and Co-Director of Columbia's new Center on Poverty and Social Policy

What have these workers and their families experienced over the past several decades? A common but deeply flawed measure of their wellbeing over the years is the official poverty rate, which fluctuates over a fairly narrow band but remained essentially flat since President Lyndon B. Johnson's declaration of the War on Poverty in the mid-1960s.¹

This is not the forum to rehearse the litany of reasons why the official poverty rate is fundamentally flawed. But perhaps its biggest shortcoming is that it doesn't count the many resources directed toward low-income families when measuring income. These resources include in-kind benefits such as supplemental nutrition assistance (what we used to call food stamps) and housing assistance, but also after-tax benefits such as the Earned Income Tax Credit and the Child Tax Credit.

When these resources are properly accounted for in a poverty measure, my colleagues and I at Columbia University demonstrate that poverty rates fell by about 40 percent over the past half century, from 26 percent in 1967 to 16 percent today.² We have made more progress than we thought in fighting poverty in the United States since the 1960s. That is the good news. The bad news is that the declines I note above have come entirely because of the work of government policies and programs—not because lowincome workers and families have succeeded in the workplace.

Indeed, aside from the latter half of the 1990s, low-income workers and families generally fared poorly relative to their more advantaged peers in the middle class and especially compared to the wealthy in terms of income growth. Absent resources from government

Low-income workers and families generally fared poorly relative to their more advantaged peers in the middle class and especially among the wealthy. programs, poverty (properly measured) would have actually increased between the 1960s and today—from 27 percent to 29 percent, equal to about 37 million people.³

Focusing exclusively on numbers and percentages surrounding a specific poverty line, however, obscures other trends in income and the wellbeing of the poor. Recent data that my colleagues and I are collecting for a new longitudinal study of New York City residents tells us that actual levels of material hardship—the inability to meet one's routine expenses—are actually quite a bit higher than poverty rates, even as properly measured. This means we need to think about those at the bottom of the income spectrum as not just those who fall below some predetermined poverty line but also those who find themselves consistently struggling to keep pace with what it costs to get by in contemporary society.

So a key question is whether the run-up in income inequality over the past five decades is a driving force of the economic woes of the less fortunate or simply another measure of it. The poor are doing better than in the past thanks to government programs that help alleviate poverty and give them the opportunity to climb the bottom rungs of the income ladder, but at the same time we know the fortunes of those at the top are far outpacing those at the bottom

If, as some contend, the wellbeing of the poor is dampened by the rise in inequality, then we are justified in attempting to reduce income inequality in order to improve the lots of the less fortunate. But if the two are merely jointly determined—say by the rising returns on a better education that are (partially) the result of market forces—then reducing income inequality by itself is likely do little to improve the long-run wellbeing of the poor aside from helping the poor to get by and consume more from their income.

What do we know about whether rising income inequality in the United States reduces the wellbeing of the poor? Unfortunately, not very much. Cornell University economist Robert Frank argues that as inequality rises we see a pattern of so-called "expenditure cascades" as people further down the economic ladder essentially try to consume enough to "keep up with the Jones" just above them.⁴ University of Chicago economist Marianne Bertrand finds that rising inequality leads to reductions in disposable income further down the income ladder, though she is not explicitly focused on the wellbeing of the poor.⁵

Levels of material hardship—the inability to meet one's routine expenses—are actually quite a bit higher than poverty rates, even as properly measured. But these studies spark very provocative questions. Does increased inequality not only lead to an increase in consumer prices but also changes in consumption patterns in a way that causes income to not go as far for the poor as it might? And do these processes have actual negative effects on the overall wellbeing of the poor? Identifying such effects using common econometric methods, however, remains challenging.

So it is still an open question whether rising levels of inequality harm less-skilled and lower-earning families. Even if government programs and policies keep disadvantaged individuals and families afloat, sociologists still might question whether income that comes once a year in the form of tax refunds or once a month in the form of a Supplemental Nutrition Assistance Program card is as useful as income from a regular paycheck, which provides benefits both remunerative and potentially cumulative, given that over time, that job may turn into a career.

What is ultimately most important is not whether people have enough resources over the course of a year to meet a somewhat arbitrary line of what experts think they need. Rather, we need to know whether people are truly able to harness their resources to meet both their daily and monthly expenses while simultaneously investing in their own and their children's future.

In short, understanding whether and how economic inequality affects those at the bottom of the income spectrum is central to the success and wellbeing of our nation.

Reversing Inequality at the Bottom: The Role of the Minimum Wage

Arindrajit Dube

Associate Professor of Economics at the University of Massachusetts-Amherst



here are many factors affecting the growth in wage inequality in the United States over the past four decades. When it comes to workers on the bottom rungs of the income ladder, one important factor is the minimum wage. The federal minimum wage reached its high-water mark in 1968, when it stood at \$9.59 per hour in 2014 dollars, declining to a still-respectable \$8.59 by 1979. During the 1980s, however, the real (inflation-adjusted) minimum wage declined substantially. And over the past 20 years, the minimum wage has largely treaded water, reaching a historical low of \$6.07 per hour in 2006 just before the last federal increase in 2009. The minimum wage now stands at \$7.25 per hour in today's dollars.

The failure of the minimum wage to keep up with inflation means that, for workers earning the minimum wage, each hour of labor purchases less goods and services today than it did in the past.

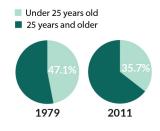
Minimum wage workers are not only (contrary to popular belief) teenagers and young adults whose low wages are supplemented by their families. In fact, between 1979 and 2011, the share of low-wage workers—defined as those with wages of \$10 or less in 2011 dollars—under the age of 25 years of age fell to 35.7 percent from 47.1 percent.¹ Instead, minimum wage workers are increasingly adults who must rely exclusively on their meager earnings to support basic household consumption. The decline in the value of the minimum wage affects female workers in particular, as they tend to be paid lower wages.

Low minimum wages are also problematic when they deviate too far from the median wage because that means minimum-wage earners are falling farther behind on the income ladder. This is why economists often use the ratio of the minimum to the median wage. The so-called 50/10 wage gap—the median wage earner compared to those with earnings in the bottom 10 percent of the income ladder—captures this type of wage inequality over time. Since 1979, around a third of the changes in the 50/10 wage gap have been driven by changes in the minimum wage.

There are two main reasons to pay attention to this measure. First, a comparison of the minimum wage to the median offers us a guide to how many workers are affected by a particular minimum wage increase, and what level of minimum wage the labor market can bear. When this ratio is low—say around 0.2—the policy is not raising wages of many workers. In contrast, a high ratio—say around 0.8—indicates a highly interventionist policy where the minimum wage is dramatically compressing differences in wages for nearly half the workforce.

More Adults Rely on Minimum Wage Jobs

Minimum wage workers under the age of 25 earning \$10 an hour or less in 2011 dollars.



Source: John Schmitt and Janelle Jones, *Bad Jobs on the Rise* (Washington, DC: Center for Economic and Policy Research, September 2012). ©2014 Washington Center for Equitable Growth Second, the median wage provides a reference point for judging what is a reasonable minimum wage level. No one expects that the minimum wage should be set equal to the median wage, but fairness concerns matter when the minimum wage falls below say, one-fourth or one-fifth of the median wage.²

A natural target is to set the federal minimum wage to half of the median wage for full-time workers. This target has important precedence historically in the United States. In the 1960s, this ratio was 51 percent, reaching a high of 55 percent in 1968. Averaged over the 1960–1979 period, the ratio stood at 48 percent. Today, the ratio stands at 38 percent. Raising the federal minimum wage to around \$10/hour would restore the value of the minimum wage have largely stalled in a deeply divided Congress despite widespread political support around the country.

For the first time in U.S. history we have many major cities establishing citywide minimum wages.

This federal inaction has led to a flurry of activities at the state and local level. States have stepped in during periods with a stagnant federal minimum wage in the past, especially the 2000s, but for the first time in U.S. history we have many major cities establishing citywide minimum wages for all (or most) private-sector workers. The growing list of cities with such a policy now includes Albuquerque, Chicago, San Francisco, San Diego, San Jose, Santa Fe, Seattle, and Washington, DC. Other cities such as Los Angeles and New York are actively exploring possibilities.

This push to increase minimum wages in big cities coincides with organizing by workers in fast-food chains in major metro areas. The target minimum wage in most of these areas is substantially higher in nominal (non-inflation-adjusted) value— with \$15/hour a focal point for these campaigns. The confluence of these factors raises the possibility of substantially altering wage standards in the U.S. labor market.

How should we think about these sizable increases in the minimum wage? First, we should be careful not to overstate the size of the increases or the levels of the minimum wages because the cost of living and overall wage levels vary tremendously by region. Setting the minimum wage to half the full-time median wage would produce \$10/hour policy nationally, but much higher figures in major metro areas such as Washington, DC (\$13.51), San Francisco (\$13.37), Boston (\$12.85), New York (\$12.25), and Seattle (\$11.85).

Moreover, these higher nominal wages are usually phased in gradually. In Seattle, the hourly minimum wage will eventually rise to around \$14 in 2014 dollars. This con-

stitutes around 59 percent of the median full-time wage in that metro area, which is certainly higher than historical standards but not outlandishly so.

So what we do know about the impact of minimum wages over the past few decades and the importance of particular channels for the higher, local wage standards? First, most careful recent work points to relatively small impact on employment—be it for sectors such as restaurants or retail or for groups such as teens.³ As a result of wage increases and small impact on employment, family incomes rise at the bottom. A 10 percent increase in the minimum would reduce the poverty rate among the nonelderly population by around 2 percent, and generally raises family incomes for the bottom 20 percent of the family income distribution.⁴

It is possible that the much larger increases in minimum wage may induce greater substitution of low-skilled labor with automation, or with fewer but more high-skilled workers? If this is true then we would expect evidence of growing "disemployment" (workers out of a job due to lack of skills or education) from these higher city-wide wage standards. Yet recent research also identifies some additional benefits that may be more important than larger wage increases. A growing body of research shows that while the impact on employment stock is small, there are larger reductions in employment flows or turnover.⁵ The reduction in turnover provides additional evidence that search frictions in the low-wage labor market are quantitatively important and offer some clues as to the way cost increases may be absorbed.

Given the cost of recruiting and training new workers, for example, reduction in turnover can be expected to offset about a fifth of the labor-cost increases associated with minimum wage hikes in this range. I think the large city wide increases will provide us with some additional evidence on this topic. In particular, I believe it should be possible to assess whether the lower turnover regimes lead to substantially different training policies as would be predicted by some models incorporating "search friction"—things that prevent or make it more difficult for workers to find the kind of jobs they want.⁶ Moreover, it will be interesting to see whether change comes from the extensive margin (growth in high-training/low-turnover firms) or the intensive margin (change within firms).

The nature of high-cost metro areas means that a substantially higher minimum wage may allow more lower-wage workers to live closer to their place of work (inside the city) and reduce commute time. The labor-supply effect from this "in-migration"

A 10 percent increase in the minimum would reduce the poverty rate among the non-elderly population by around 2 percent. also can reduce recruitment costs and improve the quality of the service work force. These additional channels will be useful to keep in mind in future research.

Evidence also suggests that, in part, cost increases associated with a higher minimum wage are passed on to customers as price increases, especially for industries that employ high levels of low-wage labor. The best evidence suggests that a 10 percent increase in minimum wage would raise fast food prices by around 0.7 percent. There are reasons to believe that the higher income customers inside major cities are better able to absorb price increases without cutting back on demand. Limited evidence from San Francisco tends to confirm this observation.⁸

Finally, there is some evidence that low-wage workers substantially increase consumption in response to wage hikes.⁹ Daniel Aaronson and Eric French at the Federal Reserve argue that the higher marginal propensity to consume among low-wage workers is likely to lead to some short-term increases in economic growth from a minimum wage increase.¹⁰ My reading of the evidence is that it is somewhat difficult to accurately assess the importance of this channel, in part because the relatively small number of minimum wage workers makes any aggregate demand effect fairly small. But I do think that the size of increases and possible in-migration of low-wage workers into urban areas may increase the local demand impact of a city wage standard.

Minimum wage policies are a powerful lever for affecting wage inequality in the bottom half of the labor market. Modest increases in minimum wages can raise the bottom wage, and family incomes, without substantially affecting employment. But minimum wages are limited in their reach, and cannot be expected to solve all our problems when it comes to wage inequality. At the same time, the much higher wage standards being implemented in some of the cities offer the possibility of taking this policy "to scale."

Along with this greater promise, however, come added risks. The reality is that we do not know very well how these policies will affect the local economy. Future researchers would do well to utilize the careful identification strategies that have been the hallmark of recent minimum wage research to study these high city wide minimum wage increases. Doing so will deepen our understanding of the functioning of the low-wage labor market, and help us gauge the proper scope of this important public policy.

Modest increases in minimum wages can raise the bottom wage, and family incomes, without substantially affecting employment.

Economic Inequality and Growth in the United Kingdom: Insights for the United States

Gavin Kelley

Chief Executive of the Resolution Foundation

fter an extraordinarily long and deep economic downturn, the United Kingdom is finally enjoying belated but comparatively strong growth. The current recovery is jobs-rich, with employment growth massively outperforming expectations relative to gross domestic product. That's the good news. In stark contrast, however, pay growth remains unprecedentedly weak and productivity has plummeted. Real (inflation-adjusted) wages have fallen for six years straight, with even nominal wages growing at less than 1 percent in recent months—the lowest increase ever recorded.

This apparent collapse in the link between economic growth and real wage gains is more extreme than anything we have seen before. But the trend has not emerged completely out of the blue. Even as the U.K. economy continued to grow steadily prior to the financial crisis and global recession in 2007-2009, workers across the earnings distribution experienced a major slow-down in wage growth.

This unhappy story about the weakening relationship between wages and growth is all too familiar in the United States. But the U.K. experience is different in important respects—and potentially offers some relevant insights for U.S. policymakers to ponder.

First, let's look at what happened. The simple ratio of GDP growth to growth in median wages in the United Kingdom weakened markedly in the period from 2003-2008 compared to the 1990s and 1980s. In those earlier decades, wage inequality grew sharply—those at the top pulled away from the middle, and the middle pulled away from the bottom—but pay was rising across the board. In contrast, a big deceleration in the growth rate of earnings characterized the early 2000s. For the first time, median pay trailed way behind growth in real GDP per capita.

Even as the U.K. economy continued to grow steadily prior to the financial crisis and global recession, workers across the earnings distribution experienced a major slow-down in wage growth. Between 1977 and 2002, average annual real wage growth for workers at the median was around 2 percent, but from 2003 to 2008 it fell to around 0 percent to 1 percent (depending on the measure of inflation used). This stagnation happened even while real GDP per capita had an average annual growth rate of 1.4 percent. The squeeze was broadly felt: the only earners on the income ladder who experienced stronger growth were those near the bottom rungs (buoyed by increases in the minimum wage) and those at the very top (especially due to bonus payments in finance).

In the wake of the financial crisis of 2008 and amid the Great Recession of 2007-2009, the fall in real wages (around 8 percent) has also been relatively evenly spread across the earnings spectrum, though it is far bigger if we include the self-employed (who are excluded from official data). Younger workers have suffered the most, while older workers have been the least affected.

Wages, however, don't give the full-picture when it comes to living standards. If we look at household income growth, from 1994-95 to 2011-12, the bottom half of households took just 16 percent of pre-tax growth. Upper-middle households (those in the 50th to 90th percentiles) took 45 percent of household income pre-tax growth (44 percent post-tax), proportionate to their population share. The richest 10 percent of households took 38 percent of pre-tax growth (29 percent post-tax) while the richest 1 percent took 14 percent pre-tax (9 percent post-tax).

In short, redistribution boosted the bottom half's share of income growth from 16 to 26 percent.

Why has the link between economic growth and wages weakened? The share of GDP flowing to the wages of those on the low and middle part of the income spectrum has fallen markedly since the mid-1970s, from 16 percent to just 12 percent—a decline of 25 percent.¹ In simple accounting terms, this relationship depends on three factors:

- How much of GDP growth goes to profit rather than labor?
- How much of that share of economic growth goes to labor in the form of nonwage benefits and how much actually gets paid out to workers in wages?
- Of this wage share, how much reaches low- and middle-income earners?

Why has the link between economic growth and wages weakened in the United Kingdom? It is often assumed that the United Kingdom and the United States alike face a long-term decline in the labor share of GDP as more of our national incomes are sucked up into corporate profits due to a mix of changing globalisation, technology, increased financialisation and, relatedly, deregulation spurred by the impact of big money on democratic politics.

From the U.K. perspective, there has been a slight shift in this direction over time, though it is an issue that is often overstated. Changes in the U.K.'s labor share of national income accounted for only a fifth of the cleavage that had opened up between pay and productivity since the early 1970s. The decline in the labor share of income has been less marked than in the United States.²

Another U.K. perspective is that workers' wages have primarily been under pressure because of the rising burdens on employers to provide more non-wage compensation such as higher national insurance and pension contributions. These employment costs have certainly risen, but again they can be overstated, with such increases accounting for a bit over a quarter of the gap between productivity and pay. That said, it is true that the rising cost of non-wage compensation appears to have played a more important role in the period of wage stagnation from 2003 in the United Kingdom.

But by far the most important factor explaining the declining share of the cake going to the bottom half of U.K. workers since the 1970s has been rising wage inequality, although this played a smaller role in the immediate pre-crisis period of 2003 to 2008.

How these three trends are likely to evolve over the next decade and beyond is far from clear. The intellectual zeitgeist expects there to be a redistribution of income over time from labor toward capital due to the "rise of the robot" (technology replacing workers) and French economist Thomas Piketty's now famous observation that "r > g" (returns on capital are greater than the returns on economic growth).

Equally troubling is the outlook for non-wage costs. The tricky balancing act over the past decade of securing adequate pensions savings for an aging society and protecting the wages of today's workers in the United Kingdom is unlikely to go away. Similarly, most projections anticipate that, following the recent downturn period where wage inequality remained fairly level, it is now likely to increase again as the highest earners pull away from the rest. It is often assumed that the United Kingdom and the United States alike face a long-term decline in the labor share of GDP. Yet the idea that resumed growth is pre-destined to mean ever higher inequality is bogus. It was not long ago, after all, that the United Kingdom experienced broadly shared economic growth. So what observations can we make based on the U.K.'s experience?

A rising minimum wage and aggressive use of tax-credits made a significant and positive difference in the United Kingdom.

First, standing still takes a lot of effort when the ground is shifting. A rising minimum wage and aggressive use of tax-credits made a significant and positive difference in the United Kingdom, but policymakers were pushing against the grain and didn't do enough to confront the structural economic challenges such as inadequate business investment, lack of employee bargaining power, and weak demand for skilled labor.

Second, successive waves of "welfare reform," together with the long-term decline in labor union collective bargaining, appears to have shifted the wage-unemployment relationship since the early 2000s. Wages have become significantly less responsive to falling unemployment than was the case in the 1980s and 1990s.³ At the same time, and despite the gains from the minimum wage, working poverty has become far more pervasive. Arguably, these shifts put even more onus on aggressive monetary and fiscal policy to help generate a tight labour market and wage growth.

Third, the U.K.'s policy on the minimum wage was a success but we shouldn't rest on our laurels. The Low Pay Commission, the body that oversees the minimum wage, is widely judged to have been highly effective if perhaps too cautious. The wage gap between the bottom and middle of the distribution has fallen (slightly) since its introduction. Fifteen years ago the whole notion of the minimum wage was highly partisan. Now each of the political parties jockey for position on this issue.

The Low Pay Commission's blend of operational independence, technical expertise, and social partnership (employer and union representation) has worked well. And this flexibility has been an advantage; in the UK context, linking the national minimum wage to inflation would be a mistake. But there is now a sense that we need to revise our minimum wage framework to reflect learning over 15 years and to inject more ambition into the process.⁴

Finally, policy wonks need to think hard about the political economy of tax credits. Most experts think tax credits increased the incentive to work (boosting singleparent employment rates in particular), helped bring about a major fall in child poverty, and shored up the post-tax transfer share of income going to the bottom 50 percent of society. Yet the rapid expansion of the policy (around 8 in 10 families with kids were eligible in 2010) raced ahead of popular support, making it surprisingly easy for the current governing coalition of Conservatives and Liberal Democrats to cut them. Tax credits have been characterised as "welfare" for the work-shy, whereas "tax-relief" is generally perceived more positively.

So what is the outlook for wage inequality in the United Kingdom? Broad-based economic growth is very unlikely to return by chance. Securing such an outcome will require a number of elements, including:

- A more aggressive strategy for raising the wage floor during the current period of economic recovery, drawing confidence from growing research about the capacity of buoyant labour markets to absorb steady minimum wage rises
- Tackling the extraordinary rents that have accrued to small numbers in the finance sector over the past decade as the link between run-away rewards, financial instability, and fiscal retrenchment is all too clear (and is toxic for those on low and modest incomes)
- Ditching the notion that increasing payroll taxes (on employees and employers) are a politically cute way of raising extra revenue (not least when large and regressive tax-reliefs remain untouched)
- Boosting the woefully inadequate business and public investment as there is no other path to higher labor productivity
- Remedying perennial weaknesses in U.K. education policy, especially the awful wage and productivity returns to many low and intermediate level vocational qualifications (respectively, the qualification level that a 16 or 19 year old is expected to attain)

This last point is key. Education may not be the panacea that political leaders claim it to be, but the wage-penalty arising from poor quality sub-degree level vocational qualifications in the United Kingdom is particularly punitive.

More speculatively, there is a desperate need for experimentation with new labor market institutions that could offer employees some greater form of bargaining power, but in a manner that is compatible with the realities of a relatively flexible, heavily servicedominated economy. This is pretty much a policy void in the United Kingdom today.

Recreating more equitable, broad-based economic growth requires as prerequisites a tighter jobs market together with a higher wage floor. But to restore the link between economic growth and wage growth also will involve bold policy experimentation in pursuit of higher wages for those on the low- and middle-income rungs on the economy in the United Kingdom.

Recreating more equitable, broadbased economic growth requires as prerequisites a tighter jobs market together with a higher wage floor.

Understanding Economic Inequality and Growth at the Middle of the Income Ladder

Whether and how middle-and low-income families alike are strained by the money and time needed to raise their children to be productive members of our society

Recent shifts in our economy hit middle class families in ways that may directly affect both current and future productivity. Families in the middle of the income spectrum experienced very little income growth over the past several decades despite working more and often irregular hours. Between 1979 and 2007, the incomes of these families grew by just under 40 percent (after adjusting for inflation), but over that same time period their hours of work also increased.¹

Compared to 1979, middle class married couples in 2007 put in an average of 11 extra hours of work per week.² Much of this added employment is due to the increased employment rates of women and mothers. Most dramatic is the increase in the share of mothers who work full-time, full-year (at least 50 weeks per year and at least 35 hours a week), which rose from 27.3 percent of mothers in 1979 to 46 percent of mothers in 2007 before declining somewhat to 44.1 percent, in the wake of the 2007-2009 recession.³

The dramatic increase in women's working hours certainly boosted household earnings. Middle class households would have substantially lower earnings today if women's employment patterns had remained unchanged. And U.S. gross domestic product—the largest measure of economic growth—would have been roughly 11 percent lower in 2012 if women had not increased their working hours as they did. In today's dollars, this translates to over \$1.7 trillion less in output—roughly equivalent to total U.S. spending on Social Security, Medicare, and Medicaid combined in 2012.⁴

But as more women enter the workforce and most men continue to work outside the home, parents are increasingly strapped for time.⁵ Given the importance of early childhood for a child and our nation's future human capital, understanding

how trends in our economy affect the next generation of workers is key to future economic growth. Economists have spilled a great deal of ink seeking to understand female employment patterns and what greater maternal employment means for families and, particularly, children's wellbeing and development. Over the past decades, economists have begun focusing on how a child's experiences between birth and starting kindergarten affect their future employment and earnings.⁶

The three essays in this section of our conference report—by Stanford University sociologist Sean Reardon, Stanford's Clayman Institute sociologist Marianne Cooper, and the Vice President and Director of the Children & Families Program at Next Generation, Ann O'Leary—explore how middle-income families are trying to balance work/life while providing their kids with the best opportunities available and how government policy can help create institutions that allow all workers to both contribute in the workplace and at home. —*Heather Boushey*

Families in the middle of the income spectrum experienced very little income growth over the past several decades despite working harder.

TABLE 1

Estimated impact of women's increased annual hours of work on GDP, 1979-2012

	Average annual hours of work	
	1979	2007
Men	1,717	1,685
Women	907	1,203
All	1,295	1,438
All, assuming women worked 1979 average hours	1,295	1,285
Ratio of counterfactual to actual hours		0.894
Implied change in GDP		
Percent		-10.6%
Billions of 2012 dollars		-\$1,661

Note: Average annual hours are weighted by the share of the population ages 16 to 64. Women were 51.4 percent of the working-age population in 2012.

Source: Eileen Applebaum, Heather Boushey, John Schmitt, "The Economic Importance of Women's Rising Hours of Work," (Center for American Progress and Center for Economic and Policy Research), April 2014.

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Income Inequality Affects Our Children's Educational Opportunities

Sean F. Reardon

Sociologist at Stanford University

ne of the clearest manifestations of growing economic inequality in our nation today is the widening educational achievement gap between the children of the wealthiest and the children of everyone else. At first glance, this sounds like an obvious outcome. After all, wealthier families are able to afford expensive private schools, or homes in wealthy public school districts with more educational resources.

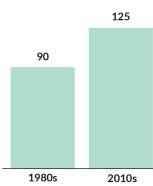
But a closer look at this education achievement gap over the past 50 years or so shows that the gap only began to widen in the 1970s, right about the time that wealth and income inequality in our nation also began to grow. The past 30 years have seen a sustained rise in inequality in wages, incomes, and wealth, leading to more and more income and wealth accruing to those at the top of the economic ladder, pulling the rich further away from those on the other rungs.¹

At the same time, the growing educational gap became ever more apparent. In the 1980s, the gap between the reading and math skills of the wealthiest 10 percent of kids and poorest 10 percent was about 90 points on an 800-point SAT-type scale.² Three decades later, the gap has grown to 125 points. This widening gap is largely due to differences in how well prepared children are for school before they enter kindergarten or even pre-kindergarten.³ In this era of economic inequality, wealthier parents have far more resources, both in terms of time and money, to better prepare their children to succeed in school and later in life.

This widening educational achievement gap may threaten our future economic growth. With only a select few individuals receiving the best education and enrichment, we are not effectively developing the economic potential of our future workforce. To grow our economy we must provide educational and enrichment opportunities for children across the income spectrum, rather than only a select few at the top.

A Growing Educational Achievement Gap

The wealthiest 10 percent of rich and poor children's scores on an 800-point SAT-type scale



Source: Sean F. Reardon, "The Widening Academic Achievement Gap Between the Rich and the Poor. New Evidence and Possible Explanations," in *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances,* ed. Greg J. Duncan and Richard J. Murnane (New York, NY: Russell Sage Foundation, 2011). ©2014 Washington Center for Equitable Growth Wealth and income largely define the educational gap today, more so than race and ethnicity. In the 1950s and 1960s, the opposite was true. Back then, racial discrimination in all aspects of life led to deep racial inequality. Economic inequality, in contrast, was lower than at any time in U.S. history, according to extensive research done by economists Thomas Piketty at the Paris School of Economics and Emmanuel Saez at the University of California-Berkeley.⁴ But anti-discrimination and civil rights legislation and school desegregation led to improved economic, social, and educational conditions for African Americans and other minorities beginning in the late 1960s. As a result, the gap today between white and black children is about 70 points on an 800-point SAT-type scale, 40 percent smaller than it was in the 1970s, and about half the size of the gap between rich and poor children, but still unacceptable.⁵

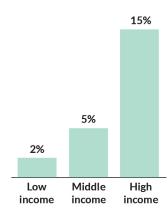
The growth of the socioeconomic achievement gap appears to be largely because more affluent parents are increasingly investing more time and money in their kids' educational enrichment—and at earlier periods in their children's lives—than hard-pressed low-income and middle class families.⁶ Indeed, surveys show that the amount of time and money parents invest in their children has grown sharply over the past four decades among both affluent and non-affluent parents. But the increase in these investments has been two to three times greater among high-income families.⁷ Economists Richard Murnane of Harvard University and Greg Duncan at the University of California-Irvine find that between 1972 and 2006 the amount highincome families spent on their children's enrichment activities grew by 150 percent, while the amount spent by low-income families grew by 57 percent.⁸ In part, parents are spending more on their kids because they understand that educational success is increasingly important in today's uncertain economic times, a point that sociologist Marianne Cooper at the Clayman Institute makes in her recent book "Cut Adrift."9 But low- and middle-income families can't match the resources—both the money and flexible time-of the rich.

As a result, rich and poor children score very differently on school readiness tests before they enter kindergarten. Once they are in school, however, the gap grows very little—by less than 10 percent between kindergarten and high school.¹⁰ Thus, it appears that the academic gap is widening because rich students are increasingly entering kindergarten much better prepared to succeed in school than low- and middle-class students. To be sure, there are important differences in the quality of schools serving low- and high-income students, but these differences do not appear to be as salient as the differences in children's experiences prior to kindergarten.

Affluent parents are increasingly investing more time and money on their kids' educational enrichment—and at earlier periods in their children's lives.

Cornering the Market on Seats at the Best Colleges

High school graduates enrolled in a highly selective college or university in 2004



Source: Sean F. Reardon, Rachel Baker, and Daniel Klasik, Race, Income, and Enrollment Patterns in Highly Selective Colleges, 1982-2004 (Stanford, CA: Center for Education Policy Analysis, August 3, 2012). ©2014 Washington Center for Equitable Growth The socioeconomic education gap is likely to affect us for decades to come. Think of it as a leading indicator of disparities in civic engagement, college enrollment, and adult success. Indeed, family income and wealth have become increasingly correlated with a variety of positive adolescent activities, such as sports participation, school leadership, extracurricular activities, and volunteer work, according to research conducted by Harvard University political scientist Robert D. Putnam and his colleagues.¹¹

Not only are the children of the rich doing better in elementary and high school than the children of the poor, they also are cornering the market on the seats in the best colleges. In a study that I conducted with several of my graduate students, we found that 15 percent of high-income students from the 2004 graduating class of high school enrolled in a highly selective college or university compared to only 5 percent of middle-income graduates and 2 percent of low-income graduates.¹² Because these colleges provide educational opportunities and access to social networks that often lead to high-paying jobs, children from low-income families risk are being locked out of the upper end of the economic spectrum. For low-income children, the American Dream is further out of reach.

This is bad news for our future economy and society because we need well-educated workers in order to sustainably boost economic productivity and grow the economy. So how can we prepare every child, not just those most affluent ones, to be productive members of society? First of all, we must acknowledge that educational problems cannot be resolved by school alone. The achievement gap begins at an early age. To close it, we must invest in children's early childhood educational opportunities. This means investing not only in preschool but also in parents. Specifically, we need to:

- Invest in high-quality early childhood education programs (pre-schools, day care) and make them affordable for all families.
- Invest in programs that help parents become their children's first and best teacher.
- Provide policy solutions to help all parents have the time to be teachers through paid leave, paid sick days, workplace flexibility, and income support programs that ensure that families can focus on their children even in hard economic times.

In short, we can narrow the socioeconomic education gap through public policies that help parents of all incomes provide enriching educational opportunities for their children in the way that only affluent parents can do today.

One Nation Under Worry

Marianne Cooper

Sociologist at The Clayman Institute, Stanford University

s study after study shows, the rich are doing better than the rest of us. But surprisingly, they don't always presume that their wealth will protect them or guarantee their children's futures. In talking with families across the class spectrum about how they coping in an uncertain age for my new book, "Cut Adrift: Families in Insecure Times," I learned that even the affluent families don't think they have enough and strive to attain more.¹ In contrast, the working- and middle-class families I spoke with realize they can't do much to improve their situations so they lower their expectations and try to get by on less.

This is the new face of economic inequality in the United States today. Most everyone is dealing with economic insecurity, yet the ways in which families on different rungs of the income ladder are doing so may be fueling greater economic inequality.

Take Paul Mah, a technology executive with assets of more than \$1 million. "We are probably in the top 1 percent of all American households," says Mah, "so I can't complain, but I still don't feel rich." Only accumulating millions more, he says, would enable him to stop feeling anxious about his financial future and the prospects of his children.

In contrast, Laura Delgado, a struggling single mother of three who works as a cashier, has zero savings, but in many ways is less concerned. "Having nothing isn't always a bad thing," she says, noting that things could always be worse. To cope with her financial trouble, Delgado scales back her definition of security to just the basics (food, shelter, clothing) and filters out bad news by always trying to look on the bright side of things. Her approach enables her to control the anxiety she feels about her difficult economic situation.

These are just two of the emotional stories behind the statistics documenting that we live in precarious times. As Americans scramble to hold on to jobs, deal with pay cuts, afford rising college tuition, fund retirements, manage debt, weather the costs Most everyone is dealing with economic insecurity, yet the ways in which families on different rungs of the income ladder are doing so may be fueling greater economic inequality. of medical emergencies, and give their children an edge in an increasingly competitive world, there are deep psychological reverberations—for us all.

Of course these reverberations look and feel differently for different groups of Americans. As economic insecurity grows—a reflection of the many changes and challenges in our economy today—so too has the divide in our country between the haves and the have-nots. This means families face different obstacles and can overcome them, or not, depending on the resources at their disposal.

Like Laura Delgado, many middle- and working-class families I talked with are so beaten down that they are letting go of their dreams for a better life. Instead, they try to make the insecurity they face more tolerable. When Laura must choose whether to pay the power bill or put food on the table for example, she makes light of the lack of heat in her home by telling her kids it's just "camping."

Affluent families respond differently. Rather than trying to adjust to greater insecurity, they seek to protect their families by continuing to climb the wealth-andincome ladder. Security for some of the wealthiest families I talked with meant accumulating a net worth of more than \$10 million. Such eye-popping definitions of security leave many affluent families more worried at times than their less fortunate compatriots further down the ladder.

In our go-it-alone age, we all adopt ways of coping—ways of thinking and feeling—that help us navigate through choppy and dangerous waters. These different approaches to managing insecurity reveal that in hard times the divisions among us are not just economic, they are also emotional.

Emotional disparities like these have real consequences. As the rich push for more and everyone else tries to accommodate to less, we actually make inequality worse. Because we treat economic insecurity as a personal problem rather than a social problem that we can solve collectively, we are unable to muster the will to stop it.

As the rich push for more and everyone else tries to accommodate to less, we actually make inequality

worse.

Our Future Depends on Early Childhood Investments

Ann O'Leary

Vice President and Director of the Children & Families Program at NextGeneration

t is startling to think that even before a child sits down on her first day of kindergarten and reaches for her crayons, we can already reasonably predict what she will earn as an adult. Research shows that early language development, understanding of math concepts, and social emotional stability at age five are the greatest predictors of academic success in school. In fact, skills learned before age five can forecast future adult earnings, educational attainment, and employment.¹

These findings have real implications for our economy. Human capital—the level of education, skills, and talents of our workforce—is a main driver of economic growth, so in order to ensure we have a healthy workforce and thriving economy in the decades to come, we must begin by developing human capital during early childhood.

Yet rising economic inequality and unstable economic growth define our society today. Children have different enrichment experiences during this critical time period based on where their families sit on the income ladder. About half of children In the United States receive no early childhood education.² These different experiences translate into a growing educational achievement gap between poor and rich children.

One study—often referred to as the famous "30 million word gap" study by University of Kansas child psychology professors Betty Hart and Todd R. Risley—finds that children living in poverty hear 30 million fewer words by age four than higher-income children.³ On average, a child from a low-income family knows 500 words by the age of 3, compared with 700 words for a child from a working-class family and 1,100 for a child from a professional family.⁴ Research by Stanford University infant psychology professor Anne Fernald and her colleagues found that by even age two, there is a six-month gap in language proficiency between lower-income and higher-income children. Skills learned before age five can forecast future adult earnings, educational attainment, and employment. In short, the educational achievement gap between poor and rich children begins well before kindergarten.

How can we better prepare our nation's youngest generation for success? According to University of Chicago economist James J. Heckman, educational and enrichment investments during early childhood yield the highest return in human capital compared to other investments over time.⁵ Why? Because as the brain forms, children learn cognitive skills such as language and early math concepts as well as "soft" skills such as curiosity, self-control, and grit. Both skillsets are critical for later academic and workplace success. By the time a child enters Kindergarten, the gap in school readiness is large and well established, growing by less than 10 percent between Kindergarten and high school.⁶

School readiness is enhanced by what happens in preschool, but the two factors that most explain the achievement gaps are parenting styles and home-learning environments.⁷ Yet many parents are unaware of the importance of early brain development and of the tremendous impact they can have in building their young child's brain and early vocabulary with simple actions such as talking, reading and singing.

Even if parents are aware of the importance of these activities, they may have difficulty carving out time at home with their children as they juggle jobs and their children's needs. Today, more children than ever are raised in single-parent families or in homes where both parents work. Parents today are constantly balancing work and family care often without access to family-friendly workplace policies to balance the two.

To be sure, if parents are unable to provide enriching home experiences then children can gain valuable developmental and learning support in quality child care and preschool settings. Yet many simply cannot afford childcare. In 2011, the average cost for a 4-year-old in professional childcare ranged from about \$4,000 to \$15,000 a year.⁸ Such costs put a major strain on family budgets, especially for low-income families, which spent nearly a third of their income on childcare (30 percent) in 2011, compared to middle- and higher-income families, which spent less than one-tenth (8 percent) of their income.⁹

What's more, low-income families who do strain to pay for child care often find that the care they can afford is, at best, a safe place for their child to stay while they are at work rather than an enriching environment for their young child to learn

In 2011, the average cost for a 4-yearold in professional childcare ranged from about \$4,000 to \$15,000 a year. critical skills. Sadly, these families often discover that the affordable childcare provider offers poor or mediocre support to help their child in the critical stages of early childhood development.¹⁰

In order to have a productive workforce and thriving economy tomorrow, we need to invest in our children today. There are viable policy solutions that could expand early childhood education and enrichment opportunities to all, rather than a select few at the top. First, voluntary home visits by child development professionals could increase awareness among working-class parents of how they can foster their children's development at home, such as talking, reading, and singing to their children before bedtime.

Second, it is important to expand access to high-quality, affordable early childhood education. These programs better prepare children for school, putting children more than a year ahead in mathematics and other subjects.¹¹ Low-income families would greatly benefit from expanded access to quality childcare, Early Head Start, and high-quality preschool programs.

Lastly, parents can only be better first teachers of their children if they have the time to be with their children. Policies such as workplace flexibility, paid family and medical leave, and paid sick days could help all working parents better manage work and family obligations and spend more time with their children. Today, professional workers are the most likely to have access to these policies, often considered additional employee "perks" by employers.

The importance of investing in early childhood matters for our overall economic competitiveness. The United States should be making smart economic investments in early childhood to ensure that all children have an equitable start before their first day of school. For the American Dream to shine well into the 21st century, it is no exaggeration to say that every American, young and old, needs our youngest ones to be the best and the brightest as adults no matter their family background and income level.

The United States should be making smart economic investments in early childhood to ensure that all children have an equitable start before their first day of school.

Understanding Economic Inequality and Growth at the Top of the Income Ladder

Whether and how rising inequality reflects increased contributions to economic growth or instead undue gains

hanks in large part to the ground-breaking work of Paris School of Economics professor Thomas Piketty, and his co-authors, including University of California-Berkley economics professor Emmanuel Saez, we know that we are living in an era of widening inequality. The share of post-taxand-transfer income going to the top 1 percent of earners increased from nearly 8 percent in 1979 to about 17 percent in 2007.¹ Over the course of the current economic recovery, the top 1 percent has received 95 percent of all pre-tax income gains—seeing a 31 percent increase in their incomes—while the bottom 99 percent saw a meager 0.4 percent increase.²

Economists hypothesize several reasons for this sharp increase in income inequality, among them rising pay for chief executives and other senior executives, increasing returns to superstar workers, the rise of the financial industry, and the decline in top-income tax rates.³ But this debate is far from over. And the issue is not just income inequality. Economic inequality is on the rise across a variety of dimensions, including wealth. According to research by Saez and Gabriel Zucman, assistant professor of economics at the London School of Economics, the share of wealth owned by the top 0.01 percent has increased 4-fold over in the past 35 years.⁴

Piketty's data makes the case that the steady accumulation of wealth at the top of the income spectrum is one of the most important ways that income inequality affects our economy. While there may be a theoretical argument for why higher incomes provide greater incentives for individual effort or inventing the next "big thing," it may also be that, beyond a certain point, income and wealth inequality dampens incentives as the wealthy increasingly seek to preserve their wealth rather than risk it in potentially productive endeavors while the non-wealthy are locked out due to "opportunity hoarding" by those at the top. One fundamental issue that Piketty's book, "Capital in the 21st Century," compels us to consider is the interaction between the flow of income and the stock of wealth. Does today's flow of income to the very top of the economic ladder calcify into tomorrow's wealth inequality? After all, the very high incomes that some people earn will allow them to build larger and larger stocks of capital over time.

Do we need to address rising income or wealth inequality in order to save our capitalist economy? How can we do so without hurting the vibrancy of today's economy? The three essays in this section of our conference report—by UC-Berkeley economist Emmanuel Saez, Michael Ettlinger, founding director of the University of New Hampshire Carsey School of Public Policy, and Northwestern University sociology PhD candidate Fiona Chin—discuss the state of top incomes, the consequences of their rise, and possible policies to promote more widely shared economic growth. —*Heather Boushey*

FIGURE 2

The Increasing Share of Income Going to the Top of the U.S. Income Ladder

After declining in first half of the 20th century, the share of national income became increasingly concentrated in the top of the income distribution beginning in the 1980s.



Over the course of the current economic recovery, the top 1 percent has received 95 percent of all pretax income gains seeing a 31 percent increase in their incomes.

Source: Alvaredo, Facundo, Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, "The World Top Incomes Database." July 17, 2014. ©2014 Washington Center for Equitable Growth

The Explosion of U.S. Income and Wealth Inequality

Emmanuel Saez

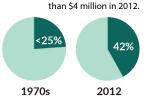
Professor of Eeconomics and Director of the Center for Equitable Growth at the University of California-Berkeley

New Research Findings

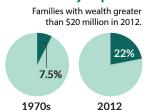
Total Household Wealth

Accrued by Top 1%

Families with wealth greater



Total Household Wealth Accrued by Top 0.1%



Source: Emmanuel Saez and Gabriel Zucman, Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data, Working Paper (Cambridge, MA: National Bureau of Economic Research, September 2014), ©2014 Washington Center for Equitable Growth In the United States today, the share of total pre-tax income accruing to the top 1 percent has more than doubled over the past five decades. The wealthy among us (families with incomes above \$400,000) pulled in 22 percent of pre-tax income in 2012, the last year for which complete data are available, compared to less than 10 percent in the 1970s.¹ What's more, by 2012 the top 1 percent income earners had regained almost all the ground lost during the Great Recession of 2007-2009. In contrast, the remaining 99 percent experienced stagnated real income growth—after factoring in inflation—after the Great Recession.

Another less documented but equally alarming trend has been the surge in wealth inequality in the United States since the 1970s. In a new working paper published by the National Bureau of Economic Research, Gabriel Zucman at the London School of Economics and I examined information on capital income from individual tax return data to construct measures of U.S. wealth concentration since 1913. We find that the share of total household wealth accrued by the top 1 percent of families—those with wealth of more than \$4 million in 2012—increased to almost 42 percent in 2012 from less than 25 percent in the late 1970s. Almost all of this increase is due to gains among the top 0.1 percent of families with wealth of more than \$20 million in 2012. The wealth of these families surged to 22 percent of total household wealth in the United States in 2012 from around 7.5 percent in the late 1970s.²

The flip side of such rising wealth concentration is the stagnation in middle-class wealth. Although average wealth per family grew by about 60 percent between 1986 and 2012, the average wealth of families in the bottom 90 percent essentially stagnated. In particular, the Great Recession reduced their average family wealth to \$85,000 in 2009 from \$130,000 in 2006. By 2012, average family wealth for the bottom 90 percent was still only \$83,000. In contrast, wealth among the top 1 percent increased substantially over the same period, regaining most of the wealth lost during the Great Recession.

For both wealth and income, then, there is a very uneven recovery from the losses of the Great Recession, with almost no gains for the bottom 90 percent, and all the gains concentrated among the top 10 percent, and especially the top 1 percent. How can we explain such large increases in income and wealth concentration in the United States and what should be done about it?

Contrary to the widely held view, we cannot blame everything on globalization and new technologies. While large increases in income concentration occurred in other English-speaking countries such as the United Kingdom or Canada, other developed-nation members of the Organisation for Economic Cooperation and Development, such as those in continental Europe or Japan, experienced far smaller increases in income concentration.³ At the same time, income tax rates on upper income earners have declined significantly since the 1970s in many OECD countries, particularly in English-speaking ones. Case in point: Top marginal income tax rates in the United States and the United Kingdom were above 70 percent in the 1970s before President Ronald Reagan's administration and Prime Minister Margaret Thatcher's government drastically cut them by 40 percentage points within a decade.

New research I published this year with Paris School of Economics professor Thomas Piketty and Stefanie Stantcheva at the Massachusetts Institute of Technology shows that, across 18 OECD countries with sufficient data, there is indeed a strong correlation between reductions in top tax rates and increases in the top 1 percent's share of pre-tax income from the 1960s to the present.⁴ Our research shows that the United States experienced a 35-percentage point reduction in its top income tax rate and a ten-percentage point increase in the share of pre-tax income earned by the top 1 percent. In contrast, France and Germany saw very little change in their top tax rates and the share of pre-tax income accrued by the top 1 percent over the same period.

The evolution of top tax rates is a good predictor of changes in pre-tax income concentration. There are three scenarios to explain the strong response of top pre-tax incomes to top tax rates. They have very different policy implications and can be tested in the data.

First, higher top tax rates may discourage work effort and business creation among the most talented—the so-called supply-side effect of higher taxes. In this scenario, lower top tax rates would lead to more economic activity by the rich and hence more

There is a strong correlation between reductions in top tax rates and increases in the top 1 percent's share of pre-tax income from the 1960s to the present. economic growth. Yet the overwhelming evidence shows that there is no correlation between cuts in top tax rates and average annual real (inflation-adjusted) GDP-percapita growth since the 1960s. Countries that made large cuts in top tax rates, such as the United Kingdom and the United States, have not grown significantly faster than countries that did not, such as Germany and Denmark.

Second, higher top tax rates could increase tax avoidance. In that scenario, increasing top rates in a tax system riddled with loopholes and tax avoidance opportunities is not productive. A better policy would be first to close loopholes in order to eliminate most opportunities for tax avoidance and only then increase top tax rates. Conservative commentators argue that the surge in pre-tax incomes discussed above could be indicative of tax avoidance in the 1970s, when top earners were presumably hiding a large fraction of their income amid high taxes.

If this tax avoidance scenario were true, then charitable giving among top earners should have decreased once top tax rates were cut. After all, charitable giving is tax deductible and thus is more advantageous precisely when top tax rates are high. In fact, charitable giving among the rich surged pretty much in the same proportion as their reported incomes over the past several decades. If the rich are able to give so much more today than in the 1970s, it must be the case that they are truly richer.

Third, while standard economic models assume that pay reflects productivity, there are strong reasons to be skeptical, especially at the top of the income ladder where the actual economic contribution of managers working in complex organizations is particularly difficult to measure. In this scenario, top earners might be able partly to set their own pay by bargaining harder or influencing executive compensation committees. Naturally, the incentives for such "rent-seeking" are much stronger when top tax rates are low.

In this scenario, cuts in top tax rates can still increase the share of total household income going to the top 1 percent at the expense of the remaining 99 percent. In other words, tax cuts for the wealthiest stimulate rent-seeking at the top but not overall economic growth—the key difference from the supply-side scenario that justified tax cuts for high income earners in the first place.

Up until the 1970s, policymakers and public opinion probably considered—rightly or wrongly—that at the very top of the income ladder pay increases reflected mostly greed or other socially wasteful activities rather than productive work. This is why policymakers were able to set marginal tax rates as high as 80 percent in the United States

Countries that made large cuts in top tax rates, such as the United Kingdom and the United States, have not grown significantly faster than countries that did not, such as Germany and Denmark and the United Kingdom. The Reagan-Thatcher supply side revolutions succeeded in making such top tax rate levels unthinkable, yet after decades of increasing income concentration alongside mediocre economic growth since the 1970s followed by the Great Recession, a rethinking of that supply side narrative is now underway.

Zucman and I show in our new working paper that the surge in wealth concentration and the erosion of middle class wealth can be explained by two factors. First, differences in the ability to save by the middle class and the wealthy means that more income inequality will translate into more inequality in savings. Upper earners will naturally save relatively more and accumulate more wealth as income inequality widens.

Second, the saving rate among the middle class has plummeted since the 1980s, in large part due to a surge in debt, in particular mortgage debt and student loans. With such low savings rates, middle class wealth formation is bound to stall. In contrast, the savings rate of the rich has remained substantial.⁵

If such trends of growing income inequality and growing disparity in savings rates between the middle class and rich persist, then U.S. wealth inequality will continue to increase. The rich will be able to leave large estates to their heirs and the United States could find itself becoming a patrimonial society where inheritors dominate the top of the income and wealth distribution as famously pointed out by Piketty in his new book "Capital in the 21st Century."⁶

What should be done about the rise of income and wealth concentration in the United States? More progressive taxation would help on several fronts. Increasing the tax rate as incomes rise helps curb excessive and wasteful compensation of top income earners. Progressive taxation of capital income also reduces the rate of return on wealth, making it more difficult for large family fortunes to perpetuate themselves over generations. Progressive estate taxation is the most natural tool to prevent self-made wealth from becoming inherited wealth. At the same time, complementary policies are needed to encourage middle class wealth formation. Recent work in behavioral economics by Richard Thaler at the University of Chicago and Cass Sunstein at Harvard University shows that it is possible to encourage savings and wealth formation through well-designed programs that nudge people into savings.⁷

The surge in wealth concentration and the erosion of middle class wealth can be explained by differences in the ability to save and the plummetting savings rate among the middle class since the 1980s.

Addressing Economic Inequality Requires a Broad Set of Policies and Cooperation

Michael Ettlinger

Director of the Carsey School of Public Policy at the University of New Hampshire

here are any number of policies suggested by policymakers, academics and commentators for addressing economic inequality. A representative sample would include tax redistribution, improving education, raising the minimum wage, direct government job creation, employer hiring incentives, subsidized child care, better retirement security, a stronger social safety net, direct middle- and low-income subsidies, ending the socialization of environmental degradation, aggressive financial market regulation, stronger trade unions, more investment in public goods (paid for by the better off), socially responsible trade policy, immigration reform, corporate governance changes, and campaign finance reform.

That's certainly a formidable list, but interestingly most analysts and advocates who care about economic inequality focus on just one or two of these—typically offering a concise, but ultimately unsatisfying recipe. Given the rapidly rising levels of inequality, when one reads the typical, short, policy agenda, it's hard not to have a feeling of ennui—a sense that the solution offered falls well short of what's needed to solve the problem or is completely impractical.

It is, for example, hard to believe that better educational opportunities is the complete answer. Improving education has huge virtue in terms of economic advancement at the individual level, creating opportunity, personal fulfillment, and overall economic growth. But, aside from anything else, at the rate we're going, we'll have again doubled our level of inequality by the time substantial numbers of people are likely to benefit from improved education. And it's not like we've licked how exactly to improve education or that it's clear that improved education solves the problem.

After all, if the result of boosting educational attainment is simply more competition for a slowly increasing number of jobs that require further education, then the

Given the rapidly rising levels of inequality, when one reads the typical, short, policy agenda, it's hard not to have a feeling of ennui. effect might primarily be that different people are on the winning and losing ends of inequality, not a lessening of inequality itself—at least from a global perspective. And the historical record is not encouraging.¹ So, we should improve education, but we shouldn't count on it as the silver bullet for addressing inequality.

There are other policies, of course, that are blunter instruments and clearly could fundamentally change the distribution of income and wealth. Taxes are the most clear cut example. If we take a sizable portion of the income of the wealthy and, one-way-or-another, distribute it to everyone else, inequality would, unequivocally, be reduced (call this the Sherwood Forest approach). But redistribution on that scale is unlikely and, at truly the scale that would be needed to reduce the levels inequality to what it was even a few years ago, would probably be damaging to the overall economy. While there is ample evidence that the moderately higher levels of income tax on the well off are not the economic disaster sometimes claimed, addressing extreme economic inequality exclusively through the income tax could get us to the point at which higher taxes do cause harm.² As with education, raising income taxes on the wealthy is not, alone, the answer.

"Wealth" or "capital" taxes on the assets of the better off, another favored approach, face a number of practical limitations. One problem in the United States is that a federal wealth tax would almost certainly require an amendment to the constitution. But even aside from that "technicality," there is a limit to what one could reasonably expect to accomplish with a wealth tax.

One of the virtues of an income tax is that it taxes money going between two parties who both are typically required to inform the tax authorities of the transaction—so to outright cheat on taxes requires the complicity of at least two people. It happens, but the requirement of trust limits it. Wealth, in contrast, can be held without active engagement of another party.

Another virtue of an income tax is that if the transaction is honest then the dollar amount involved is usually clear-cut. That is less true for a tax on wealth. Assets held in publicly traded corporations or real estate in areas where there are frequent land deals are relatively easy. But the valuation of closely held corporations, let alone art and obscure intellectual property rights, can be extremely difficult—and one can count on more wealth ending up in those forms if a substantial wealth tax were put in place. A very small wealth tax would not necessarily spark this sort of tax avoidance. A substantial one would. We should improve education, but we shouldn't count on it as the silver bullet for addressing inequality. I can make similar arguments for almost the entire list I started with. Even if one believes that the minimum wage is too low, most everyone would agree that it can be too high. Even if one believes that our trade regimes are a factor in increasing inequality and that reforms are needed, overly restrictive policies would be counterproductive. Even if you believe that the outsized incomes from Wall Street are a consequence of power and influence—not genuine contributions to our overall prosperity—the national economy would surely be hurt if we tried to address economic inequality purely through restraints on the financial sector.

If you didn't have ennui when you started reading this you probably do now.

If you didn't have ennui when you started reading this you probably do now. But the point isn't that it's impossible to address income inequality. The point is that it's going to take a range of approaches. And, arguably, a range of approaches is easier to accomplish than trying to put all of one's eggs in a single basket. If the whole solution doesn't depend on a confiscatory tax on the wealthy, or vastly increasing educational attainment, or world-wide consensus on a socially responsible, equitable, trade agreement—but instead on incremental change in range of areas—that is a much less daunting task.

There are agreements to be had in many of these areas. None of those individual policies will be at the scale needed to address inequality in a meaningful way, but together they can add up to make a difference.³

There are reasons to do this. Extreme inequality leaves many people having harder lives than is necessary while, at the other end of the spectrum, personal wealth can reach a point where its growth does little to improve the lives of its beneficiaries—with the overall result being a net reduction in the aggregate quality of life. And there are real dangers to our society of such severe stratification. It's an issue that is going to require a broad range of effort and cooperation around the world to address. But it's achievable if we don't try to accomplish it with just one or two highly contested policies.

What the Wealthy Know and Believe About Economic Inequality

Fiona Chin

Sociology PhD Candidate at Northwestern University

he wealthiest one percent among us in the United States are pulling away from everyone else, a trend documented by numerous economists and highlighted often by the media. Despite all this attention on inequality, there is a dearth of empirical research on what the wealthy know and believe to be true about this trend.

Recent research on social stratification and mobility in our country examines the beliefs of ordinary Americans about the growing wealth and income gaps, but few academics are talking directly to the wealthiest Americans about their own perceptions. It is notoriously difficult to interview wealthy subjects. It is hard to find them, given their scarcity in the population. Once you identify possible subjects, it is hard to gain their cooperation, particularly when discussing topics they find uncomfortable, such as income and wealth inequality.

How the very affluent view economic inequality is important because what they know and think influences how they interact with our political leaders responsible for translating these views into public policies. If policymakers respond disproportionately to the affluent and the majority of the wealthy do not favor government programs to ameliorate inequality then it is especially important for scholars and policy experts to learn what ideas and preferences the wealthy embrace. In contrast, if the majority of the very affluent favor steps to rectify the wealth and income gaps, then policymakers can consider enacting programs that are favored more by the general public.

I study wealthy Americans to find out what they believe about income and wealth inequality.¹ My data come from two sources. The first is the Survey of Economically Successful Americans and the Common Good, or SESA, which was pioneered by Northwestern University political science professor Benjamin Page and Vanderbilt University political science professor Larry Bartels and funded by How the very affluent view economic inequality is important because what they know and think influences how they interact with our political leaders. the Russell Sage Foundation.² NORC at the University of Chicago conducted the survey in 2011. Respondents had an average of \$14 million in household wealth (median of \$7.5 million), making the sample representative of the wealthiest one-to-two percent of Chicago-area residents.

Most national surveys with representative samples capture very few respondents from the top of the wealth distribution. While it targets the Chicago metropolitan area, SESA is among the very few data sets on the wealthy and includes questions on a variety of topics, from economic mobility to taxes, retirement, philanthropic and charitable volunteering and giving, and other areas. As a survey, however, SESA was limited in the depth to which respondents could answer any particular question.

Upon reviewing the original survey sheets with interviewer notations in the margins, I found that the wealthy were eager to express more nuance than closedended survey responses provided. To complement the survey data with more detail, I am compiling a second source of information by conducting in-depth interviews with economically successful Americans from across the country. These interviews focus much more specifically on subjects' beliefs about economic inequality and mobility, politics, and public policy.

As of August 2014, I have conducted 89 interviews ranging from 45 minutes to three hours in length. I spoke with top income earners and top wealth holders, who I recruited based on the chain-referral method. Although my sample is not statistically representative, this methodology has allowed me to collect data on the beliefs of wealthy Americans from different geographic regions and backgrounds. Interview respondents had an average of \$8.2 million in household wealth (median of \$4.7 million). The interview sample was not as wealthy as the SESA sample overall, but more than half of my interviewees were within the top one percent of the income or wealth distributions. Interview subjects were from 18 different metropolitan areas across 15 states and the District of Columbia and worked in a variety of occupations and industries.

Despite the methodological differences, the interview questions that duplicated SESA questions yielded very similar patterns of answers. My research is on-going, but I have some preliminary results to share, with the important caveat that I am continuing to analyze my data and hope to conduct approximately ten more interviews.

The wealthy are aware of economic inequality and recognize that it has grown in recent decades. In the SESA data and my own in-depth interviews, the vast majority of respondents knew that income inequality is larger today than it was 20 years ago. They

The wealthy are aware of economic inequality and recognize that it has grown in recent decades. also tended to express a desire for a lower level of income inequality. Approximately two-thirds of respondents believed that income differences in our society are too large.

The wealthy also recognize that the distribution of wealth across society is very skewed. In fact, they tend to overestimate the proportion of wealth held by the top one percent. Based on the SESA data and my preliminary interviews, the median perception of the respondents so far was that the top one percent hold approximately half of all U.S. wealth. (According to New York University economist Edward Wolff, the wealthiest one percent held a 35 percent share of the country's household net worth, as of 2007.³) In my interviews, I also probe subjects about how large a share the wealthiest one percent "ought" to hold. Only about two-fifths of interview respondents believed that the wealthiest one percent ought to hold less.

In short, both survey and interview respondents tended to agree that income inequality is too high. But my interview data show that the wealthy did not necessarily believe that there should be less wealth inequality.

As much as the wealthy appear to be aware of growing economic inequality, they did not necessarily favor any kind of public intervention to remedy or ameliorate the trend. In fact, the wealthiest SESA respondents favored cutting back federal government programs such as Social Security, job programs, health care, and food stamps. Only 17 percent of SESA respondents thought that the government should "redistribute wealth by heavy taxes on the rich."

Among my interviewees, very few were in favor of raising taxes to redress economic disparities, although a minority supported public intervention in the form of job training and other programs aimed at increasing economic opportunity. In general, many interview subjects were very pessimistic about the future of inequality trends and did not foresee any slow down in the growing bifurcation between the wealthy and the rest of society.

As a group, then, the wealthy are well informed about current events and public affairs, according to my preliminary interviews and the SESA data. They pay attention to the news and are very politically active, so understanding and considering their preferences are important. My preliminary findings indicate two emerging patterns: The wealthy know that economic inequality is rising, but they do not agree that anything should or can be done to reverse the trend. My analysis is at an early stage, and much more research must be done in this arena in order to inform a productive dialogue between scholars and policymakers.

As much as the wealthy appear to be aware of growing economic inequality, they do not necessarily favor any kind of public intervention to remedy or ameliorate the trend.

Heather Boushey

Heather Boushey is Executive Director and Chief Economist at the Washington Center for Equitable Growth and a Senior Fellow at the Center for American Progress. Her research focuses on economic inequality and public policy, specifically employment, social policy, and family economic well-being. Her research has been published in academic journals, she writes regularly for popular media, including *The New York Times*' "Room for Debate," *The Atlantic*, and *Democracy*, and she makes frequent television appearances on Bloomberg, MSNBC, CNBC, and PBS. Boushey previously served as an economist for the Joint Economic Committee of the U.S. Congress, the Center for Economic and Policy Research, and the Economic Policy Institute. She received her Ph.D. in economics from the New School for Social Research and her B.A. from Hampshire College.

Fiona Chin

Fiona Chin is a Ph.D. Candidate in Sociology at Northwestern University and a Graduate Research Assistant at the Institute for Policy Research. Her research focuses on wealthy Americans and their beliefs about economic inequality and public policy. Fiona currently holds an American Fellowship from the American Association of University Women. She has been a research fellow of the Columbia University Center for Institutional and Social Change and was a fellow in the inaugural cohort of the University of Pennsylvania Social Science and Policy Forum Summer Institute on Inequality. Prior to graduate school, Fiona was an investment banker in New York and then worked in the Provost's Office at Harvard University. She received an A.B. cum laude in Economics from Harvard University and an M.A. in Sociology from Northwestern University.

Marianne Cooper

Marianne Cooper is a sociologist at the Clayman Institute for Gender Research at Stanford University and an affiliate at the Stanford Center on Poverty and Inequality. She was the lead researcher for *Lean In: Women, Work, and the Will to Lead* by Sheryl Sandberg and is a contributor to LeanIn.org. She is the author of "Cut Adrift: Families in Insecure Times." She is an expert on gender, family life, work, economic insecurity, and social and economic inequality. Cooper writes, speaks, and consults about these issues for media outlets, professional groups, and companies such as Amazon.com Inc., American Express Co., and Kraft Food Groups Inc. Cooper received her Ph.D. in sociology from the University of California-Berkeley.

Arindrajit Dube

Arin Dube is an economist at the University of Massachusetts, Amherst. His work focuses on labor economics, health economics, public finance, and political economy. His core areas of research include the minimum wage, fiscal policy, income inequality, health reform, and the economics of conflict. Prior to joining UMass, Dube was a research economist at the Institute for Research on Labor and Employment at University of California, Berkley. He is also currently a research fellow at the Institute for the Study of Labor in Bonn, Germany. Dube received his B.A. in economics and M.A. in development policy from Stanford University, and his Ph.D. in economics from the University of Chicago.

Michael Ettlinger

Michael Ettlinger is the Founding Director of the Carsey School of Public Policy at the University of New Hampshire, which will train future leaders in the United States and around the world in policymaking and the use of research. Prior to joining UNH, he served as Senior Director for Fiscal and Economic Policy at The Pew Charitable Trusts and before that as Vice President for Economic Policy at the Center for American Progress. Previously, Michael spent six years at the Economic Policy Institute directing the Economic Analysis and Research Network, and was tax policy director for Citizens for Tax Justice and the Institute on Taxation and Economic Policy. He has also served on the staff of the New York State Assembly. Ettlinger received his B.A. in electrical engineering from Cornell University and a law degree from American University, Washington College of Law.

Gavin Kelly

Gavin Kelly is Chief Executive of the Resolution Foundation, a non-partisan think tank that works to improve the living standards of those in Britain on low and middle incomes. He joined the Foundation from No 10 Downing Street where he worked as Deputy Chief of Staff. He spent over a decade in Whitehall and was a member of the Council of Economic Advisors at HMT, the Senior Advisor to the Secretary of State at the Department for Education and the Department for Communities and Local Government, Deputy Head of the Prime Minister's Strategy Unit and a member of the No 10 Policy Unit. Before working in government he taught economics and politics at the University of Sheffield where he received his doctorate. Kelly is a leading media commentator on economics and public policy, writing for *The Guardian*, the *Financial Times*, and is a regular blogger for the *New Statesman*.

Ann O'Leary

Ann O'Leary directs the Children and Families Program at Next Generation, which includes spearheading "Too Small to Fail"—Next Generation's joint initiative with the Clinton Foundation to help parents and businesses improve the health and well-being of children ages zero to five — developing a national research portfolio, and leading policy activities in California. She also serves as a Senior Fellow at the Center for American Progress where she writes about work-family policies. O'Leary previously served as a lecturer in health law at the University of California, Berkeley, School of Law, Executive Director of the Berkeley Center on Health, Economic & Family Security at UC Berkeley School of Law, a Deputy City Attorney for the city of San Francisco, Legislative Director to Senator Hillary Rodham Clinton, and led the children and family policy team on the White House Domestic Policy Council under President Clinton. O'Leary received her B.A. from Mount Holyoke College, her M.A. in education policy from Stanford University, and a law degree from the University of California, Berkeley, School of Law.

Sean F. Reardon

Sean Reardon is the endowed Professor of Poverty and Inequality in Education and Professor of Sociology at Stanford University. His research focuses on the causes, patterns, trends, and consequences of social and educational inequality, the effects of educational policy on educational and social inequality, and in applied statistical methods for educational research. In addition, he develops methods of measuring social and educational inequality (including the measurement of segregation and achievement gaps) and methods of causal inference in educational and social science research. He teaches graduate courses in applied statistical methods, with a particular emphasis on the application of experimental and quasi-experimental methods to the investigation of issues of educational policy and practice. Reardon received his Ph.D. in education in 1997 from Harvard University. He is a member of the National Academy of Education, and has been a recipient of a William T. Grant Foundation Scholar Award, a Carnegie Scholar Award, and a National Academy of Education Postdoctoral Fellowship.

Emmanuel Saez

Emmanuel Saez is Professor of Economics and Director of the Center for Equitable Growth at the University of California-Berkeley. His research focuses on tax policy and inequality both from theoretical and empirical perspectives. Jointly with Paris School of Economics professor Thomas Piketty, he has constructed long-run historical series of income inequality in the United States. Saez received his Ph.D. in Economics from the Massachusetts Institute of Technology in 1999. He was awarded the John Bates Clark medal of the American Economic Association in 2009 and a MacArthur Fellowship in 2010.

Christopher Wimer

Christopher Wimer is a Research Scientist at Columbia Population Research Center at Columbia University. He works on research projects within the Children, Youth, and Families and Urbanism Research Areas. He is the Project Director on CPRC's New York City Longitudinal Study of Wellbeing, and also manages and participates in the research on many of CPRC's poverty-related research projects. Wimer's research focuses on measuring poverty and disadvantage, how families cope with poverty and economic insecurity, and the role of social policies in the lives of disadvantaged families. He received his Ph.D. in Sociology and Public Policy from Harvard University.

Here is a short description of each of the 16 grants awarded by the Washington Center for Equitable Growth to accelerate cutting-edge analysis into whether and how structural changes in the U.S. economy, particularly those related to the distribution of wealth and the provision of opportunity, affect economic growth.

Human Capital

"Economic inequality and the stalled progress toward gender equality" **Philip Cohen**, Professor of Sociology, University of Maryland and **Meredith Kleykamp**, Associate Professor of Sociology, University of Maryland

Women's participation in the formal economy increased for decades after the 1960s but stalled in the late 1990s. Researchers aren't sure why this happened, but professors Cohen and Kleykamp propose one possible answer: rising inequality. As income inequality has increased, the pay-off to investing in children has increased as well, making it more attractive to have one parent stay at home—usually the mother. Rising work hours among women has had a large effect on economic growth. U.S. gross domestic product in 2012 would have been 11 percent lower if not for the rising working hours of women. If Cohen and Kleykamp's hypothesis is right, then rising inequality has held back women's entrance into the labor market and significantly slowed down American economic growth.

"Inequality at home: The evolution of class-based gaps in young children's home environments and pre-school age skills from 1986-2012"

Ariel Kalil, Professor, Harris School of Public Policy, University of Chicago,
Greg Duncan, Distinguished Professor of Education, University of California-Irvine, Rebecca Ryan, Assistant Professor of Psychology, Georgetown University,
Sean Reardon, Professor of Education and Sociology, Stanford University,
Kathleen M. Ziol-Guest, Research Associate Professor, New York University
Co-funded with the Russell Sage Foundation.

Researchers increasingly point out the importance of a child's early years for the development of skills that will help them succeed later in life. Much of this scholar-

ship focuses on the importance of cognitive skills, such as reading, but the development of non-cognitive skills, such as motivation and interpersonal skills, is also critical. These five researchers will look at how inequality across home environments affects the development of these non-cognitive skills. This channel could have major consequences for the life prospects of children, as economic inequality across families may be magnified for the next generation. Understanding these differences is vital to improving the prospects for disadvantaged children and the growth prospects for our economy.

"School finance reform and educational equity"

Jesse Rothstein, Associate Professor of Economics, University of California-Berkeley

Improving school quality is a well-established way to improve student learning. But one specific approach is understudied: school finance reform. This project will examine state-level school finance reforms, intended to increase funding for schools serving poor children, over the past several decades. If school financing matters, then reforms that equalize funding will also tend to equalize student achievement across districts. This researcher will study the effects of these reforms on the absolute and relative test scores of students in low-income school districts. Policymakers can then understand if these reforms boost overall scores as well as reduce the inequality of outcomes.

Consumer Demand

"Financial innovation to reduce inequality and promote equitable growth" Michael Barr, Professor of Law and Public Policy, University of Michigan

If policymakers want to help low- and medium-income families pay down their debt, we need to better understand how families manage their debt and debt payments. This research will look at the different strategies families take to handle debts, including the tactic of "debt juggling," where households pay just enough to avoid going into collection but make no progress in paying off the debts. The research will subsequently look at how policies informed by behavioral economics could help improve families' debt management strategies.

"Measuring the effects of debt forgiveness"

Will Dobbie, Assistant Professor of Economics and Public Affairs, Princeton University

In the aftermath of the Great Recession, U.S. policymakers and the public are more aware than ever of the dangers of large increases in private debt. But we are now left with a considerable amount of debt that many households can't even begin to dig out from under, which not only holds back consumption but also drastically increases wealth inequality. Many analysts recommend partial debt forgiveness as a way of helping households better handle their debt loads. This research, which includes the compilation of a brand-new data source, will help economists evaluate debt-relief programs that have implications for tax policy, housing finance, and student loan concessions.

"Wealth, income, and consumption: a microeconomic approach to a macroeconomic question"

Timothy Smeeding, Distinguished Professor of Public Affairs, University of Wisconsin, **Jonathan Fisher**, U.S. Census Bureau, **David Johnson**, Bureau of Economic Analysis, Department of Commerce, and **Jeffrey Thompson**, Federal Reserve Board of Governors

These four researchers will investigate how inequality in the distribution of income and wealth impacts consumption, a major component of economic growth. Specifically, they will create a new dataset that will help them and other researchers explore these questions. They will look at how disparities in income and wealth have affected decisions about consumption and saving since the beginning of the Great Recession in 2009. The results will be important for growth modeling, for determining how inequality affects economic growth, and for understanding the differences in who has benefited from recent patterns of income growth in the economy.

"Labor market performance and debt dynamics: the United States in the 2000s" **Ethan Kaplan**, Assistant Professor of Economics, University of Maryland

The level of private debt in the U.S. economy rose considerably during the 2000s. This research will investigate how much of that increase was due to the weak job growth of that decade. If the debt run-up was due to consumers' borrowing to cover necessities after a job loss, the policy implications are quite different than if it were due to reckless consumer spending. This research will also look at how debt was distributed across the population by age, race, and income, and how that distribution changed during the 2000s. A better understanding of the causes of increased debt and knowing who increased their debt load the most will help us better understand the importance of savings and the relationship between consumer demand and economic growth.

Government and Labor Market Institutions

"From economic growth to decent jobs and middle class prosperity: Post-1979 U.S. employment performance in international perspective" **David Howell**, Professor of Economics and Public Policy, The New School *Co-funded with the Russell Sage Foundation*.

Labor market institutions differ substantially across developed nations, and the result is a fair amount of variation in the quality of jobs created. This research will shed light on how economic growth translates into high-quality jobs characterized by decent wages and stability, or, in simple terms "good jobs." The research will provide a detailed exploration of the quantity and quality of U.S. employment growth since 1979 by economic sector, occupation and demographic group. It will conduct similar in-depth work on two other large and wealthy countries, Canada and France, as well as a cross-country analysis of approximately 25 countries aimed at the same objective. The research will facilitate more nuanced comparisons between policy progress in the United States versus that of other developed nations.

"Inside monopsony: a mixed methods approach to understanding how labor standards shape employment practices in the restaurant industry" **William Lester**. Assistant Professor of City and Regional Planning, University of North Carolina

This research will look at how regional variations in labor market regulations influence the types of businesses that locate in those regions, and the employment

practices of those businesses. The analysis will focus on San Francisco, which has relatively comprehensive locally enforced labor standards, and the North Carolina Research Triangle, which lacks strong labor standards. This research project seeks to understand how locally-enacted labor standards that aim to reduce inequality reshape the structure of work in low-wage industries, with a specific focus on the restaurant industry.

"Schedule stability for hourly workers – Phase I of II"

Joan Williams, Distinguished Professor of Law, University of California Hastings

This research will investigate the interaction of business time-scheduling policies and changing family structures. Unpredictable work hours, more common among low-wage workers, may reduce worker productivity and thus economic growth. In conjunction with at least one corporate partner, the researchers will test the impact of effective scheduling systems on employees via a controlled intervention. They will divide workers into groups, with certain groups receiving greater control over their schedules, and then examine the resulting absenteeism and attrition rates for each group. The research will test the hypothesis that an improved worklife fit will lead to greater job satisfaction for hourly workers, who will in turn be less likely to leave their jobs when family obligations interfere with their schedule, and ultimately will result in enhanced economic security for these workers. At the same time, the research will explore whether employers who implement scheduling practices that improve work-life fit are able to retain experienced employees who are more productive than newly-hired employees.

Young Scholars

"Can reforms to public and private credit provisions bolster social insurance and promote more equitable growth?" **Pascal Noel**, graduate student in Economics, Harvard University

Rising inequality has two implications for individuals' ability to rebound from temporary setbacks and contribute to economic growth: poorer households don't have savings to fall back on during temporary income losses and richer households are able to self-insure and find social insurance programs less valuable. This research will investigate whether and how credit policies could help lower-income individuals better weather shocks and contribute to economic growth.

"The impact of need-based financial aid reform on the decision to attend college"

Shayak Sarkar and Ryan Sakoda, graduate students in Economics, Harvard University

Low-income students disproportionately attend for-profits colleges and universities where low graduation rates and high levels of student debt are common. This research will utilize administrative data to test whether new rules that require graduation and debt standards change matriculation at for-profits schools.

"The effects of a progressive tax system on innovation and growth"

Stefanie Stancheva, graduate student in Economics, Massachusetts Institute of Technology

This research will examine the implications of tax structures for inequality and growth, focusing on innovation. The researcher will investigate this question by looking at cross-national differences in tax policy and innovation.

"The American taxpayer project"

Vanessa Williamson, graduate student in Government and Social Policy, Harvard University

This research will explore political support for different kinds of tax structures. Better understanding tax preferences is key to better understanding the range of possible tax policies and their contribution to inequality and growth.

"Inequality and fiscal balance: Is U.S. capital income actually taxed and why?" **Danny Yagan**, post-doctoral researcher in Economics, University of California-Berkeley

This research will look at how the wealthy re-label income and wealth to avoid taxes. This study will help us better understand the distribution of wealth and income at the very top of the distribution, as well as the implications of mislabeling for capital accumulation and economic growth.

"Declining labor shares and the relative price of investment: evidence from state investment tax credits"

Owen Zidar, assistant professor of Economics (as of Fall 2014), University of Chicago Booth School of Business

This research will explore the changing distribution of income between labor and capital. The project will look specifically at how tax policy focused towards investment may be responsible for the shift of income from labor to capital by looking at differences across states. The shift in the capital-labor distribution is critically important for understanding not just economic inequality, but growth as well.

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