Washington Center for Equitable Growth

VISION 2020

EVIDENCE FOR A STRONGER ECONOMY

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Evidence for a stronger economy

The Washington Center for Equitable Growth is a non-profit research and grantmaking organization dedicated to advancing evidence-backed ideas and policies that promote strong, stable, and broad-based economic growth.

Equitable Growth examines whether and how economic inequality—in all its forms—affects economic growth and stability, and what policy-makers can do about it.

We work to build a strong bridge between academics and policymakers to ensure that research on equitable growth and inequality is relevant, accessible, and informative to the policymaking process. And we have the support and counsel of a steering committee comprised of leading scholars and former government officials. Members include Melody Barnes, Alan Blinder, Raj Chetty, Janet Currie, Jason Furman, John Podesta, Emmanuel Saez, Robert Solow, and Janet Yellen.

Since our founding in 2013, we have funded the work of more than 200 scholars and built a broader network through our working papers series, events, and convenings. By supporting research and bringing these scholars together to exchange ideas, we have learned a great deal and advanced a broad range of evidence-based policy approaches to addressing economic inequality and delivering broad-based economic growth to communities and families.

Cover design: David Evans

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Foreword

By David Mitchell, Washington Center for Equitable Growth

The past four decades of U.S. economic policy have delivered record-high incomes and wealth at the top of our society, alongside too-little wage growth and social mobility for the rest. Reversing these trends is the foremost challenge facing the country, and the 2020 presidential campaign is an opportune time to debate what economic policies should come next.

The evidence shows that building an economy that delivers strong, stable, and broadly shared growth requires tackling inequality and concentrated economic power head-on, with bold, systematic reforms that fundamentally change the way markets and government work. In its first 6 years, the Washington Center for Equitable Growth has granted nearly $6 million to more than 200 academic researchers to explore whether and how inequality affects growth and stability. Equitable Growth's President and CEO Heather Boushey synthesizes what we've learned so far in her new book, *Unbound: How Inequality Constricts Our Economy and What We Can Do About It*. The book is an exploration of recent transformative shifts in economic research that demonstrate how inequality obstructs, subverts, and distorts the pathways to shared economic growth.

Economic inequality obstructs—through opportunity-hoarding and discrimination—the supply of talent, ideas, and capital, slowing productivity growth. Concentrated corporate power subverts the institutions that manage the market, hobbling innovation and suppressing wages, while concentrated wealth subverts our ability to make public investments that benefit the majority of Americans. And these subversions and obstructions distort the macroeconomy by undermining both consumer spending and productive investments.

Undoing the economic damage wrought by economic inequality and building the structures and institutions necessary to chart a new path will not be easy. That's why I am pleased to share this book—a compilation of research by a new generation of scholars who are proposing evidence-backed policy ideas that are both concrete and at-scale, and which seek to point the way forward. *Vision 2020* highlights a range of new ideas and the academic research behind them, so that our national debate about economic policy in 2020 is informed by the best and latest research, and so that our elected officials have available to them the best policy thinking.

To that end, this book presents 21 essays with big policy ideas for 2021 and beyond. As the name *Vision 2020* implies, every author not only provides evidence and historical context for their policy ideas but also a vision for how to get there. Taken together, these ideas form the backbone of what could be an agenda for equitable growth in the third decade of the 21st century. Importantly, the views represented in each of the proposals are those of the authors alone.

Vision 2020 begins by looking at how inequality subverts the ways markets work and what we can do about it, particularly focusing on how to curtail anticompetitive behavior by powerful corporations. By cracking down on U.S. antitrust violations and unfair competition, policymakers can begin to address the ways that concentrated economic power translates into political and social power. Tackling this problem will require not just enhanced enforcement but also modernization of U.S. antitrust and competition laws, including new approaches to privacy and data protection, as detailed by Yale University economist Fiona Scott

Morton. There are also ways to infuse more robust competition into the pharmaceutical market, which will lower prices for life-saving medicines without sacrificing innovation, as professor of medicine Aaron Kesselheim at Harvard University points out.

The legal and institutional context for how firms operate—and the way inequality subverts these processes—matters for workers as well. In the second section of *Vision 2020*, we tackle the labor market with a series of essays by scholars who look specifically at the problem of diminished worker power and discuss the most cutting-edge research on how to boost wages. Solutions range from combating the unfair market power of certain firms in some labor markets (see the essay by economists Suresh Naidu at Columbia University and Sydnee Caldwell, who will soon be joining the faculty at the University of California, Berkeley), to building worker negotiating leverage through expanded access to unions (see the essay by Columbia University professor of international and public affairs Alexander Hertel-Fernandez). The third essay in this section, by economist Kimberly Clausing at Reed College, argues for putting workers at the center of future trade agreements and expanding assistance to dislocated workers. And economist Arindrajit Dube at the University of Massachusetts Amherst, makes the case for raising the minimum wage and establishing wage boards to close out the second section.

Addressing these subversions of markets creates the potential to remove the obstructions that are created by high economic inequality, as well as limit the distortions that inequality is causing in the U.S. macroeconomy. We know from the evidence that high economic inequality—in all its forms, including across firms, as well as by race, ethnicity, gender, and place—shapes economic outcomes and destabilizes the macroeconomy. The proposals in the book's final three sections address systemic issues that block individuals, families, and communities from achieving the benefits of broadly shared economic stability and prosperity.

Vision 2020's third section focuses on a uniquely American set of obstructions that appear at the intersection of work and family, preventing parents and caregivers from fully participating in the economy. The United States is one of only a few countries in the world without any national paid family leave policy, which is the jumping-off point for economists Maya Rossin-Slater at Stanford University and Jenna Stearns at University of California, Davis to examine why providing paid leave to all new parents could help boost U.S. economic growth and well-being. American University public policy professor Taryn Morrissey then details the costs and consequences of our nation's extremely expensive and unequal early childhood care and education system.

The lack of access to paid leave and affordable childcare interact with a host of other challenges that make it nearly impossible for low-income families to make ends meet and undermines human capital development among the next generation. Employers set unstable and unpredictable schedules (see the essay by social service professor Susan Lambert at the University of Chicago), which leads directly to earnings volatility (see the essay by Syracuse University public administration and international affairs professor Emily Wiemers and economist Michael Carr at the University of Massachusetts Boston). All the while, eligibility for means-tested programs such as the Supplemental Nutrition Assistance Program have become more restrictive, hurting families and weakening the countercyclical macroeconomic benefits of the program (see the essay by education and social policy professor Diane Whitmore Schanzenbach at Northwestern University and public policy and economics professor Hilary Hoynes at the University of California, Berkeley). Fixing these problems would be a game-changer for millions of families and would also benefit the overall economy.

The fourth section of *Vision 2020* focuses on how public investment, funded by a fairer tax system, could help remove the obstructions caused by high economic inequality, and how changes in countercyclical, regulatory, and monetary policy can reduce the severity of recessions and address the macroeconomic distortions caused by inequality. Princeton University professor of economics and public affairs Owen Zidar and finance professor Eric Zwick at the University of Chicago set out a proposal for progressive tax increases. John Sabelhaus, a visiting scholar at Equitable Growth, points out that Congress has largely abdicated to the Federal Reserve responsibility for managing the macroeconomy, which has contributed to inequality-exacerbating asset bubbles. And law professor Yair Listokin at Yale University recommends countercyclical policies that can boost the economy, helpfully providing ideas for what the executive branch can do to support both a strong and stable U.S. economy.

Vision 2020's fifth and final section focuses on how to ensure the benefits of economic growth are broadly shared. The essays in this section pay particular attention to how the structural racism embedded in housing, K-12 education, criminal justice, higher education, and environmental policies is a fundamental obstruction to economic opportunity that drags down the U.S. economy through its effects on opportunity and productivity. Economist Trevon Logan at The Ohio State University and public administration and policy professor Bradley Hardy at American University examine race and economic mobility, offering a range of community-focused reforms. Professor of social work Robynn Cox at the University of Southern California details how the criminal justice system crushes economic opportunity for too many Americans. And University of California, Berkeley post-doctoral sociology fellow and Yurok Tribe of California member Blythe George argues that the pervasive historical experience of Native Americans dealing with substance abuse and incarceration can be tackled and become a learning experience for other troubled communities in the United States.

The next set of authors present very specific policy ideas for discrete yet wide-ranging problems. Economist Dania Francis at the University of Massachusetts Boston parses out the need and scope for reparations for the descendants of the formerly enslaved in the United States. Public affairs professor Darrick Hamilton at The Ohio State University and public health and health policy professor Naomi Zewde at the City University of New York argue for comprehensive college student debt cancellation. And political science professors Leah Stokes and Matto Mildenberger at the University of California, Santa Barbara present the urgency for climate policies that embrace many of the Green New Deal interventions now being debated across the nation.

The book concludes with an examination by Equitable Growth's Heather Boushey of why U.S. policymakers need to change the way we measure the U.S. economy. She argues that understanding how the fruits of aggregate economic growth are distributed across the income distribution would pave the way for major policy breakthroughs by transforming the definition of economic progress to mean broadly shared economic growth.

Reimagining an economy that works for all—providing good jobs and opportunities and rebuilding economic and political power for people and communities across the nation—is the defining challenge of our time. This national election year marks a critical juncture in the nation's political debate, and we at Equitable Growth hope the many bold ideas included here inspire the country to rise to that challenge, fashioning a new economic vision in 2020 and implementing that vision in 2021 and beyond.

*—**David Mitchell** is the director of Government and External Relations at the Washington Center for Equitable Growth.*

COMPETITION

Competition is a little like good health: You only appreciate it once you've lost it. Research increasingly shows that the United States suffers from a market power problem that contributes to wider U.S. economic problems such as income and wealth inequality, wage stagnation, stifled innovation and entrepreneurship, and slow growth. Solving the market power problem with evidence-based policies is imperative for delivering the strong, stable, and broad-based growth the country so desperately needs.

The Washington Center for Equitable Growth's work in this area examines market power in the U.S. economy, the relationship between market power and stagnant wages, and the impact of the current merger wave.

We do this because there are serious, negative ramifications of high market concentration for our economy and because weak and underenforced antitrust laws justifiably give rise to the increasingly popular, and politically toxic, belief that the rules of the economy are rigged for the rich and powerful. Just as money corrupts the political process, market power corrupts the economy.

In order to get at the scale and scope of the problem, Equitable Growth recently released a comprehensive literature review on the economic research on competition and market power, and we are now examining the state of antitrust laws, having recently published a report on the state of antitrust enforcement. We have analyzed important cases, highlighted scholarly work proposing new avenues for antitrust enforcement, and testified before Congress on improving competition in pharmaceutical markets.

As the essays in this section underscore, there is substantial research covering both competition policy generally, and drug pricing specifically. Both essays provide more than a laundry list of policy proposals—they provide a vision for how to achieve increased competition and, in turn, more widely shared prosperity for our nation.

*—**Michael Kades**, Washington Center for Equitable Growth*

ANTITRUST

Reforming U.S. antitrust enforcement and competition policy

By Fiona M. Scott Morton, Yale University School of Management

Overview

Competitive markets deliver to consumers a variety of benefits: higher productivity, lower prices, better quality products, and more innovation. Yet firms have a financial incentive to restrain competition in order to obtain monopoly profits. There are three main harmful methods of limiting competition: colluding with rivals in a market, merging with rivals or potential rivals, and using anticompetitive techniques to exclude existing or potential entrants.

U.S. antitrust laws are designed to prevent these behaviors by making price-fixing, bid-rigging, and similar behavior illegal, requiring government review of mergers to prevent those that lessen competition, and prohibiting anticompetitive conduct by an incumbent with market power that tends to exclude entrants and rivals. Unfortunately, over the past few decades, these laws have not been operating in a way that generates and preserves vigorous competition in U.S. markets.

It is well understood that market power decreases innovation, productivity, and the efficient use of resources. Market power, however, also contributes to growing inequality. Shareholders and senior executives who benefit from increased market power through higher salaries and increased stock prices are disproportionately wealthier than consumers, on average. Furthermore, consumers, suppliers, and workers may be harmed by paying higher prices for monopoly products or services and receiving lower compensation for the products and services (inputs or wages) they supply to monopsonists (buyers with market power).[1]

Consumption, by contrast, is not nearly so concentrated. Joshua Gans at the University of Toronto's Rotman School of Management and his co-authors report that the consumption of the top 20 percent of the wealth distribution in the United States is approximately equal to that of the bottom 60 percent, but their equity holdings are 13 times larger. Thus, if a dollar of monopoly profit is transferred to lower prices, most of that dollar moves from benefitting the top 10 percent through the value of their stock or dividends to instead benefitting the bottom 90 percent through lower costs of purchases.

Therefore, antitrust enforcement redistributes wealth without incurring the traditional shadow costs arising from taxation and, indeed, is an actively beneficial form of redistribution for the economy.[2] Because antitrust enforcement both redistributes income and wealth to the bottom 90 percent of the population, as well as increases efficiency, it should be the first choice of policymakers concerned with equity. The standard for anticompetitive harm that courts use today is the protection of consumer welfare—meaning price, quality, and innovation, now and in the future. Antitrust enforcement using the best available economic tools—developed, in some cases, decades ago—generates the evidence needed to show where such anticompetitive conduct is present.

The underenforcement described below is the fault neither of this standard nor of the economic tools themselves—though they could, of course, be better. The antitrust underenforcement we see today is primarily the result of decisions made over the past 40 years in the courts.

The four policies I recommend to reverse this harmful trend are:

- Dramatically increase the budgets of two federal antitrust agencies, the Federal Trade Commission and the Antitrust Division of the U.S. Department of Justice, which would be less expensive than it might appear because the two agencies collect disgorgement and restitution awards that flow back to consumers.

- Appoint leaders of these two agencies who are committed to using the best tools available to reverse the decline in competition. Aggressive but appropriate enforcement will either lead to good results or will identify failures in the law or by the judiciary to protect competition and consumers.

- Support and pass new legislation so that Congress can make it clear to the courts how it would like federal antitrust laws to be enforced and require courts to adopt up-to-date economic learning.

- Create a new "Digital Authority" to enforce privacy laws, protect digital identities and consumer data from being monopolized by private firms with market power, and create baseline conditions conducive to competition in digital marketplaces.

This essay will first address the "hot" topics in antitrust today, such as technology markets and digital platforms, as well as important everyday markets such as agriculture, transport, and pharmaceutical products, and then turn to my recommended reforms.

Key Takeaways

THE EVIDENCE

- Competitive markets deliver higher productivity, lower prices, better-quality products, and more innovation, yet firms often seek to restrain competition to obtain monopoly profits.
- Today, there is increasing evidence that many firms are unrestrained by antitrust enforcement and engage in anticompetitive mergers, anticompetitive exclusion, and collusion with rivals.

THE SOLUTIONS

- U.S. antitrust laws need to be strengthened, particularly in the area of mergers and exclusionary conduct, and a new digital regulatory authority that would enforce privacy laws and create conditions conducive to competition would improve outcomes in digital markets.

Market power has increased

The evidence for the failure of current U.S. antitrust policy is detailed in my report from May 2019 titled "Modern U.S. antitrust theory and evidence amid rising concerns of market power and its effects," and its accompanying database.[3] Economic evidence of rising market power comes from large samples of firms and industries. One widely discussed study of all publicly traded firms finds that markups (the difference between the price charged to a consumer and the cost to make an additional unit) have risen sharply since 1990 among firms in the top half of the markup distribution.[4] Macroeconomists have further documented a declining share of national incoming going to workers and a rising share going to profit.[5] New theories whose empirical implications are only now being explored also are possible contributors to rising market power. For instance, the huge growth in overlapping equity ownership of rival firms by diversified financial investors over the past four decades has plausibly led to less aggressive competition in many industries.[6]

Still more evidence of market power comes from labor markets—in this case monopsony power, which is exercised by a buyer with market power (such as an employer) to pay less for its inputs (such as workers). Because workers have specialized skills and are often geographically constrained, monopsony power is common. Recent studies find that employers have monopsony power over college professors and nurses.[7] Wages for nurses may stagnate after hospital mergers for this reason. The extensive use of noncompete agreements in employment contracts involving low-wage fast-food workers and the no-poach agreements between a number of high-tech firms over software engineers and between rail equipment suppliers over their workers, provide additional examples of anticompetitive conduct that harms workers.[8]

Evidence that antitrust laws are falling short is plentiful. Many cartels go undiscovered, and tacit collusion is probably even more prevalent because it is harder for antitrust enforcers to prosecute and deter.[9] Anticompetitive horizontal mergers (between rivals) appear to be underdeterred.[10] A variety of clever strategies used by incumbents to exclude entrants, either by purchasing them when they are nascent or using tactics to confine them to a less threatening niche or forcing them to exit have been successfully deployed in recent years, often when antitrust enforcement is late or absent.[11]

Each of these sources of concern can be critiqued, but together they make a compelling case. Some of the evidence may have benign explanations in part, such as the growing importance of fixed costs, for example, when creating software or pharmaceuticals that leads naturally to higher markups, or the increasing benefit of being on the same platform with other users (known as "network effects" in the case of a social media site). Firms in industries with high fixed costs or large network externalities may exhibit high profits and productivity and low labor shares, and may earn high profits because they had a good idea early and executed well, thereby getting adoption from many consumers.[12] Nonetheless, the overall picture is clear that market power has been growing in the United States for decades. Moreover, even where the explanation for growing market power is benign, we must ensure that companies do not use anticompetitive tactics to protect their position.

Firms with market power need not compete aggressively to sell their products, so they tend to raise prices, reduce quality, and/or innovate less. Market power can also contribute to slowed economic growth by, for example, suppressing productivity increases.[13] Theoretical and empirical economic studies convincingly show that innovation is harmed by anticompetitive conduct.[14]

This is why antitrust enforcement is such a terrific policy tool to strengthen competition—it does not come with an efficiency downside, as do most policies that redistribute income. Policies that enhance competition are unambiguously beneficial for efficiency, as well as inclusive prosperity, with minor qualifications.[15] Other policies for addressing inequality, in particular, such as labor market and tax policies, may create disincentives or allocative efficiency losses that must be weighed against their distributional benefits. Policies to enhance competition, by contrast, offer what is close to a free lunch.[16]

An agenda to confront market power

An antitrust enforcement policy agenda to confront rising market power has four parts: increase enforcement resources; appoint agency leaders committed to using the best tools to combat the decline in competition; reform statutes to deter and prevent anticompetitive conduct more effectively; and use regulatory tools to foster competition. Let's look at each of these policy components in turn.

Increase resources for enforcement

The resources expended on enforcing the antitrust laws in the United States are lower as a proportion of Gross Domestic Product than they were for most of the mid-1900s and have experienced a notable decline since 2000. Interestingly, this decline coincides with a rise in markups by firms, an increase in U.S. Supreme Court opinions protecting monopolists, and increasing policies that benefit incumbents. These patterns are consistent with the interests that favor corporate profits over consumers and those firms gaining more control of the political process to achieve all of these goals.

Approximately doubling the budget of both federal antitrust agencies would restore resources to a level where the agencies would be able to combat much more of the anticompetitive conduct present in the economy. In increasing resources, Congress should also consider whether it should provide funds to bolster the enforcement efforts of state attorneys general.

Appoint leaders committed to using the best tools available to enforce competition rules

Effective antitrust enforcement requires the appointment of enforcers who will vigorously protect consumers using modern economic tools. This will inevitably require litigation in the face of hostile legal rules, and possibly losses. Yet aggressive but appropriate enforcement will either lead to good results or identify failures by the judiciary to protect competition and consumers.

Leadership at the two agencies that is committed to reversing the decline in competition could take full advantage of existing antitrust laws. The game theory revolution (creation of tools to understand strategic interactions) in microeconomics beginning in the 1980s and the development of empirical techniques from the 1990s onward provide underutilized tools to identify and quantify harmful practices that can be attacked under the current antitrust rules.[17]

The enforcement agencies already use econometric methods, sophisticated simulations, bargaining theory, and other tools to identify harmful conduct and choose which cases to bring to court, yet in some instances, courts have trouble understanding these tools and resist accepting them as state of the art. Too often, court decisions, such as in the merger of AT&T Inc. and Time Warner Inc., reject modern economic ideas.[18] Rather than change strategies, enforcers must continue to rely on the best arguments and evidence even if there is a chance that in the short run a court will not understand. Sound economics is critical to this approach: It shows where there is harm to consumers and explains how that conduct is harming consumers. Over time, the economic arguments can educate all of society, both the public and the courts. This is not an easy task but generates broad-based benefits.

The history of pharmaceutical pay-for-delay litigation amounts to a long string of losses in court for the Federal Trade Commission against drugmakers, eventually followed by success.[19] This history shows that the agencies are capable of convincing courts to change their views when they rely on sound economics and persevere. Moreover, publicly demonstrating the harm through an ultimately unsuccessful court challenge can clarify to the public and to Congress when a court is ideologically opposed to protecting consumers from that harm.

One of today's significant challenges is convincing courts to do more to protect potential competition from anticompetitive conduct.[20] When markets become more concentrated because of network effects or economies of scale, the primary locus of competition shifts from competition *in* the market to competition *for* the market. In that setting, consumers rely on competitors who are about to enter, could potentially enter, or who are nascent competi-

Despite the government's success in some merger litigation, this success only occurs in transactions that most clearly violate the law.[25] The fact that the two antitrust agencies must litigate cases that are clearly anticompetitive—rather than the parties not even considering the deal in the first place or abandoning it after the government makes its concerns known—speaks to the limitations of current antitrust legal doctrine.

It would likely take decades to reverse this body of accumulated legal doctrine, even if every future case that was litigated were decided with perfect accuracy. Fortunately, Congress is the final arbiter on competition law and can change it to reflect the desire of society for competitive markets. Congress has not substantively amended those laws in more than 60 years. A broad foundation of economic research supports retooling our antitrust laws for the 21st century and restoring the vigor that was originally intended. Although legislation can take many forms, successful antitrust reform legislation should accomplish four goals:

- Overturn Supreme Court precedent that has inoculated exclusionary conduct from antitrust scrutiny even when it harms competition by eliminating or harming competitors
- Prohibit courts from assuming that some aspect of a market is competitive or will become competitive rather than assessing the evidence in the case
- Create simple rules (known as presumptions) that will lower the resource cost of enforcement for conduct and acquisitions that economic research shows are likely to raise competitive problems
- Clarify that the antitrust laws are designed to protect competition that may manifest itself across a broad range of outcomes such as higher prices, reduced quality, harm to innovation, lower input prices, and elimination of potential competition

Lastly, Congress could consider two ways to raise the expertise level of judges. One is to require the court to hire its own economic expert in an antitrust case, paid by the parties. The neutral expert's task would be to help the court understand the economics presented by each side. A second option is to create a specialized trial court to hear cases brought under the federal antitrust laws.[26] Doing so would allow antitrust cases to be heard by judges with experience in evaluating complex economic evidence. A sophisticated judge would encourage litigants to rely on the best economic arguments and modern economic tools applied to the facts in the case, improving the accuracy of judicial decisions and discouraging judicial acceptance of the erroneous general economic assumptions that have supported relaxed antitrust enforcement.[27] A term on such a specialized court should be of relatively short duration to limit the possibility of capture or entrenchment.

Complementary regulation that promotes competition: Create a federal digital authority

There is a real need for federal agency to regulate digital businesses. This new agency could create a baseline level of competition in an area that lacks it. Regulations under its purview could enhance competition by, for example, facilitating digital-data portability that would allow a consumer to take her own data in a usable format from one provider to a competitor (such as moving purchase history from Amazon.com to Jet.com).

A new agency also could define and regulate "interoperability" in the digital arena; for example, a Verizon phone can call an AT&T phone because they are interoperable. A digital authority could ensure social media sites were also interoperable so that a person who uses Snap, for example, could follow her friends who post content on Instagram or another site. And it could consider the creation of open standards that promote competition, such as a standard for micropayments. These payments in fractions of a cent cannot practically be made today because the transaction cost is higher than the amount being paid. But micropayments may be critical in compensating consumers for their attention, may be an important dimension of competition between platforms, and may aggregate to significant benefit to consumers. By creating one system, a regulator could enable price competition in attention markets.

In addition, this new regulator could be tasked with enforcing somewhat stricter antitrust laws for those digital platforms or sectors that Congress felt required additional scrutiny and speed, or where competition was particularly valuable for society. This would allow a faster, more specialized agency to protect small entrants into digital marketplaces from exclusion or discrimination by the incumbent platform. It would also allow for review of even the smallest acquisitions when those small firms are being acquired by the largest incumbents. In general, the agency could have a mandate to protect and facilitate entry to address competition problems in the digital sector.

—***Fiona M. Scott Morton*** *is the Theodore Nierenberg Professor of Economics at the Yale University School of Management.* (*This essay draws on ideas developed in prior work jointly with Jonathan Baker, a research professor of law at American University Washington College of Law.*)

Endnotes

1 Sean Ennis and others, "Inequality: A Hidden Source of Market Power" (Organisation for Economic Co-operation and Development, 2017), available at http://www.oecd.org/competition/inequality-a-hidden-cost-of-market-power.htm; Joshua Gans and others, "Inequality and Market Concentration, When Shareholding is More Skewed than Consumption." Working Paper no. 25395 (National Bureau of Economic Research, 2018), available at http://www.nber.org/papers/w25395.

2 The exercise of monopsony power in labor markets further contributes to increased inequality. Nor does greater market power in product markets benefit workers. With the decline of private-sector unionization, workers have limited ability to appropriate any increase in producer surplus.

3 Fiona Scott Morton, "Modern U.S. antitrust theory and evidence amid rising concerns of market power and its effects" (Washington: Washington Center for Equitable Growth, 2019), available at https://equitablegrowth.org/research-paper/modern-u-s-antitrust-theory-and-evidence-amid-rising-concerns-of-market-power-and-its-effects/.

4 Jan De Loecker and Jan Eeckhout, "The Rise of Market Power and the Macroeconomic Implications." Working Paper No. 23687 (National Bureau of Economic Research, 2017), available at http://www.nber.org/papers/w23687.pdf.

5 Simcha Barkai, "Declining Labor and Capital Shares." Working Paper No. 2 (University of Chicago Stigler Center, 2016), available at http://home.uchicago.edu/~barkai/doc/BarkaiDecliningLaborCapital.pdf.

6 Martin C. Schmalz, "Common-Ownership, Concentration, and Corporate Conduct," *Annual Review of Financial Economics* 10 (2018): 413–48, available at https://www.annualreviews.org/doi/abs/10.1146/annurev-financial-110217-022747; Matthew Backus and others, "The Common Ownership Hypothesis: Theory and Evidence." Working Paper (The Brookings Institution, 2019), available at https://www.brookings.edu/research/the-common-ownership-hypothesis-theory-and-explanation/.

7 Austan Goolsbee and Chad Syverson, "Monopsony Power in Higher Education: A Tale of Two Tracks." Working Paper no. 26070 (National Bureau of Economic Research, 2019), available at https://www.nber.org/papers/w26070.pdf; Elena Prager and Matt Schmitt, "Employer Consolidation and Wages: Evidence from Hospitals." Working Paper (Washington Center for Equitable Growth, 2019), available at https://equitablegrowth.org/working-papers/employer-consolidation-and-wages-evidence-from-hospitals/.

8 For more on these examples, see Washington State Office of the Attorney General, "AG Ferguson's initiative to end no-poach clauses nationwide continues with seven additional chains," Press release, December 20, 2018, available at https://www.atg.wa.gov/news/news-releases/ag-ferguson-s-initiative-end-no-poach-clauses-nationwide-continues-seven; Complaint, *U.S. v. Adobe Systems, Inc.*, September 24, 2010, available at https://www.justice.gov/atr/case-document/complaint-0; Complaint, *U.S. v. Knorr-Bremse AG*, April 3, 2018, available at https://www.justice.gov/atr/case-document/file/1048866/download.

9 Joseph E. Harrington Jr. and Yanhao Wei, "What Can the Duration of Discovered Cartels Tell Us About the Duration of All Cartels?" *The Economics Journal* 127 (607) (2017): 1977–2005, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3031007; Margaret C. Levenstein and Valerie Y. Suslow, "Breaking Up is Hard to Do: Determinants of Cartel Duration," *Journal of Law and Economics* 54 (2) (2011): 455–492, available at https://www.jstor.org/stable/10.1086/657660?seq=1#page_scan_tab_contents.

10 Thomas Wollmann, "Stealth Consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act," *American Economic Review: Insights* 1 (1) (2019): 77–94, available at https://www.aeaweb.org/articles?id=10.1257/aeri.20180137&&from=f; Bruce A. Blonigen and Justin R. Pierce, "Evidence for the Effects of Mergers on Market Power and Efficiency." Working Paper No. 22750 (National Bureau of Economic Research, 2016), available at http://www.nber.org/papers/w22750; Orley Ashenfelter and others, "Did Robert Bork Understate the Competitive Impact of Mergers? Evidence from Consummated Mergers," *Journal of Law and Economics* 57 (S3) (2014): S67–S100, available at https://www.journals.uchicago.edu/doi/abs/10.1086/675862.

11 Tactics include, inter alia, those found in pay-for-delay cases, killer acquisitions research, the work on small mergers such as dialysis clinics, the contracts used by Google in the EC Android case, etc. Alexander MacKay and David Aron Smith, "The Empirical Effects of Minimum Resale Price Maintenance on Prices and Output," *Kilts Center for Marketing at Chicago Booth – Nielsen Dataset Paper Series* 2 (6) (2014), available at https://ssrn.com/abstract=2513533.

12 Jonathan B. Baker, "Market Power or Just Scale Economies?" Pro-Market, December 17, 2018, available at https://promarket.org/market-power-scale-economies/.

13 Thomas J. Holmes and James A. Schmitz Jr, "Competition and Productivity: A Review of Evidence," *Annual Review of Economics* 2 (2010): 619–642, available at https://www.annualreviews.org/doi/abs/10.1146/annurev.economics.102308.124407; Nicholas Bloom and John Van Reenen, "Why Do Management Practices Differ Across Firms and Countries?" *Journal of Economic Perspectives* 24 (1) (2010): 203–224, available at https://www.aeaweb.org/articles?id=10.1257/jep.24.1.203.

14 Giulio Federico and others, "Antitrust and Innovation: Welcoming and Protecting Disruption," *Innovation Policy and the Economy* 10 (2019), available at https://www.nber.org/chapters/c14261.pdf.

15 One qualification is that it is possible for policies that encourage competition to lead to excessive entry, reducing aggregate economic welfare. Another possibility is that preventing the exercise of market power by worker-owned firms or nonwealthy shareholders against sellers of luxury products could increase inequality by reducing a transfer away from the wealthy.

16 The analogy works if one imagines that the current system burns up half the lunches and gives the remaining lunches to one person in the dining hall. From a public choice perspective, the distributional consequences of robust antitrust enforcement help explain why they have not been adopted.

17 Jonathan Baker and others, "Collection: Unlocking Antitrust Enforcement" *Yale Law Journal* 127 (7) (2018): 1742–2203, available at https://www.yalelawjournal.org/collection/unlocking-antitrust-enforcement.

18 Brief for 27 antitrust scholars as Amici Curiae in Support of Neither Party, *United States Of America v. AT&T Inc.; Directv Group Holdings, LLC; And Time Warner Inc.*, Case No. 18-5214, United States Court of Appeals for the District of Columbia Circuit, filed August 13, 2018, available at https://www.researchgate.net/publication/327057400_Brief_for_27_Antitrust_Scholars_as_Amici_Curiae_in_Support_of_Neither_Party_United_States_Of_America_Plaintiff-Appellant_v_ATT_Inc_Directv_Group_Holdings_LLC_And_Time_Warner_Inc_Defendants-Appellees_O. The district court's decision was upheld on appeal, but the appeals court did not make the same errors.

19 *Federal Trade Commission v. Actavis*, Inc., 570 U.S. 136 (2013).

20 Another significant challenge, labor market monopsony, is addressed in an Economics for Inclusive Prosperity policy brief by Marshall Steinbaum. We do not discuss it further here.

21 In the Microsoft litigation, the defendant maintained its operating system monopoly by excluding Netscape's browser and the Java programming language. Those products, working together, could have reduced customer costs of using rival operating systems by allowing applications' programming to access any operating system through the browser. Both Netscape's browser and Java had previously been highly successful.

22 Howard A Shelanski, "The Case for Rebalancing Antitrust and Regulation," *Michigan Law Review* 109 (5) (2011): 683–732, available at https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1160&context=mlr.

23 Ohio v. American Express Co., 585 U.S.___ (2018), available at https://www.supremecourt.gov/opinions/17pdf/16-1454_5h26.pdf.

24 Michael Katz and Jonathan Sallet, "Multisided Platforms and Antitrust Enforcement," 127 (7) (2018): 1742–2203, available at https://www.yalelawjournal.org/feature/multisided-platforms-and-antitrust-enforcement.

25 Federal Trade Commission, "In the Matter of Otto Bock Healthcare North America, Inc. Docket No. 9378" (2019), available at https://www.ftc.gov/enforcement/cases-proceedings/171-0231/otto-bock-healthcarefreedom-innovations.

26 Perhaps similar to those in other highly technical areas of law, such as tax and bankruptcy

27 We envision appeals going to the federal circuits, as now. We do not recommend converting the Federal Trade Commission into the specialized antitrust trial court for fear of losing its administrative adjudication of antitrust complaints, its competition rulemaking authority, the resources and expertise it devotes to antitrust enforcement, and its consumer protection authority and resources.

DRUG PRICING

Improving competition to lower U.S. prescription drug costs

By Aaron S. Kesselheim, Harvard Medical School and Brigham and Women's Hospital

Overview

Prescription drugs are among the most effective and cost-effective interventions in medicine, and the drug industry plays an important role in bringing these products to market, which can require substantial resources. Yet drug prices in the United States continue to rise without a direct connection to the costs of development, which can make breakthroughs unaffordable for many patients, leading to bad clinical consequences.

Rising drug prices also are a major driver of U.S. healthcare spending, now accounting for about one-fifth of overall spending, with one private insurer reporting that 25 percent of healthcare dollars are going to prescription drugs.[1] The United States spent about $476 billion on prescription drugs in 2018.[2] This is an increase of about $100 billion as compared to $361 billion in spending in 2014,[3] with the discovery and testing of new drugs accounting for additional tens of billions of taxpayer and private dollars.

In recent years, there have been great advances in the use of prescription medications for treating heart disease and certain types of cancer, but high prescription drug prices have threatened to limit the availability of new transformative medications such as treatments for the hepatitis C virus infection,[4] new gene therapies for devastating illnesses, and decades-old products such as insulin[5] and antibiotics.[6] By contrast, many key pharmaceutical therapies for chronic diseases such as high blood pressure and depression can be obtained for $4 per month or less, due to a vibrant generic drug marketplace in the United States.[7]

In this essay, I will review the origins of high prescription drug prices in the United States, as well as various policy mechanisms that can lead to more rational spending. There are four main periods in the development process of a prescription drug:

- The discovery process leading up to approval by the U.S. Food and Drug Administration
- The brand-name-only period of market exclusivity that lasts a median of 12–14 years or more after drug approval[8]
- The end of market exclusivity and the transition to a competitive market with the introduction of generic drugs
- The multisource generic drug period

High drug prices are driven by a variety of factors in each of these time periods, and the policy solutions that I present in this essay vary based on when in the process the drug currently sits. These policy recommendations, in their entirety, would dramatically lower spending on prescription drugs while ensuring continued funding for true innovation.

Key Takeaways

THE EVIDENCE

- Rising drug prices are a major driver of U.S. healthcare spending, accounting for a little less than one-fifth of overall spending in 2018.
- High drug prices can limit the availability of new medications, including gene therapies for devastating illnesses and decades-old products such as insulin and antibiotics.

THE SOLUTIONS

- Policy reforms are necessary at all phases of drug development and sales—including the discovery process leading up to approval by the U.S. Food and Drug Administration, the brand-name-only period of market exclusivity, the end of market exclusivity and the transition to a competitive market with generic drugs, and the multisourcing of generic drugs—to dramatically lower spending while ensuring continued funding for true innovation.

Drug discovery period

Government-funded research laboratories and those based in nonprofit academic centers are the origin of most key fundamental discoveries on which new drugs are based and are frequently cited in the research underlying new drugs.[9] This support is derived from taxpayer funds through the National Institutes of Health. Whether the seminal study leading to the development of a new therapeutic approach arises through public support or in the private sector, considerable (and costly) work is then required to bring a drug to market. This is generally done within the pharmaceutical company that comes to own the intellectual property for a given compound.

Studies show the central role that public funding plays in the discovery, development, and even clinical testing of a growing number of transformative drugs.[10] As a result, there is concern that the public funds this key research that generates innovation while manufacturers then obtain exclusive rights to the products and charge high prices to the very taxpayers who funded the research in the first place.

More government and academic institutions supported by public funding have sought to patent and license the discoveries they make that are relevant to drug discovery. In a recent study, my colleagues and I examined all new drugs—excluding biologics, or those drugs produced from living organisms, as opposed to drugs produced through chemical synthesis—approved in the United States from 2008–2017 and found that publicly supported research in nonprofit institutions or spin-off companies that had their origins in public-funded research made important late-stage intellectual contributions to at least one in four of these new drugs.[11] But few such patent licenses have traditionally not had clauses that restrict manufacturers' ability to charge excessive prices to government payers or return royalties to support future public funding of science.

Policy recommendations for the drug discovery period

One way to lower drug prices when public funding leads to patents covering approved prescription drugs would be for the National Institutes of Health to require a reasonable pricing provision in the technology transfer from the public sector to the private sector. This provision could, for example, require that the ultimate price of the product be no greater than its value-based price—a price reflecting the drug's potential ability to improve patient outcomes over comparable interventions—as determined by independent organizations.

A less-effective version of such a clause was part of the NIH Combined Research and Development Agreement process from 1989–1995, but it was never implemented fully and ultimately was dropped under substantial lobbying pressure from the pharmaceutical industry.[12]

Notably, according to the Bayh-Dole Act of 1980, which established the basic rules for commercialization of technology arising from government funding, the federal government retains a license in such patents and can even "march-in" to invalidate an exclusive commercialization license if the product is not made available on "reasonable terms." The NIH, however, does not interpret reasonable terms as applying to pricing and has never invoked the march-in provision when public interest groups have requested such a move.

In addition, few drugs have all of their patents linked to government funding because pharmaceutical manufacturers usually build a broad thicket of dozens, or hundreds, of patents around the product prior to approval. So, it is unlikely that greater reliance on the march-in provision will serve as an effective lever to reduce drug prices in all but a few cases.[13]

Finally, it is important for policymakers to recognize that focusing on patented technology misses the manifold ways that information and insights generated by publicly funded science get taken up by for-profit manufacturers and applied to drug discovery. Many of the policy proposals discussed subsequently in this essay can lead to more rational drug prices and are ethically justified by the publicly supported science currently serving as a primary engine of innovation for the for-profit pharmaceutical industry.

Brand-name-only period

After drugs are approved by the U.S. Food and Drug Administration, manufacturers hold patents and other exclusivities on their products to prevent direct competition. There is thus no direct competition that could help lower drug prices. Competition between brand-name drugs that treat the same conditions has not been shown to effectively lower prices, apart from a few cases. In such an environment, the most direct way to lower prices is to empower the buyers to negotiate better terms with the exclusivity-holding manufacturers. So, the best solution is to provide the U.S. government with the authority to negotiate reasonable prescription drug prices that reflect the value that the treatments provide to patients.

Currently, in the United States, brand-name manufacturers can set any price they choose during the market exclusivity period, while the buyers' markets for prescription drugs are served by a patchwork of public and private payers with far less equivalent negotiating power.[14] Medicare—the government program that covers payment for people older than 65 years of age—is forbidden by law from negotiating prices with drug manufacturers. This is despite Medicare's ability to negotiate or set the price for every other kind of medical service it covers. This imbalance in power between the sole-source supplier and the multiple, competing buyers is made worse by various rules and restrictions on the payers and their abilities to decline to cover certain drugs.

Medicare Part B, for example, accepts payment rates for FDA-approved drugs based on their average sales price, and Medicare Part D plans must cover at least two drugs in each class in addition to substantially all drugs in six "protected classes" (including cancer and HIV).[15] But Medicare cannot negotiate the price of these mandatory drugs on behalf of the individual plans that implement coverage. Similarly, Medicaid programs, which cover care for the poor and disabled, are required to list virtually all FDA-approved drugs on their formularies.[16]

In the private sector, insurers can refuse to pay for particularly costly drugs that have equivalently less expensive alternatives, but they may also impose high co-payments to discourage patient demand for such lower-value medications. The latter approach is counteracted by manufacturer coupons to patients and patient assistance programs.[17] For these and other reasons, commercial payers receive lower rebates, on average, than Medicare.

Policy recommendations for the brand-name-only period

During this period, the most direct way to address excessive drug prices would be for the government to negotiate the price of drugs. Numerous other countries have health technology assessment organizations that assess a newly approved drug's clinical value and help determine what a fair price would be based on how well it is expected to perform against other available treatments.[18] These publicly funded organizations gather data on the effectiveness, safety, and cost of new drugs, compared with other interventions, to assess whether the payer should cover the price.

This does not occur in the United States, making it difficult for value-based assessments to drive medication use and cost. Currently, several smaller public and private entities take on this role.[19] The United States needs a similar body operating at the national government level that can make such a determination within the first year after approval; until then, manufacturers might be permitted to charge the price they believe is appropriate.[20] Past legislative efforts to establish such a body have been derailed by the political process, but it would be best situated within the Department of Health and Human Services and could accept information about the cost of development and cost of failure as a way of determining a rational, value-based price.

Once the price is established, price increases each year should not be able to exceed inflation, unless the manufacturer brings new evidence that changes knowledge about the drug's value. Similarly, future technology that lowers the cost of care for the indication should lead to price declines. As a safety net for particularly essential and high-priced medications for which a negotiated price cannot be reached, the government has the authority to reimburse pharmaceutical manufacturers at a fair market-value price for use of their intellectual property (along with a reasonable royalty rate to account for the cost of failure) under Section 25 of the U.S. Code, §1498.[21]

During this period, brand-name pharmaceutical manufacturers spend billions of dollars annually to persuade physicians and patients to use their products, but there is a shortage of noncommercial information disseminated about drug benefits, risks, and cost effectiveness. As an alternative, we need to support independent programs designed to generate unbiased information about evidence-based management of disease and then invest in actively disseminating this educational information to physicians, so that it can translate optimally into more cost-effective prescribing. [22]

In addition, at present, manufacturers are limited to only actively promoting their drugs primarily for the diseases or conditions that the FDA has reviewed and approved, even though prescribing for non-FDA-approved (or "off label") prescription drug uses can be common. Recent federal court decisions interpreting the First Amendment have extended protection of commercial speech and put these rules in jeopardy, potentially allowing manufacturers to engage in widespread promotion of off-label drug uses. Such uses often lack the same level of evidence as FDA-approved uses, and so can be potentially dangerous to patients.[23] And they can be costly to the system, too.[24] Thus, the FDA must reaffirm its commitment to current off-label marketing rules, which should be enforced even under the evolving commercial speech doctrine in this area.[25]

Transition to a competitive market period

The only type of competition that consistently and substantially lowers drug prices comes from introduction to the U.S. market of interchangeable, FDA-approved generic drugs. When the market exclusivity period ends for a given medication, generic manufacturers can enter the market and prices generally fall, reducing healthcare spending by patients and payers and promoting greater access to the drug.[26]

Yet brand-name manufacturers often employ product life-cycle management strategies to extend market exclusivity periods.[27] This involves exploiting the interpretations of the standards for patenting under the Patent Act and seeking “secondary” patents on peripheral aspects of the drug, such as its appearance or coating, that can extend market exclusivity periods indefinitely. In one review of two HIV medications, my colleagues and I identified 108 different patents covering the products that could have extended their market exclusivity by 12 years or more.[28] This practice also can be extended further to “tertiary” patents covering a drug’s delivery via a device, such as an injectable pen, a patch, or an inhaler.[29]

Secondary and tertiary patents also enable product-hopping strategies, in which manufacturers introduce new versions of their products with incremental changes that do not provide advancements in drug efficacy, safety, or convenience that are commensurate to the higher prices being charged. In one case, a manufacturer of an antibiotic successively changed its formulation from capsules to tablets and then altered its strength and scoring marks, allowing it to stay ahead of generic entry.[30]

In addition, manufacturers use various strategies to prevent the timely entry of generic drugs. These include filing Citizen Petitions with the Food and Drug Administration, restricting supplies of their product for generic manufacturers to use in bioequivalence studies, and entering into settlements with generic manufacturers seeking to challenge patents that include agreements to drop the challenge and delay or terminate its plans to market a competing generic product.

Policy recommendations during the transition to a competitive market period

There are currently some pieces of legislation being considered in Congress that try to address generic-delaying strategies in a piecemeal way, such as by making it illegal to restrict samples or requiring greater disclosure of a product’s patent landscape. Similarly, more common use of the administrative Patent Trial and Appeals Board’s patent review process—such as automatic Patent Trial and Appeals Board review at the time any drug patent is listed with the FDA—could help weed out insufficiently innovative patents.[31] Congress also could change federal law and direct the Food and Drug Administration to grant interchangeability ratings to drugs that offer nonclinically significant changes.

The states also have a role to play. Regulations permitting or requiring the substitution of generic drugs for brand-name products is managed at the state level, with variation across the states. These state laws could be adapted to permit "therapeutic substitution" of drugs proven to work comparably even if they are not pharmaceutically equivalent, such as a tablet and a capsule.

Another policy solution that would help prevent secondary and tertiary patents from delaying generic entry would be to restrict a brand-name drug's market exclusivity period to a particular time period and not permit secondary or tertiary patents—or any of the other strategies—from being able to block FDA approval of a generic version. My colleagues and I have proposed that manufacturers be restricted to the single patent for which they seek and receive Patent Term Restoration (a period of up to 5 years to account for time spent in clinical trials and FDA review), plus the 6-month patent extension manufacturers receive for testing their drugs in children. At the end of this period, generics should be permitted to enter, no matter what other patents have been obtained. The failure of a generic to enter the market should spark a formal federal investigation to determine whether some anticompetitive strategies have been used.

Multisource generic period

After a drug has lost exclusivity protection, prices may not fall if there are not enough generic manufacturers in the market.[32] Similarly, older, off-patent drugs can transition from markets served by multiple manufacturers to markets served by three or fewer, allowing the remaining manufacturers more flexibility to raise prices. Such older products may not be lucrative enough for other generic manufacturers to enter the market.

Policy recommendations for the multisource generic period

In the past, long delays in generic drug approval times at the FDA have limited generic entry in these kinds of cases, but the agency has substantially accelerated review times due to increased funding from user fees starting in 2012. More resources must be invested at the FDA to ensure that there are not unnecessary delays in generic drug approval and that guidances are produced in a timely fashion for the types of studies generic manufacturers will need to complete to receive FDA approval of interchangeable products, particularly for complex small molecule products (generic versions of nonliving organic compounds) and biosimilars (competitor versions of biologic drugs). Importation is a possible solution in cases of high prices for off-patent drugs, particularly if there are manufacturers selling these products in other similar regulatory systems around the world that, for any reason, have decided not to pursue FDA approval yet. In one study of 170 off-patent drug products being sold in the United States by three or fewer manufacturers, more than half (109, or 64 percent) had at least one manufacturer approved by a non-U.S. regulator and 32 (19 percent) had four or more.[33]

In these cases, a process for facilitating United States-wide imports, followed by an expedited process for formal FDA approval, could help prevent and respond to price spikes.[34] Here's just one example: Pyrimethamine—the drug used for a complication of advanced HIV that was famously subject to a 5,000 percent price increase in the U.S. market by Turing Pharmaceuticals, from $13.50 to $750 per pill—is being sold by some manufacturers for as little as $0.03 per pill.[35]

Another solution would be to pursue a system of government-sponsored drug manufacturing. In recent years, some private organizations have developed their own efforts at drug manufacturing, and other nonprofit drug manufacturers have emerged. A government-run manufacturing plant, as proposed in Congress in 2018, could be set up to ensure a continued supply of off-patent products that for-profit generic manufacturers have lost interest in producing.

Conclusion

There is no one single solution for reducing unnecessary spending on prescription drugs because the market changes so substantially during the course of a drug's development and then its widespread use after FDA approval. But with sensible changes directed toward the different forces that affect the market at different times, the United States can help contain rising drug costs, better ensure that we pay for clinical value in the system—rather than whatever price drug manufacturers believe they can extract—and better ensure availability of important drugs for the patients who need them.

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Endnotes

1 Michael Sherman and others, "Prescription Medicines Account for One in Four Dollars Spent by a Commercial Health Plan," Health Affairs blog, August 24, 2018, available at https://www.healthaffairs.org/do/10.1377/hblog20180821.820628/full/.

2 Glen T. Schumock and others, "National Trends in Prescription Drug Expenditures and Projections for 2019," *American Journal of Health System Pharmacy* 76 (15) (2019): 1105–1121.

3 Glen T. Schumock and others, "National Trends in Prescription Drug Expenditures and Projections for 2015," *American Journal of Health-System Pharmacy* 72 (9) (2015): 717–736.

4 Brandy Henry, "Drug Pricing & Challenges to Hepatitis C Treatment Access," *Journal of Health and Biomedical Law* 14 (2018): 265–283.

5 Jing Luo and others, "Strategies to improve the Affordability of Insulin in the USA," *Lancet Diabetes and Endocrinology* 5 (3) (2017): 158–159.

6 Jonathan D. Alpern and others, "Trends in Pricing and Generic Competition within the Oral Antibiotic Drug Market in the United States," *Clinical Infectious Diseases* 65 (11) (2017): 1848–1852.

7 Patrick Liu and others, "Medicare Beneficiary Out-of-Pocket Costs for Generic Cardiovascular Medications Available Through $4 Generic Drug Discount Programs," *Annals of Internal Medicine* 169 (11) (2018): 817–819.

8 Bo Wang, Jun Liu, and Aaron S. Kesselheim, "Variations in Time of Market Exclusivity among Top-Selling Prescription Drugs in the United States," *JAMA Internal Medicine* 175 (4) (2015): 635–637.

9 Ekaterina Galinka Cleary and others, "Contribution of NIH Funding to New Drug Approvals 2010-2016," *Proceedings of the National Academy of Sciences of the USA* 115 (10) (2018): 2329–2334.

10 Aaron S. Kesselheim, Tan YT, and Jerry Avorn, "The Roles of Academia, Rare Diseases, and Repurposing in the Development of the Most Transformative Drugs," *Health Affairs* 34 (2) (2015): 286–294.

11 Rahul Nayak, Jerry Avorn, and Aaron S. Kesselheim. "Public Support for Late-Stage New Drug Discovery; Cohort Study," *BMJ* 367 (2019): l5766.

12 Rebecca Wolitz, "The Pay-Twice Critique, Government Funding, and Reasonable Pricing Clauses," *Georgia State University College of Law Journal of Legal Medicine Symposium* (2019), available at https://ssrn.com/abstract=3440799.

13 Carolyn L. Treasure, Jerry Avorn, and Aaron S. Kesselheim, "Do March-In Rights Ensure Access to Medical Products Arising from Federally Funded Research? A Qualitative Study," *Milbank Quarterly* 93 (4) (2015): 761–787.

14 Aaron S. Kesselheim, Jerry Avorn, and Ameet Sarpatwari, "The High Cost of Prescription Drugs in the United States: Origins and Prospects for Reform," *JAMA* 316 (8) (2016): 858–871.

15 Thomas J. Hwang and others, "Analysis of Proposed Medicare Part B to Part D Shift with Associated Changes in Total Spending and Patient Cost-Sharing for Prescription Drugs," *JAMA Internal Medicine* 179 (3) (2019): 374–380.

16 Benjamin D. Sommers and Aaron S. Kesselheim, "Massachusetts' Proposed Medicaid Reforms—Cheaper Drugs and Better Coverage?" New England Journal of Medicine 378 (2) (2018): 109–111.

17 Joseph S. Ross and Aaron S. Kesselheim, "Prescription-Drug Coupons—No Such Thing As a Free Lunch," *New England Journal of Medicine* 369 (13) (2013): 1188–1189.

18 Jing Luo and Aaron S. Kesselheim, "Setting Prescription Drug Prices: A Comparison of Strategies in the US, UK, Canada, Australia, and Germany," *Harvard Health Policy Review* 15 (2) (2016): 4–9.

19 Steven D. Pearson, "The ICER Value Framework: Integrating Cost Effectiveness and Affordability in the Assessment of Health Care Value," *Value in Health* 21 (3) (2018): 258–265.

20 Ariel D. Stern and others, "The impact of price regulation on the availability of new drugs in Germany," *Health Affairs* 38 (7) (2019): 1182–1187.

21 Amy Kapczynski and Aaron S. Kesselheim, "Government 'Patent Use': A Legal Approach to Reduce Drug Spending," *Health Affairs* 35 (5) (2016): 791–797.

22 Jerry Avorn, "Academic Detailing: 'Marketing' the Best Evidence to Clinicians," *JAMA* 317 (4) (2017): 361–362.

23 Food and Drug Administration, "Public Health Interests and First Amendment Considerations Related to Manufacturer Communications Regarding Unapproved Uses of Approved or Cleared Medical Products" (2017).

24 Aaron S. Kesselheim, Michelle M. Mello, and Jerry Avorn, "FDA Regulation of Off-label Drug Promotion under Attack," *JAMA* 309 (5) (2013): 445–446.

25 Aaron S. Kesselheim and Michelle M. Mello, "Prospects for Regulation of Off-Label Drug Promotion in an Era of Expanding Commercial Speech Protection," *University of North Carolina Law Review* 92 (5) (2014): 1539–1604.

26 William H. Shrank and others, "State Generic Substitution Laws Can Lower Drug Outlays under Medicaid," *Health Affairs* 29 (7) (2010): 1383–1390.

27 Kerstin N. Vokinger and others, "Strategies That Delay Market Entry of Generic Drugs," *JAMA Internal Medicine* 177 (11) (2017): 1665–1669.

28 Amin T and Aaron S. Kesselheim, "Secondary patenting of branded pharmaceuticals: a case study of how patents on two HIV drugs could be extended for decades" *Health Affairs* 31 (2012): 2286–2294.

29 Reed F. Beall and Aaron S. Kesselheim, "Tertiary Patenting on Drug-Device Combination Products in the United States," *Nature Biotechnology* 36 (2) (2018): 142–145.

30 Federal Trade Commission, "FTC Files Amicus Brief Explaining That Pharmaceutical 'Product Hopping' Can Violate Antitrust Laws," Press release, October 1, 2015, available at https://www.ftc.gov/news-events/press-releases/2015/10/ftc-files-amicus-brief-explaining-pharmaceutical-product-hopping.

31 Jonathan J. Darrow, Reed F. Beall, and Aaron S. Kesselheim, "The Generic Drug Industry Embraces a Faster, Cheaper Pathway for Challenging Patents," *Applied Health Economics and Health Policy* 17 (1) (2019): 47–54.

32 Chintan V. Dave, Abraham Hartzema, and Aaron S. Kesselheim, "Prices of Generic Drugs Associated with Numbers of Manufacturers," *New England Journal of Medicine* 377 (26) (2017): 2597–2598.

33 Ravi Gupta and others, "Availability of US Off-Patent Drugs at Risk for Acute Price Increases or Shortages from Manufacturers Approved by Non-US Regulators," *BMJ* 360 (2018): k831.

34 Thomas J. Bollyky and Aaron S. Kesselheim, "Can Drug Importation Address High Generic Drug Prices?" White Paper (The Brookings Institution, 2017), available at https://www.brookings.edu/research/can-drug-importation-address-high-generic-drug-prices/.

35 Michael A. Carrier, Nicole L. Levidow, and Aaron S. Kesselheim, "Using Antitrust Law to Challenge Turing's Daraprim Price Increase," *Berkeley Technology Law Journal* 31 (2) (2016): 1379–1408.

LABOR

Most breadwinners in the United States support themselves and their families through their work in the labor market, so increasing income inequality is a pre-eminent concern for the economic well-being of all U.S. workers. The Washington Center for Equitable Growth supports research to better understand the causes of wage stagnation and how policies can foster the structural transformation of the U.S. labor market so that workers can share in the gains of economic growth.

We are especially proud of the work Equitable Growth is engaged in examining monopsony (lack of competition for workers among individual employers) and overall bargaining power in the labor market. We also continue to seed cutting-edge research that is revolutionizing how academics and policymakers alike think about the structural and dynamic forces in the U.S. labor market that determine how wages are set and by whom.

The political appetite for strengthening the power of workers and corralling the current market power of firms is growing. A number of 2020 presidential candidates are proposing comprehensive labor policy reforms, while states and municipalities continue to lead the way on bold policies that improve wages and the security of workers along the income spectrum. This election year also figures to be a major turning point for active policies to boost wages, as the U.S. economy is more than 10 years into the recovery from the Great Recession. Unemployment rates are historically low, and there is evidence of a tight labor market, yet too many workers still lack access to good jobs and face lackluster wage growth in the absence of bargaining power to ensure they will be paid commensurate with the value they create in the economy.

These drags on U.S. workers' employment and career opportunities and long-term earnings potential are even more persistent because of racialized and gendered labor market barriers that workers face, resulting in persistent intersectional wage gaps. These conditions today call for bold policies that can alter how the labor market functions in a way that ensures growth is broadly shared. The following essays demonstrate the breadth and strength of scholarship in this area and the possible solutions that can flow from that research.

—***Kate Bahn***, *Washington Center for Equitable Growth*

MONOPSONY

Wage and employment implications of U.S. labor market monopsony and possible policy solutions

By Sydnee Caldwell, University of California, Berkeley, and Suresh Naidu, Columbia University

Overview

When a firm cuts wages by 5 percent, how many workers will quit in the next year? If the labor market works the same way as the market for chairs, then virtually all of the workers should leave for other firms. This is because, in a perfectly competitive market, there will always be another firm that is willing to pay the worker the value of what she produces. But ask any human resources manager or any worker, and they will tell you that it is extremely unlikely that all the workers would leave their jobs.

Recent economic research is able to quantify this: Between 10 percent and 20 percent of workers will quit. New estimates of this number—known as the elasticity of a firm's labor supply—which rely on administrative data or innovative experiments, are arriving all the time.[1]

Economists have a word for this phenomenon: monopsony power. While literal monopsony power in the sense of a labor market with one employer is rare, the modern model of monopsony applies to markets where there are still many firms. The fundamental reason employers have this power is that jobs are complex transactions where the preferences of both workers and firms over job characteristics and performance are important and idiosyncratic. Because job shopping is rare and sporadic, workers don't have many tools with which to figure out how much they will value a particular job before they take it.

A modern job in the United States is integrated in a constellation of relationships among co-workers and managers. Many workers possess skills that are specialized for particular employers and particular tasks. They also have preferences about their work environment. They may need to have a short enough commute. They may enjoy working with certain people. And they may have strong preferences about the communities in which they live.

Furthermore, searching for a job in the labor market takes time and energy. All potential job offers are not immediately observable by all workers who might accept them. Both of these facts mean that employees will only slowly respond to wage changes at their jobs. They may poke around the web for new job listings or they may ask their friends or former colleagues about possible job opportunities. None of this happens quickly, however, giving firms monopsony power over their workforces.

Monopsony power hinders wage growth for workers, which, in turn, slows consumer demand and reduces overall savings in the U.S. economy. This slows U.S. economic growth over the long term. Understanding the influence of monopsony power on the U.S. labor market is important because it helps make sense of why, from the point of view of employers, labor is often scarce. This perception often leads employers to demand policies that increase the supply of properly skilled workers, be they training programs, education, or increased migration. Some of the perceived "skills gap" may simply be because employers can't find skilled workers at a wage they are willing to pay.

Fortunately, there are a number of policy actions that can be taken that are effectively "free lunches," in the sense that there may be room for policymakers to increase wages without reducing employment. Other basic labor market institutions, such as unions, wage mandates, and mandated benefits may also improve workers' welfare.

In this essay, we review the evidence for firms' monopsony power in the U.S. labor market and explain what this means for wage growth and wage inequality. We then explain why, in a labor market where monopsony power is ubiquitous, policies that restrain firms' wage-setting power and policies that bring workers to the bargaining table will stimulate wage growth without costing jobs. Furthermore, policies that encourage competition in the labor market—such as restricting the use of noncompete or nonsolicit agreements—are likely to help workers throughout the wage distribution.

All of these outcomes, we argue, could help ameliorate income inequality in the United States and generate more broad-based and sustained economic growth.

Key Takeaways

THE EVIDENCE

- Monopsony power in the U.S. labor market—the power of firms to set wages below what a competitive market would deliver—hinders wage growth for workers, which slows consumer demand, reduces overall savings, and slows economic growth over the long term.

- Understanding the influence of monopsony power is important because when labor is scarce, it often leads employers to call for public policies that increase the supply of properly skilled workers, yet some of the perceived "skills gap" may simply be because employers can't find skilled workers at a wage they are willing to pay.

THE SOLUTIONS

- Policies that restrain firms' wage-setting power and strengthen workers' bargaining position will stimulate wage growth without costing jobs. And policies that encourage competition in the labor market—such as restricting the use of noncompete or nonsolicit agreements—are likely to help workers, help ameliorate U.S. income inequality, and generate more broad-based and sustained economic growth.

Economic evidence for U.S. labor market monopsony

The academic literature on monopsony—and the term itself—-date back to 1933, when Joan Robinson published *The Economics of Imperfect Competition*.[2] Mainstream mid-20th century U.S. labor economists were enthusiastic proponents of the view that laissez-faire labor markets were characterized by monopsony.[3] Sometime in the late 20th century, however, this viewpoint fell out of favor, and economists started to emphasize models where wages were determined primarily by the value of an individual worker's skill.

In recent years, research using new matched employer-employee data, which allows researchers to track workers' careers across employers, casts doubt on the idea that workers' wages are only determined by their individual skills. Pioneering recent research asked a simple question: Do workers' wages depend not only on their skills but also on the identity of the firms they work at?[4]

One answer comes courtesy of graphs such as the one below, produced using Oregon unemployment records. Figure 1 shows that the wage gains experienced by Oregonian workers who transition from the firms paying the lowest overall wages (by quartile) to those in the highest quartile of wage payers is strongly positive and is similar to the wage decreases experienced by their counterparts who transition the other way. Figure 1 also shows that while workers do transition to higher-wage jobs more than to lower-wage jobs (as measured by the thickness of the line), there are almost as many transitions from high-wage firms to low-wage ones. (See Figure 1.)

Wage changes depend on the pay policies of origin and destination firms

Wage changes for individuals who move between high- and low-wage firms by initial and ending firm quartile

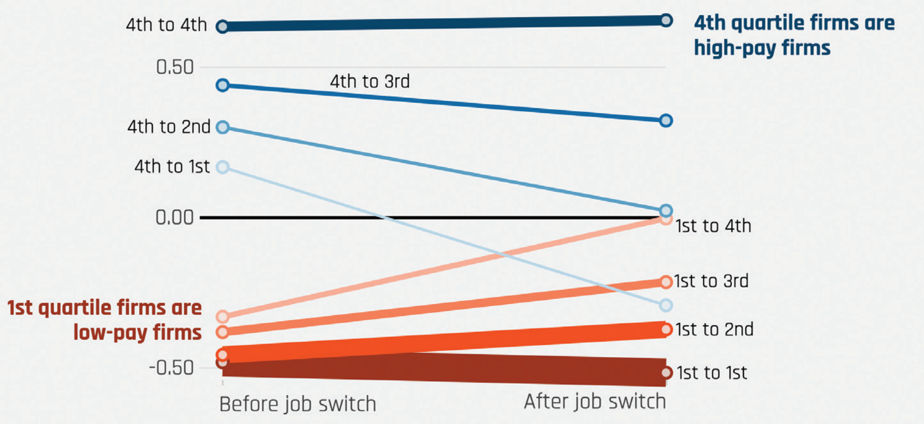

FIGURE 1

...workers who transition from the firms paying the lowest overall wages to those in the highest quartile of wage payers is strongly positive and is similar to the wage decreases experienced by their counterparts who transition the other way.

Source: Ihssan Bassier, Arindrajit Dube, and Suresh Naidu, "Monopsony in Movers" (Santa Fe Institute, forthcoming), to be available at http://tuvalu.santafe.edu/~snaidu/.

This would not be true if workers' wages depended only on their skill levels. In that case, workers' wages would not depend on the identity of their employers. This empirical research shows that firms played an independent and significant role in determining wages. In short, the outdated "law of one price" for an individual worker is, at best, a suggestion in the labor market.

Of course, there are a variety of reasons workers at different firms may be paid different wages. There could be differences in how productive workers are at different firms or differences in working conditions. The cleanest test for the presence of firms' monopsony power involves experimentally manipulating wages and seeing how much turnover among employees changes. What monopsony models predict is that the separations response to randomized wages is low, as it is for new recruits. That means that only some of the workers leave, and that the firm is still able to recruit new workers, though fewer of them.

The recent availability of administrative data from firms and labor market platforms, such as Amazon Mechanical Turk and Burning Glass, have made it possible to examine contexts where wages can be experimentally manipulated in "real world" labor markets. One of these studies comes from the type of labor market that would seem to be the least likely to be plagued by monopsony power: an online labor market with thousands of workers and thousands of easy-to-find employers. Economist Arindrajit Dube at the University of Massachusetts Amherst and his co-authors conducted a series of experiments on Amazon Mechanical Turk, where they asked workers who had already completed a simple task if they would like to complete a given number of additional tasks at a specific rate.[5] The take-up of this offer across workers with different, randomly assigned wage offers allowed the researchers to estimate the amount of wage-setting market power held by employers posting on the platform.

The researchers found that, even in this setting, there were sufficient frictions—economic parlance for the difficulty workers face in searching for jobs—such that a 10 percent increase in the offer increased take-up by only 1 percent, on average. This means that because workers aren't able to easily match into the best possible job option, they end up accepting lower wage offers than would be predicted in a competitive market.

Another popular research strategy to identify firms' monopsony power focuses on documenting the extent of concentration in the labor market and then examining the impact of this concentration on wages.[6] Intuitively, more concentrated markets are those in which there are fewer employers competing for workers.[7] The two federal antitrust agencies, the Federal Trade Commission and the Antitrust Division of the U.S. Department of Justice, have long used the Herfindahl-Hirschman Index, or HHI, a measure of concentration in product markets when evaluating the impacts of potential mergers. Finance professor Efraim Benmelech at the Kellogg School of Management at Northwestern University and his co-authors use administrative data from the U.S. Census Bureau to calculate the level of concentration of each labor market in the United States. The researchers find an HHI level of 2,300.[8]

This research shows that firms, at the very least, enjoy moderately concentrated labor markets for their employees. The main antitrust agencies in the United States classify product markets as concentrated if the HHI level is more than 1,500; the cutoff for a market to be considered highly concentrated is 2,500. By this metric, many labor markets in the United States are moderately concentrated. Researchers also uniformly find a negative correlation between concentration and wages, meaning that wages are, on average, lower in more concentrated markets.[9]

Mergers in more concentrated product markets typically face more government scrutiny. New research by labor market economists question whether mergers in more concentrated labor markets should also face antitrust scrutiny. While some economists have found that the average merger has no impact on wages, more careful research—such as by Elena Prager at Northwestern University and Matt Schmitt at the University of California, Los Angeles—finds that mergers greatly reduced wages for workers with healthcare industry-specific skills, who have fewer outside options than workers with more general skills.[10] That is, hospital mergers reduced wages for workers in more concentrated markets.

In some cases, reducing wages may even be an explicit goal of the merging firms. Recent research conducted in Denmark finds that firms there target high-wage firms for acquisition, then, after the acquisition, they fire the managers and lower workers' wages.[11] As we discuss in the final section of this chapter, scrutinizing mergers for impacts on labor market outcomes is well within the orbit of current U.S. antitrust legal doctrine and enforcement capacity.

Implications of monopsony in the U.S. labor market for wages and wage inequality

Firms with monopsony power set pay policies, taking into account that if they want to hire more workers, they have to pay higher wages. This leads to workers earning less than they produce, as well as to higher unemployment. The unemployment created by firms' monopsony power is not a result of market power, per se, but rather firms' inability to perfectly pay each worker the minimum amount required to get that worker to become an employee at the firm.

Because employers cannot observe each worker's reservation wage—the minimum the firm would have to pay to get the worker to accept the job—employers pay relatively uniform wages to their employees. So, even a small degree of monopsony power—a labor supply elasticity of around 4 (meaning 40 percent of the workers leave if the firm cuts wages by 10 percent)—would imply that workers take home only about 80 percent of what they produce, with the rest accruing as profits for their employers.

These pure monopsony profits can raise the measured capital share of income, which, in the national accounts, combines pure economic profits with the returns to productive capital, as well as the wealth-to-income ratio and the ratio of market-to-book values of firms. The increase in all these measures are part of the so-called Piketty facts, named after the Paris School of Economics professor Thomas Piketty, the author of the best-selling *Capital in the 21st Century*.[12] These facts point to the increasing importance of wealth in the economy, and a monopsonistic lens suggests that some of this rise may be due to the erosion of policies that mitigated the use of monopsony power.

And because capital income is more concentrated than labor income, these pure monopsony profits would likely increase overall income inequality as well. Yet the inequality induced by these additional profits could be offset somewhat by some high-income workers facing potentially quite high degrees of monopsony power (think software engineers, whose high levels of pay shouldn't obscure the fact that they work for employers who have considerable market power due to concentration and anticompetitive conduct such as no-poaching agreements).

Lowering monopsony power may, in fact, raise wages for some already high-paid occupations. In the United Arab Emirates, for example, research by one of the co-authors of this essay, Suresh Naidu, and the co-authors of that paper find that weakening monopsony power raised wages the most both at the bottom and at the top of the wage distribution.[13] While the overall effect of monopsony on income inequality is an open question, there are reasons to suspect monopsony is, on net, disequalizing.

Firms' monopsony power also can contribute to racial and gender wage gaps. In fact, the original use of monopsony, first put forward by the famous 20th century economist Joan Robinson, was to explain why equally productive workers might earn different wages. In her formulation, monopsony power might lead to a gender wage gap, as employers could use "female" as a tag for less elastic labor supply, identifying workers who are less willing (or able) to leave their current jobs for better opportunities elsewhere. They could then exploit this fact to pay these workers lower wages.

There are at least three reasons women and minorities may be less elastic and thus earn lower wages. First, as in the original Robinson formulation, women, particularly married women, may face geographic constraints on their job search that men do not face. For instance, women may need to work close to their homes if childcare is not widely accessible.

Second, the presence of discriminatory employers in the U.S. labor market can lead to a wage gap—even at the firms that do not discriminate. This is because the presence of discriminatory employers affects the wages of nondiscriminatory employers, worsening the overall labor market for some individuals more than others.

Third, some groups of workers, including women and minorities, may have less access to information about new openings than their nonminority male colleagues, making the market effectively less competitive for them.[14] This may contribute to gender and racial wage gaps. A commonly cited statistic is that half of all jobs in the United States are found through informal contacts or social networks, which are themselves segregated and unequally distributed.[15]

Then, there's the rising practice among companies that use or sell software, which these firms claim can accurately predict which workers are likely to leave, as well as when and at what wage. An important open question today is whether modern human resource analytics, by predicting turnover and retention and producing recommended wage policies based on the data of many firms, facilitates employer collusion on wages or wage discrimination.

If firms use these predictions to target wage increases or bonuses—and do not train their algorithms to be gender- and race-blind—then this may lead to a wage gap over time. Yet software tools that make competing offers increasingly visible to workers may prove to play some role in mitigating monopsony. The interaction of technological change and labor market monopsony is clearly an area that needs further research.

Public policy implications of monopsony in the U.S. labor market

There are several ways policymakers can address the potential negative consequences of firms' market power on wages and employment in the U.S. labor market. First, antitrust regulation could be updated to more comprehensively and explicitly cover labor market monopsony.[16] This means both considering potential labor market harms when evaluating mergers and acquisitions, and increasing the amount of funding available to the two federal antitrust agencies to investigate anticompetitive practices, including wage fixing or no-poaching agreements.[17]

Even in the absence of antitrust action, policies that encourage firms to compete more aggressively for workers, such as restrictions on the use of noncompete clauses or nonsolicit agreements, may be effective at helping workers throughout the wage distribution. Using data from the U.S. Census Bureau, researchers find that increased enforceability of noncompete clauses across states in the United States led to lower wage growth and decreased job-to-job mobility.[18] Using discontinuities in laws at state borders, these researchers further showed that the enforceability of noncompetes had spillover effects on workers who were not directly affected. These results highlight why noncompete clauses and nonsolicit agreements reduce workers' wages both by reducing workers' ability to take advantage of new opportunities and by reducing their ability to renegotiate their wages on the job.

A classic intervention in the presence of monopsony power is the minimum wage. By restraining firms' wage-setting ability at the lower end of the U.S. labor market, policymakers can increase wages for the lowest-paid workers and stimulate higher wages for those just above them on the wage ladder. What's more, modest increases in the minimum wage can lead to gains in both wages and employment.

The reason increases in the minimum wage may increase employment is that, in the absence of a minimum wage, firms with market power have to trade off the benefit of hiring more workers against the cost of raising wages for all workers (not just the additional worker). A minimum wage removes this trade-off for many firms. Prior empirical research documents that increases in the minimum wage increased employment in the most concentrated labor markets.[19] These include areas of the country where there are few firms hiring stock clerks, cashiers, or other retail sales workers. In Germany, the minimum wage has also been shown to reallocate labor from low-productivity to high-productivity employers.[20]

Of course, changes in the minimum wage only benefit low-wage workers. But if firms' monopsony power is pervasive even for mid- to high-wage workers, then tools such as unions or wage boards—which can raise wages for workers further up in the wage distribution—may also have quite limited disemployment effects. A few states, including New York and New Jersey, already have wage boards, whose power could be strengthened. These institutions could be copied in other states.

Finally, in the presence of monopsony power, policies that nominally target large individual firms, including public-sector employers, may have economywide effects. A classic paper by economists Douglas Staiger at Dartmouth College, Joanne Spetz at the University of California, San Francisco, and Ciaram Phibbs at Stanford University showed that increases in wages at government-funded Veterans Administration hospitals led to wage increases at nearby hospitals due to labor market competition.[21] One way to partially reconcile the interests of small businesses and workers may be to target wage increases to large employers (including the government), and rely on labor market competition to transmit those increases to smaller employers.

Conclusion

Labor market monopsony in the United States means that firms pay workers much less than the value of what their workers produce. Policymakers can hope to stimulate wage growth both by promoting competition in the labor market and by placing constraints on firms' wage-setting capabilities. In doing so, policymakers also can help tackle rising U.S. income inequality and set the table for more sustainable, broad-based economic growth.

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Endnotes

1 Anna Sokolova and Todd Sorensen, "Monopsony in Labor Markets: A Meta-Analysis." Discussion Paper (IZA Institute of Labor Economics, 2018), available at https://www.iza.org/publications/dp/11966/monopsony-in-labor-markets-a-meta-analysis.

2 Joan Violet Robinson, *The Economics of Imperfect Competition* (London: Palgrave Macmillan, 1933).

3 Clark Kerr, "Labor Markets: Their Character and Consequences," *The American Economic Review* 40 (2) (1950): 278–291; Martin Bronfenbrenner, "Potential Monopsony in Labor Markets," *ILR Review* 9 (4) (1956): 577–588; Lloyd G. Reynolds, "The Supply of Labor to the Firm," *The Quarterly Journal of Economics* 60 (3) (1946): 390–411.

4 John M. Abowd, Francis Kramarz, and David N. Margolis, "High Wage Workers and High Wage Firms," *Econometrica* 67 (2) (1999): 251–333; David Card, Jörg Heining, and Patrick Kline,"Workplace Heterogeneity and the Rise of West German Wage Inequality," The Quarterly Journal of Economics 128 (3) (2013): 967–1015.

5 Arindrajit Dube and others, "Monopsony in Online Labor Markets," *American Economic Review: Insights* (forthcoming).

6 José Azar, Ioana Marinescu, and Marshall I. Steinbaum, "Labor Market Concentration." Working Paper No. w24147 (National Bureau of Economic Research, 2017); José Azar and others, "Minimum Wage Employment Effects and Labor Market Concentration." Working Paper No. w26101 (National Bureau of Economic Research, 2019).

7 Labor markets are typically defined by both geography (typically commuting zone) and industry or occupation.

8 Efraim Benmelech, Nittai Bergman, and Hyunseob Kim, "Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages?" Working Paper No. w24307 (National Bureau of Economic Research, 2018).

9 José Azar, Steven Berry, and Ioana Elena Marinescu, "Estimating Labor Market Power" (2019).

10 Elena Prager and Matthew Schmitt, "Employer Consolidation and Wages: Evidence from Hospitals." Working Paper (Washington Center for Equitable Growth, 2019), available at https://equitablegrowth.org/working-papers/employer-consolidation-and-wages-evidence-from-hospitals/; Christina De Pasquale, "The Effects of Hospital Consolidation on Labor Market Outcomes" (Atlanta, GA: Emory University Department of Economics, 2014).

11 Alex Xi He and Daniel le Maire, "Mergers and Managers: Manager-Specific Wage Premiums and Rent Extraction in M&As." Working Paper (2018).

12 Gauti B. Eggertsson, Jacob A. Robbins, and Ella Getz Wold, "Kaldor and Piketty's Facts: The Rise of Monopoly Power in the United States." Working Paper No. w24287 (National Bureau of Economic Research, 2018), available at https://equitablegrowth.org/working-papers/kaldor-piketty-monopoly-power/.

13 Suresh Naidu, Yaw Nyarko, and Shing-Yi Wang, "Monopsony power in migrant labor markets:

evidence from the United Arab Emirates," *Journal of Political Economy* 124 (6) (2016): 1735–1792.

14 David S. Pedulla and Devah Pager, "Race and Networks in the Job Search Process," *American Sociological Review* (2017).

15 Yannis M. Ioannides and Linda Datcher Loury, "Job information networks, neighborhood effects, and inequality," *Journal of Economic Literature* 42 (4) (2004): 1056–1093.

16 Suresh Naidu, Eric A. Posner, and Glen Weyl, "Antitrust remedies for labor market power," *Harvard Law Review*, 132 (2018): 536; Ioana Marinescu and Herbert Hovenkamp, "Anticompetitive Mergers in Labor Markets." Working Paper (Washington Center for Equitable Growth, 2018), available at https://equitablegrowth.org/working-papers/anticompetitive-mergers/; Ioana Marinescu and Eric A. Posner, "A Proposal to Enhance Antitrust Protection Against Labor Market Monopsony" (2018).

17 C. Scott Hemphill and Nancy L. Rose, "Mergers that Harm Sellers," *Yale Law Journal* 127 (2017): 2078.

18 Matthew S. Johnson, Kurt Lavetti, and Michael Lipsitz, "The Labor Market Effects of Legal Restrictions on Worker Mobility" (2019).

19 José Azar and others, "Minimum Wage Employment Effects and Labor Market Concentration."

20 Christian Dustmann and others, "Reallocation Effects of the Minimum Wage: Evidence from Germany." Working Paper (2019).

21 Douglas O. Staiger, Joanne Spetz, and Ciaran S. Phibbs, "Is there Monopsony in the Labor Market? Evidence from a Natural Experiment," *Journal of Labor Economics* 28 (2) (2010): 211–236.

LABOR POLICY

Aligning U.S. labor law with worker preferences for labor representation

By Alexander Hertel-Fernandez, Columbia University

Overview

Just 6 percent of private-sector workers belong to a union in the United States, down from a peak of nearly a third in the early 1950s.[1] Yet this steep decline in membership does not reflect a lack of worker demand for unions. If anything, workers' interest in joining unions has increased over this period. In 2017, nearly half of all nonunion workers expressed interest in joining a union if one were available at their jobs.[2] U.S. laws governing labor organizing and collective bargaining clearly do not reflect what most workers want.

Indeed, workers across the country are strongly supportive of some aspects of traditional unions, especially collective bargaining. They also value features of labor organizations that are either prohibited by existing federal and state labor laws or are not widely available, such as industry- or statewide collective bargaining and union-administered portable health and retirement benefits. These kinds of worker preferences for labor union representation have been suppressed in the United States for most of the 20th century up to today.

In this essay, I briefly examine the ossification of U.S. labor law over this time period, alongside the steady decline in union membership since the early 1960s. I then summarize new academic research that probes workers' preferences for labor representation and organization that could inform reforms to federal labor law.[3] I conclude by describing a range of possible federal legislation that could help bring labor law in line with the preferences espoused by majorities of U.S. workers—reforms that give workers greater access to representation and voice, broaden access to collective bargaining rights, build the provision of social benefits and training into unionization, and expand the scope of collective bargaining.

Key Takeaways

THE EVIDENCE

- Steeply declining U.S. union membership does not reflect a lack of worker demand for unions, with nearly half of all nonunion workers expressing interest in joining a union.
- U.S. workers value industrywide or statewide collective bargaining and union-administered portable health and retirement benefits that are largely prohibited by federal and state labor laws.

THE SOLUTIONS

- U.S. labor law should include these preferences, giving workers broader access to collective bargaining rights, new provisions for social benefits and training, and expanded collective bargaining, so that labor market outcomes powered by vibrant unions boost broadly shared prosperity and economic growth.

The ossification of U.S. labor law—and its heavy toll

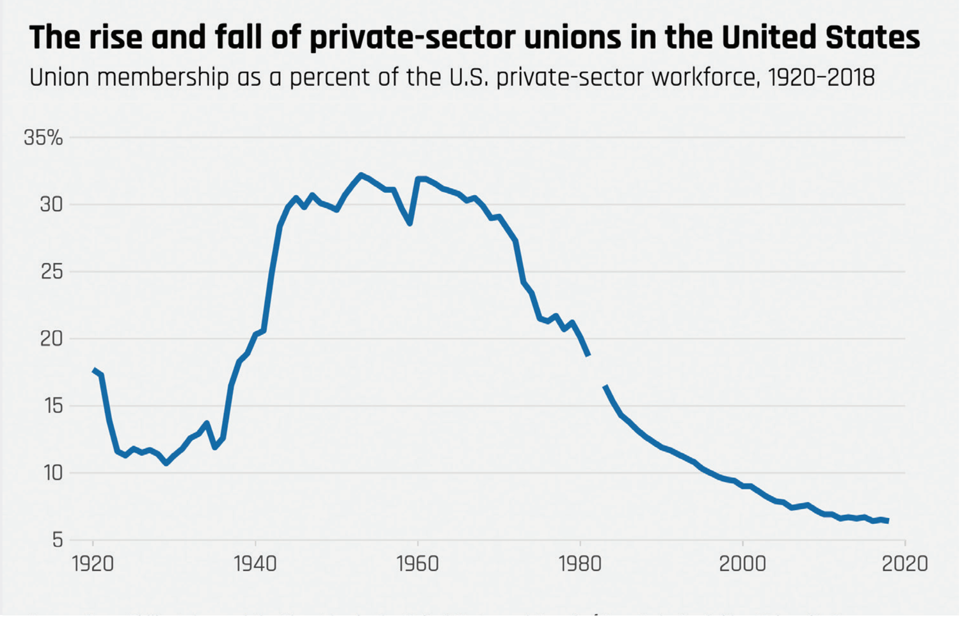
Several trends are immediately apparent in the rise and fall of private-sector union membership in the U.S. labor force from 1920 to present day. First, membership remained relatively low until the mid-1930s. Amid the Great Depression, President Franklin Delano Roosevelt signed into law a sweeping bill intended to provide a comprehensive federal right for private-sector workers to organize unions and collectively bargain with their employers. Coupled with a later surge in wartime manufacturing, the National Labor Relations Act of 1935 boosted union membership to around a third of the private-sector workforce.

Yet, as important as the National Labor Relations Act was for the U.S. labor movement, the law still imposed substantial limits on union growth.[4] It excluded large portions of workers from its reach, including the disproportionately nonwhite agricultural and domestic-workers labor force, as well as public-sector employees and any worker with supervisory or managerial duties, however limited. The law and subsequent amendments and court cases also sharply curbed union rights to picket, boycott, and strike against recalcitrant employers, thus weakening workers' most important economic leverage. What's more, penalties for employers who violated workers' rights during union drives have remained low and poorly enforced, creating strong incentives for businesses to flout federal law.[5]

Most crucially, the law established a firm-based model of organizing and bargaining—as opposed to one where workers in an entire industry or region could bargain with broad swaths of employers. Firm-based bargaining may have worked well in an economy dominated by massive factories employing tens of thousands of workers. But today, when many employers contract or franchise out most of their workers, it makes unionization virtually impossible in many sectors.[6] (See Figure 1.)

FIGURE 1

Firm-based bargaining may have worked well in an economy dominated by massive factories employing tens of thousands of workers. But today, when many employers contract or franchise out most of their workers, it makes unionization virtually impossible in many sectors.



Source: Barry Eidlin, Labor and the Class Idea in the United States and Canada [New York: Cambridge University Press, 2018], Appendix A.

These cracks in federal labor law—alongside the increasing brazenness of employers in opposing union drives—greatly contributed to the sharp decline in union membership since the 1960s and 1970s. Today, union membership in the private sector is now lower than it was before the passage of the National Labor Relations Act—and the fall in membership has exacted a significant toll on U.S. workers and the economy as a whole. Decades of research demonstrates that unions boost both unionized and nonunionized workers' wages and benefits.[7] Stronger unions also compress top-end pay, contributing to lower levels of income inequality.[8] Aside from their effects on pay, unions give workers greater voice in the workplace, and this leads to safer and more equitable working conditions.[9]

Unions are important outside of the workplace, too. Stronger unions foster civic skills and political participation among workers and then channel that mobilization into representing the interests of low- and middle-income workers and their families.[10] A number of studies indicate that economic policies are more aligned with the preferences of less-affluent citizens where union membership is higher.[11]

What workers want from labor representation

U.S. workers have not been clamoring for the demise of the labor movement. If anything, support for unions has actually increased over the past five decades. About a third of nonunion workers said that they would join a union if they could in 1977 and again in 1995, and this proportion grew to nearly half of all nonunion employees in a 2017 poll.[12] Looking more broadly, more than 60 percent of workers in 2018 said that they approved of unions, compared to only 30 percent who disapproved.[13]

While these results indicate strong worker support for unions, they do not say much about the specific representation that workers would want from labor organizations. To answer that question, I have been working with Thomas Kochan and William Kimball at the Massachusetts Institute of Technology's Sloan School of Management to understand how workers think about workplace representation and the kinds of labor law reforms that would best match workers' preferences. To that end, we have conducted large-scale, nationally representative surveys of workers, asking respondents to indicate how likely they would be to join and financially support various labor organizations. We varied how these organizations were structured, which permitted us to identify how much respondents valued individual characteristics of unions.

The characteristics we described in the survey included some common features of traditional U.S. unions, but also features of new organizations operating outside of conventional labor law (sometimes called "alt-labor" groups) and components of unions from other countries currently absent from the United States.

Which features of labor organizations were most—and least—important to workers? The most important features of hypothetical labor organizations to workers as they were considering whether they would join an organization include the following 12 characteristics in Figure 2. The presence of all of these features made workers more likely to say that they would join and support a labor organization. But some of these characteristics were clearly more popular than others. (See Figure 2.)

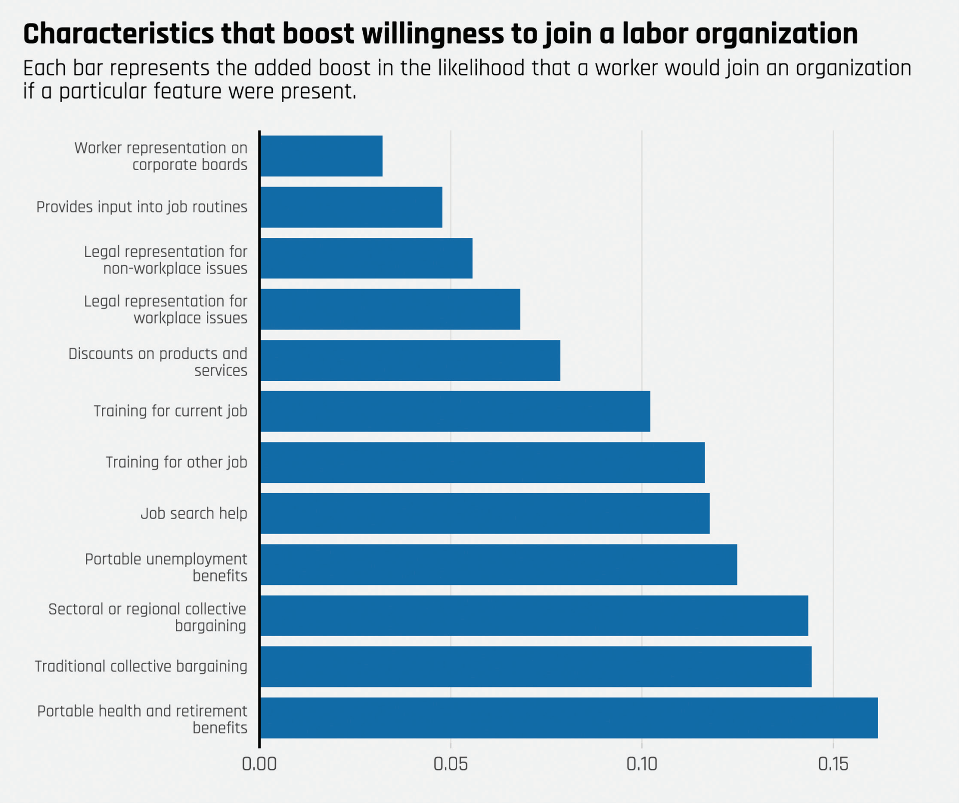


FIGURE 2

The presence of all of these features made workers more likely to say that they would join and support a labor organization.

Source: Alexander Hertel-Fernandez, William Kimball, and Thomas Kochan, "How U.S. Workers Think About Workplace Democracy: The Structure of Individual Worker Preferences for Labor Representation" [Cambridge, MA: Good Companies, Good Jobs Initiative at MIT Sloan, 2019].

Several broad conclusions emerge from our findings. First, some features of traditional unions are still very popular with workers, especially collective bargaining at the firm or establishment level. But workers also voiced considerable enthusiasm for other potential features of labor organizations that are uncommon or even barred under current U.S. workplace law. Workers found the idea of sectoral or regional bargaining—much more common in Western Europe than in the United States—about as appealing as traditional collective bargaining. Expanding the scope of labor bargaining beyond the individual shop floor to whole industries or states would go far in rebuilding labor power in the United States, giving unions the opportunity to match the national scale of capital.

Another set of features that workers found very appealing involved portable social benefits administered through unions. Workers were substantially more likely to say they wanted to join unions that offered health insurance, retirement benefits, jobless benefits, and training and job search help that they could take with them from job to job. While some unions in the United States offer all those services, most do not. The provision of social benefits and training programs through unions could be an effective way for unions to attract new members, engage existing members more deeply, and raise revenue independent of member dues.

In fact, research indicates that the Nordic countries have managed to retain very high rates of union membership precisely because labor organizations in those countries are responsible for administering unemployment insurance and retraining programs.[14] Similar findings from research I have conducted with public-sector unions in the United States also bolster this conclusion—providing highly valued benefits, such as training and professional development, to union members can foster increases in union interest and participation.[15]

The final bundle of attributes that attracted worker interest related to greater input in management decisions at the shop-floor level (determining how workers do their day-to-day jobs) and at the firmwide level (determining how businesses structure their operations). Unions in the United States have frequently shied away from these activities, even where they are legal.[16] Our results buttress the idea that workers would be supportive of unions that did much more to gain voice on workplace issues, both small and large alike.

National reforms for building greater worker representation and voice

In all, our findings reveal a substantial gap between the labor organizations that workers say that they want and the representation they actually receive in the workplace. Not only do most workers who say they want traditional unions fail to receive any union representation at all, but current labor law also bars unions from offering many of the benefits and services that workers say they most value.

New federal legislation offers the most promise in overhauling labor law in the United States. There are several areas where policymakers ought to pursue change. Here are four proposals.

Giving workers greater access to representation and voice

At a basic level, Congress ought to make it easier for workers to form and join traditional unions. This means expediting union elections, giving union organizers greater rights to communicate with workers and share information about unions, and, above all, ensuring that employers have strong incentives not to violate existing worker protections. It also means strengthening workers' rights to strike, boycott, and picket employers—without these tools, workers are outmatched against the economic and political strength of business.

More ambitiously, Congress might consider requiring regular union elections across all workplaces. Polling I have conducted indicates that only about 1 in 10 nonunion workers say they would know how to form a union at their job if they wanted to.[17] Automatic, regularly scheduled union elections would thus go far in granting workers the functional right to form a union, regardless of whether there are union organizers at a worksite or if union leaders deem a workplace a strategic target.[18] In a similar vein, Congress could mandate that all employers permit some minimal level of worker representation and voice—perhaps through joint management-worker committees—that could turn into, or complement, full-blown unions with collective bargaining rights if workers expressed sufficient interest.

Broadening access to collective bargaining rights

Given the importance of collective bargaining to U.S. workers, Congress ought to close the exclusions that exist in the National Labor Relations Act—specifically those that shut out many disproportionately minority workers from the benefits of such bargaining. All domestic workers and agricultural and public-sector employees should have the right to bargain with their employers, as should workers who are low-level or intermediate supervisors or managers.

Congress also should ensure that employers cannot simply turn workers into independent contractors to avoid unionization drives. Independent contractors and other self-employed individuals working for businesses that exercise substantial control over working conditions and pay should be permitted to organize and bargain with employers, just like conventional employees. Similarly, labor law should permit bargaining between workers and their immediate employers, as well as other businesses with substantial control over working conditions, as in franchise and contracting relationships. And Congress should ensure that employers bargain in good faith with newly recognized unions, rather than dragging out negotiations to end union drives.

Building the provision of social benefits and training into unions

Congress might create more opportunities for unions to provide the sort of social benefits and training opportunities that workers indicated they value very highly in my research. Unions are currently limited in their ability to offer health insurance and retirement plans as benefits in the organizing process, but they should be permitted to do so.

Congress also ought to free unions up to offer portable health and retirement plans to workers across entire industries. Union-administered plans could compete with employers and other private alternatives, raise nondues revenue for the union, and generate stronger incentives for workers to enroll as dues-paying members. Unions should have the legal right to manage these funds independently of employers—something they cannot do under current law.[19]

One especially promising approach to labor-administered social benefits is for Congress to permit states to run unemployment insurance benefits through unions, as is common in Northern European countries. Not only would union-run jobless funds give workers good reasons to join unions, but they could also be paired with high-quality training and job skills programs tailored to the needs of specific sectors and employers.

Expanding the scope of collective bargaining

On the most sweeping level, Congress could move the National Labor Relations Act beyond the traditional, firm-based model for organizing and bargaining by giving unions greater scope for representing workers across entire sectors or regions. While there are a number of different models that Congress might pursue, at a minimum lawmakers should set ground rules about how union and employer representatives would be defined and the rights and responsibilities of union, employer, and government representatives in bargaining and contract administration and enforcement.[20]

At the same time, moves toward broader levels of collective bargaining need to be accompanied by greater voice for workers at the shop-floor level. Accordingly, Congress might consider expanding the reach of unions to help address workers' grievances in their day-to-day jobs. That could mean, for instance, combining sectoral or regional bargaining with mandatory worker committees as described above. Those committees could deal with shop-floor grievances and firm-specific contract negotiations, while sectoral or regional labor representatives negotiate broader wage and benefit standards.

Conclusion

As these reforms suggest, there is enormous scope for improving the representation and voice that workers possess on their jobs. Moving forward on these priorities will not only help better align labor law with worker preferences but also help to accomplish many of the other goals described in this set of policy essays. A reinvigorated U.S. labor movement holds the promise of directly boosting stagnant pay and benefits for workers, improving working conditions and safety, closing yawning gaps in compensation between business executives and the workers they employ, and curbing abuses of employer power in the U.S. labor market. More broadly, history suggests that policies aimed at broadly shared prosperity and growth are only possible when supported by vibrant unions.[21] For all these reasons, an overhaul of U.S. labor law ought to be a top—and early priority—for the Congress and the president in 2021.

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Endnotes

1 Barry Eidlin, *Labor and the Class Idea in the United States and Canada* (New York: Cambridge University Press, 2018), Appendix A.

2 Thomas A. Kochan and others, "Worker Voice in America: Is There a Gap Between What Workers Expect and What They Experience?" *Industrial and Labor Relations Review* 72 (1) (2019): 3–38.

3 This memo draws from Alexander Hertel-Fernandez, William Kimball, and Thomas Kochan, "How U.S. Workers Think About Workplace Democracy: The Structure of Individual Worker Preferences for Labor Representation" (Cambridge, MA: Good Companies, Good Jobs Initiative at MIT Sloan, 2019), available at https://gcgj.mit.edu/how-us-workers-think-about-workplace-democracy-structure-individual-worker-preferences-labor.

4 For general discussions, see Cynthia Estlund, "The Ossification of American Labor Law," *Columbia Law Review* 102 (6) (2002); Kate Andrias, "The New Labor Law," *Yale Law Journal* 126 (2) (2016).

5 Morris M. Kleiner and David Weil, "Evaluating the Effectiveness of National Labor Relations Act Remedies: Analysis and Comparison with Other Workplace Penalty Policies." Working Paper No. 16626 (National Bureau of Economic Research, 2010).

6 On changes in corporate structure, see David Weil, *The Fissured Workplace* (Cambridge, MA: Harvard University Press, 2014).

7 See, canonically, Richard B. Freeman and James L. Medoff, *What Do Unions Do?* (New York: Basic Books, 1984); more recently, see Josh Bivens and others, "How today's unions help working people" (Washington: Economic Policy Institute, 2017).

8 Henry S. Farber and others, "Unions and Inequality Over the Twentieth Century: New Evidence from Survey Data." Working Paper No. 24587 (National Bureau of Economic Research, 2018); Bruce Western and Jake Rosenfeld, "Unions, Norms, and the Rise in U.S. Wage Inequality," *American Sociological Review* 76 (4) (2011): 513–37.

9 David Weil, "Are Mandated Health and Safety Committees Substitutes for or Supplements to Labor Unions?" *Industrial and Labor Relations Review* 52 (3) (1999): 339–60.

10 For a summary, see James Feigenbaum, Alexander Hertel-Fernandez, and Vanessa Williamson, "From the Bargaining Table to the Ballot Box: Political Effects of Right to Work Laws." Working Paper No. 24259 (National Bureau of Economic Research, 2019).

11 Presentation by Daniel Stegmueller, Michael Becher, and Konstantin Käppner, "Labor Unions and Unequal Representation," Universite de Geneve, April 13-14, 2018, available at https://pdfs.semanticscholar.org/b6cb/09ba8ea6eeea82da1ddc3ead47a819625c07.pdf.

12 Kochan and others, "Worker Voice in America," p.20.

13 Lydia Saad, "Labor Union Approval Steady at 15-Year High," Gallup News, August 30, 2018, available at https://news.gallup.com/poll/241679/labor-union-approval-steady-year-high.aspx.

14 Bruce Western, *Between Class and Market: Postwar Unionization in the Capitalist Democracies* (Princeton, NJ: Princeton University Press, 1997).

15 Alexander Hertel-Fernandez and Ethan Porter, "Bread and Butter or Bread and Roses? Experimental Evidence on Why Public Sector Employees Support Unions." Unpublished

Working Paper (2019), available at https://scholar.harvard.edu/files/ahertel/files/alexethan_aug2018.pdf.

16 Thomas A. Kochan, *Collective Bargaining and Industrial Relations: From Theory to Policy and Practice* (Homewood, IL: R. D. Irwin, 1980).

17 Item reported in Hertel-Fernandez, Kimball, and Kochan, "How U.S. Workers Think About Workplace Democracy."

18 For a fuller elaboration, see, for instance, Benjamin I. Sachs, "Enabling Employee Choice: A Structural Approach to the Rules of Union Organizing," *Harvard Law Review* 123 (2010): 655–728.

19 Michael A. McCarthy, *Dismantling Solidarity: Capitalist Politics and American Pensions Since the New Deal* (Ithaca, NY: Cornell University Press, 2017).

20 Kate Andrias and Brishen Rogers, "Rebuilding Worker Voice in Today's Economy" (New York: The Roosevelt Institute, 2018).

21 Martin Gilens, *Affluence and Influence: Economic Inequality and Political Power in America* (Princeton, NJ: Princeton University Press, 2012); Jacob S. Hacker and Paul Pierson, *American Amnesia: How the War on Government Led Us to Forget What Made America Prosper* (New York: Simon and Schuster, 2016).

TRADE

International trade policy that works for U.S. workers

By Kimberly A. Clausing, Reed College

Overview

International trade comes with many benefits for Americans. It lowers the cost and increases the variety of our consumer purchases. It benefits workers who make exports, as well as those who rely on imports as key inputs in their work. It helps fuel innovation, competition, and economic growth. And it helps strengthen international partnerships that are crucial for addressing global policy problems.

Yet trade also poses risks. Because the United States is a country with large amounts of capital and a highly educated workforce, we tend to specialize in products that use those key resources intensively. That's why we export complex products such as software, airplanes, and Hollywood movies. Yet we import products that reduce demand for our less-educated labor because countries with lower wages are able to make labor-intensive products more competitively.

As a consequence, international trade has harmed many U.S. workers by lowering demand for their labor. Studies find that increased imports, particularly those from China during the early 2000s, displaced more than 1 million U.S. workers.[1] There is no evidence that particular trade agreements, such as the North American Free Trade Agreement, or NAFTA, created anywhere near so much displacement, yet many U.S. workers are also skeptical of trade agreements, which they associate with poor labor market outcomes in the U.S. economy over prior decades.[2]

Indeed, since 1980, the U.S. economy has delivered a poor performance for U.S. workers. While Gross Domestic Product growth has been strong, median household incomes have been relatively stagnant. Income growth in the bottom parts of the income distribution has fallen short of expectations just as income growth at the top has soared.[3] Yet, as disappointing as these outcomes are, the evidence indicates that factors beyond trade are driving most of these outcomes.[4] Such factors include dramatic technological changes, the increased market power of companies, and important tax and regulatory policy changes.

This essay first examines why blaming our trading partners and our trade agreements for disappointing labor outcomes carries two essential risks—it harms the very workers we are trying to help, as our recent experience with trade wars shows, and it distracts us from far more effective solutions to workers' woes. I then discuss effective solutions that should be at the heart of U.S. international trade policy, among them expanding the Earned Income Tax Credit, implementing wage insurance, and strengthening and modernizing corporate taxation, alongside recommendations for improvements in international trade agreements. International trade works best when it works for everyone, and policymakers have the tools at their disposal to make that happen.

Key Takeaways

THE EVIDENCE

- International trade lowers the cost and increases the variety of U.S. consumer purchases, benefits U.S. workers who make exports and those who rely on imports as key inputs, and helps fuel innovation, competition, and economic growth.

- International trade poses risks to less-educated workers since imports reduce demand for their labor, yet other factors, including enormous technological changes, the increased market power of companies, and important economic policy changes, also play key roles in the slow wage growth of many U.S. workers.

THE SOLUTIONS

- To help U.S. workers, expand the Earned Income Tax Credit, implement broader wage insurance programs, combat global tax avoidance, and craft improved trade agreements to better balance social goals.

What not to do: Regressive responses to trade challenges

Unfortunately, U.S. international trade policy has taken a serious turn for the worse over the past 3 years. Aiming to correct perceived injustices in past trade agreements, the Trump administration has engaged in a series of costly and ineffective trade conflicts, levying unusually high tariffs, and issuing frequent disruptive threats.

U.S. workers have borne the cost of these trade wars in three important ways. First, it is important to remember that tariffs are a tax, and, beyond that, they are a regressive consumption tax.[5] Low- and middle-income families spend a higher share of their income on tariffs than do the rich, both because they consume all or most of their income (and tariffs don't burden savings) and because they typically consume a higher share of the taxed import goods. Indeed, concerns over economic inequality were a key reason why reformers advocated for creating an income tax in the early 20th century, since tariffs fell too heavily on the poor.[6] Early evidence indicates that the new Trump tariffs have already cost U.S. households hundreds of dollars each year.[7]

Second, both export workers and workers in industries reliant on imports as part of their production process are harmed by the disruption of global supply chains and export opportunities. Many countries facing new U.S. tariffs have retaliated, risking the livelihoods of workers, from soybean farmers to whiskey distillers. Disruptions to international supply chains have harmed U.S. auto production, negatively impacting auto industry employment.[8] And the chaos of constant tariff threats has introduced uncertainty and disruption into business planning, hampering investment while also weakening U.S. alliances and our ability to work with other countries in solving global problems.[9]

Third, and perhaps most importantly, all of the sound and fury surrounding these trade conflicts has distracted voters and policymakers from far more direct and productive ways to help workers. In fact, instead of using tax policy to make workers more secure, the recent tax legislation, known as the Tax Cuts and Jobs Act (passed in late 2017), increased worker insecurity. While those at the top received large tax cuts, most workers received only tiny tax cuts that disappear over time, leaving only greater government debt and the promise of higher taxes or spending cuts down the road.[10]

Moreover, the Tax Cuts and Jobs Act weakened health insurance markets by removing the mandate to purchase health insurance. This directly results in higher health insurance premiums in the health insurance market. Indeed, premium increases are likely to dwarf tax cuts for most families.[11]

What does a progressive response to trade look like? It supports labor.

There are far better ways to modernize economic policy to suit our global economy. The key is to ensure that all of the forces that buffet the U.S. economy (whether trade, technological change, or others) ultimately result in benefits for all U.S. workers.

How do we do that? Federal tax policy is our most effective tool. By taking more in tax payments from those who have “won” due to trade, technological change, and other market changes, and giving more in tax rebates to those who have “lost,” we can make sure that gains in GDP translate into gains for typical workers. This can be done while also funding the important fiscal priorities of the federal government.

Elsewhere, I have elaborated on the outlines of such substantial tax reform.[12] Here, I will focus on two essential tools that go directly to worker problems: the Earned Income Tax Credit and wage insurance. The EITC rewards work and increases standards of living by generating negative tax rates for those with low incomes. Presently, this credit is far more generous for a parent with children than for a childless worker. At low incomes, the Earned Income Tax Credit turns every $10 of wages into $14 for a parent with two children; credits can top $5,800 for such families. But credits for childless workers are paltry, peaking at about $530. (In both cases, credits are phased out at higher incomes.)

Since linking the Earned Income Tax Credit to children adds complexity and compliance issues, one ideal reform would be to make the EITC more generous for all workers while simultaneously expanding refundable child tax credits.[13] It is important to make such credits refundable since many workers with lower incomes do not end up owing federal income tax, although they all pay payroll taxes and many also pay substantial state and local taxes.

Wage insurance is a second important way to help workers. Wage insurance targets those who have lost higher-paying jobs, helping workers cope with the painful nature of economic transitions. Wage insurance currently exists on a very small scale for some older trade-displaced workers, but it can be expanded to reach workers regardless of their age or the source of job loss.

With wage insurance, the government would make up 50 percent of the difference between the wage received at the old job and the new, lower-paying job. So, if a worker earning $50,000 lost her job and had to instead take a job (or multiple jobs) that paid $30,000, then the government would make up half of the difference. Of course, benefits could be capped and time-limited, and some employment experience would be required in order to qualify. Yet wage insurance would make economic disruption easier to bear. Wage insurance also provides more income to communities that are hit by geographically concentrated disruption due to trade, technological change, domestic competition, or other factors.

Both programs support work and, because they are linked to work, they have a far lower cost than universal support programs, allowing greater generosity. These two policies focus on the key economic problem at hand: It's not that the U.S. economy doesn't provide plentiful job opportunities, it's that existing jobs are too often poorly compensated. If recessions, disability, or child-rearing prevent employment, then those challenges can be handled through programs that target those populations directly.

What does a progressive response to trade look like? It modernizes taxation.

In order to finance wage insurance, an expanded Earned Income Tax Credit, and the many important fiscal priorities of the federal government, we need an efficient, fair, and administrable tax system. Unfortunately, the international mobility of capital creates a conflict between the globalization of economic activity and the revenue needs of the government. It is therefore paramount that we modernize the tax system to ensure that it is suited to a global economy.

One key challenge is addressing the profit shifting of multinational companies. Estimates indicate that the U.S. government was losing more than $100 billion a year due to the profit shifting of multinational corporations before the Tax Cuts and Jobs Act.[14] And while that law took some steps to reduce profit shifting, it took other steps that made profit shifting worse by offering U.S. companies a territorial tax system that exempts much of their foreign income from U.S. taxation and by taxing other foreign income at a reduced rate.[15]

The new tax law also directly encourages the offshoring of U.S. physical assets by U.S. multinational companies because foreign income in low-taxed countries is more lightly taxed when companies have more assets offshore. Early evidence shows that U.S. multinational companies receiving large tax breaks under the law have responded to such incentives by increasing foreign investment.[16]

Improving the collection of the corporate tax is an important step toward a better tax system. The corporate tax is an essential part of taxing capital since the vast majority of U.S. equity income goes untaxed at an individual level by the U.S. government, as it is held in tax-exempt accounts or by individuals or institutions that are exempt from U.S. tax.[17] Capital is becoming a larger share of national income, and taxing capital is an integral part of a fair tax system. This is because capital income is more concentrated than labor income, and capital income is often the result of “rents” that stem from market power or from reaping the gains of global markets and technological change.

Fortunately, there are simple ways to modernize the U.S. corporate tax. One step that could be taken nearly immediately is to strengthen the minimum taxes that are part of the Tax Cuts and Jobs Act, while also raising the corporate tax rate.[18] In the medium run, it would be useful to rethink our entire system of international taxation in a way that makes it less vulnerable to profit shifting. A system of formulary apportionment is promising in this regard, and it is already being considered by other countries and as a model for digital taxation.[19]

The latter proposal works best within a context of international cooperation. Modernizing international trade agreements could provide an excellent forum for such coordination.

What does a progressive response to trade look like? Better trade agreements.

Our multilateral trading system was built over the seven decades since World War II, and it serves an essential function—implementing the rules of the world trading system. The United States should restore our commitment to the World Trade Organization, continuing multilateral efforts to foster the free flow of trade, while at the same time reforming domestic policies to ensure that the resulting prosperity is widely shared.

Preferential trade agreements such as the North American Free Trade Agreement have often been vilified for prioritizing corporate interests over those of workers.[20] While there is little evidence that such agreements have harmed workers, there is still substantial room to improve U.S. trade agreements by better balancing corporate and social interests. So-called investor state dispute settlement provisions and intellectual property provisions should either be eliminated or substantially rethought because they unnecessarily prioritize corporate interests over larger social aims.[21]

In fact, trade agreements can be a useful tool for governments to constrain corporate power. By combining trade liberalization with joint agreements on issues such as tax and regulatory competition, agreements can help counter the negative consequences of capital mobility. When companies threaten to relocate based on tax or regulatory considerations, governments often choose lower tax rates and looser regulations than would otherwise be socially desirable.

Modern trade agreements can pair the "carrot" of open market access with other socially desirable aims, such as combatting corporate tax avoidance or tackling climate change. International trade agreements, for example, could explicitly allow border adjustments to counter inadequate climate policies among trading partners. Global externalities such as climate change require global cooperation. International trade agreements provide a useful forum to build trust and cooperation. In contrast, as we've seen lately, trade wars breed distrust, making cooperation less attainable.

Conclusion

Even ideal international trade agreements will not address the increased economic inequality and wage stagnation of the previous decades since trade agreements had very little to do with these trends. Responding by ramping up trade conflicts and erecting trade barriers only adds insult to injury, harming U.S. workers instead of helping them.

To best help workers, we need to focus on policies that target their needs most directly. An expanded Earned Income Tax Credit can put more of the gains from trade (and other economic forces) in workers' pockets, and wage insurance can ease the pain of those who have lost jobs due to economic disruption.

We also need to recognize that the global economy generates new policy challenges. Tax rules need to be modernized to combat international tax avoidance, and trade agreements also need to be modernized, both to put workers at the center of the conversation and to better address global policy challenges such as tax competition and climate change.

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Endnotes

1 David Autor, David Dorn, and Gordon Hanson are frequent co-authors on these studies. For a list of their related papers, see "Papers," available at http://chinashock.info/papers/ (last accessed September 2, 2019).

2 For more regarding the research on NAFTA, see J. Bradford DeLong, "NAFTA and other trade deals have not gutted American manufacturing — period," Vox.com, January 24, 2017, available at https://www.vox.com/the-big-idea/2017/1/24/14363148/trade-deals-nafta-wto-china-job-loss-trump; M. Angeles Villarreal and Ian F. Fergusson, "The North American Free Trade Agreement (NAFTA)" (Washington: Congressional Research Service, 2015); Gary Clyde Hufbauer, Cathleen Cimino, and Tyler Moran, "NAFTA at 20: Misleading Charges and Positive Achievements" (Washington: Peterson Institute for International Economics, 2014).

3 For an overview of these trends, as well as the causal factors behind them, see Kimberly A. Clausing, *Open: The Progressive Case for Free Trade, Immigration, and Global Capital* (Cambridge, MA: Harvard University Press, 2019), Chapter 2.

4 Clausing, *Open: The Progressive Case for Free Trade, Immigration, and Global Capital*, Chapter 4.

5 See Jason Furman, Katheryn Russ, and Jay Shambaugh, "US tariffs are an arbitrary and regressive tax," VoxEU.org blog, January 12, 2017, available at https://voxeu.org/article/us-tariffs-are-arbitrary-and-regressive-tax. While some argue that tariffs will be borne in part by foreigners, the evidence indicates that consumers bear most of the burden. For recent examples, see Mary Amiti, Stephen J. Redding, and David E. Weinstein, "The Impact of the 2018 Trade War on U.S. Prices and Welfare." Discussion Paper No. 13564 (The Center for Economic and Policy Research, 2019); Pablo D. Fajgelbaum and others, "The Return to Protectionism." Working Paper No. 25638 (National Bureau of Economic Research, 2019).

6 For additional historical background, see Steven Weisman, *The Great Tax Wars* (New York: Simon and Schuster, 2002).

7 See Mary Amiti, Stephen J. Redding, and David E. Weinstein, "New China Tariffs Increase Costs to U.S. Households," Liberty Street Economics, May 23, 2019, available at https://libertystreeteconomics.newyorkfed.org/2019/05/new-china-tariffs-increase-costs-to-us-households.html.

8 There have been numerous news stories on these examples. For a soybean example, see National Public Radio, "Soybean Farmer Loses From Retaliatory Tariffs With No Bailout Funds In Sight," All Things Considered, May 11, 2019, available at https://www.npr.org/2019/05/11/722476220/soybean-farmer-loses-from-retaliatory-tariffs-with-no-bailout-funds-in-sight. For autos, see Jamie L. LaReau, "GM would be hit hardest if Trump imposes tariffs on Mexico," *Detroit Free Press*, May 31, 2019, available at https://www.freep.com/story/money/cars/general-motors/2019/05/31/trump-tariff-mexico-gm-immigrants/1299393001/.

9 There are many related news stories. See Ana Swanson, "U.S. Insists on Limiting Foreign Metals, Angering Allies," *The New York Times*, March 26, 2019, available at https://www.nytimes.com/2019/03/26/us/politics/us-mexico-canada-metal-quotas.html; Greg Ip, "Trump's Trade Levers Test Long-Term U.S. Alliances," *The Wall Street Journal*, June 2, 2019, available at https://www.wsj.com/articles/trumps-trade-levers-test-long-term-u-s-alliances-11559495186.

10 For a nonpartisan distributional analysis of the legislation, see Tax Policy Center, "Distributional Analysis of the Conference Agreement for the Tax Cuts and Jobs Act" (2017).

11 For a direct comparison, see Chye-Ching Huang, "Fundamentally Flawed 2017 Tax Law Largely Leaves Low- and Moderate-Income Americans Behind" Testimony before the House Budget Committee, February 27, 2019, Appendix, available at https://www.cbpp.org/federal-tax/fundamentally-flawed-2017-tax-law-largely-leaves-low-and-moderate-income-americans#tableEmbed.

12 For a broad sketch of a comprehensive tax reform plan that would modernize our tax system for the challenges of today's economy, see Clausing, *Open: The Progressive Case for Free Trade, Immigration, and Global Capital*, Chapter 10. For detailed suggestions on how to move forward after the Tax Cuts and Jobs Act, see Kimberly A. Clausing, "Fixing the Five Flaws of the Tax Cuts and Jobs Act." Working Paper (SSRN, 2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3397387.

13 A long list of reforms to strengthen the administration of the Earned Income Tax Credit was recently suggested by the National Taxpayer Advocate in a special report to Congress. See National Taxpayer Advocate, "Earned Income Tax Credit: Making the EITC Work for Taxpayers and Government" (2019), Volume 3.

14 Kimberly A. Clausing, "Profit Shifting Before and After the Tax Cuts and Jobs Act." Working Paper (SSRN, 2019), available at https://papers.

ssrn.com/sol3/papers.cfm?abstract_id=3274827; Kimberly A. Clausing, "The Effect of Profit Shifting on the Corporate Tax Base in the United States and Beyond," *National Tax Journal* (2016)' Kimberly A. Clausing, "How Big is Profit Shifting," Working Paper (SSRN 2020), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3503091. Estimates of a similar magnitude are found by the Organisation for Economic Co-operation and Development. See OECD, "BEPS Action 11: Improving the Analysis of BEPS" (2015); Gabriel Zucman, *The Hidden Wealth of Nations* (Chicago: University of Chicago Press, 2015); Fatih Guvenen and others, "Offshore Profit Shifting and Domestic Productivity Measurement." Working Paper No. 23324 (National Bureau of Economic Research, 2018); Joint Committee on Taxation, "Estimates of Federal Tax Expenditures for FY 2014–2018" (2014); Thomas Tørsløv, Ludvig Wier, and Gabriel Zucman, "The Missing Profits of Nations." Working Paper No. 24701 (National Bureau of Economic Research, 2018).

15 Clausing, "Profit Shifting Before and After the Tax Cuts and Jobs Act."

16 Brooke Beyer and others, "The Effect of the Tax Cuts and Jobs Act of 2017 on Multinational Firms' Capital Investment: Internal Capital Market Frictions and Tax Incentives." Working Paper (2019).

17 For a discussion of the rising share of capital in national income, see Clausing, *Open: The Progressive Case for Free Trade, Immigration, and Global Capital*, Chapter 2. For a discussion of the low share of equity income that is taxed at the individual level, see Leonard E. Burman, Kimberly A. Clausing, and Lydia Austin, "Is U.S. Corporate Income Double-Taxed?" *National Tax Journal* 70 (3) (2017): 675–706.

18 For a discussion of these steps, see Clausing, "Fixing the Five Flaws of the Tax Cuts and Jobs Act."

19 Reuven S. Avi-Yonah, and Kimberly A. Clausing, "Reforming Corporate Taxation in a Global Economy: A Proposal To Adopt Formulary Apportionment." *In Path to Prosperity: Hamilton Project Ideas on Income Security, Education, and Taxes* (Washington: Brookings Institution Press, 2008) pp. 319–344; Reuven S. Avi-Yonah and Kimberly A. Clausing, "Towards a 21st Century International Tax Regime," *Tax Notes International* (2019).

20 The new NAFTA agreement (known as United States-Mexico-Canada Agreement) made modest improvements in some areas, by reducing the bite of some intellectual property provisions and emphasizing enforcement of labor laws. Still, despite much brinkmanship and uncertainty, the new agreement involved relatively minor changes, not all of which were improvements.

21 An excellent list of specific suggestions is discussed in Kimberly Ann Elliott, "Developing a More Inclusive US Trade Policy at Home and Abroad." Policy Paper 146 (Center for Global Development, 2019).

WAGE STANDARDS

Rebuilding U.S. labor market wage standards

By Arindrajit Dube, University of Massachusetts Amherst

Overview

Over the past 40 years, the United States has experienced a sustained rise in wage and income inequality. This high level of inequality reflects both a disconnect between average wages and productivity and between top and bottom wages, with much of the growth in labor productivity accruing to wages at the top of the distribution.

The results: a growing gap between median compensation and average productivity and between the capital and labor shares of national income. While net productivity grew by 72 percent between 1973 and 2014, median real compensation grew only by 8 percent over that same period. (See Figure 1.)

Much of the gap between mean productivity and median compensation arises from growing inequality in the labor market, which has risen steadily over this period and especially since 1980. This is evident because mean compensation grew by around 43 percent over this period, versus 9 percent for the median. Further underscoring this dynamic, real wage growth for those at the 90th percentile of income was more than 35 percent between 1973 and 2016, compared to 6 percent real wage growth for median income earners and the bottom 10th percentile.

Globalization and technological change have likely played a role in these growing income inequality trends, but a sizable body of evidence in economics suggests institutions have been important contributors to these trends as well—including collective bargaining and statutory minimum wages. The stagnation of the federal minimum wage since 1980 contributed to real wage declines at the bottom of the income distribution.[1] And the erosion of collective bargaining led to wage declines for middle-income workers.[2]

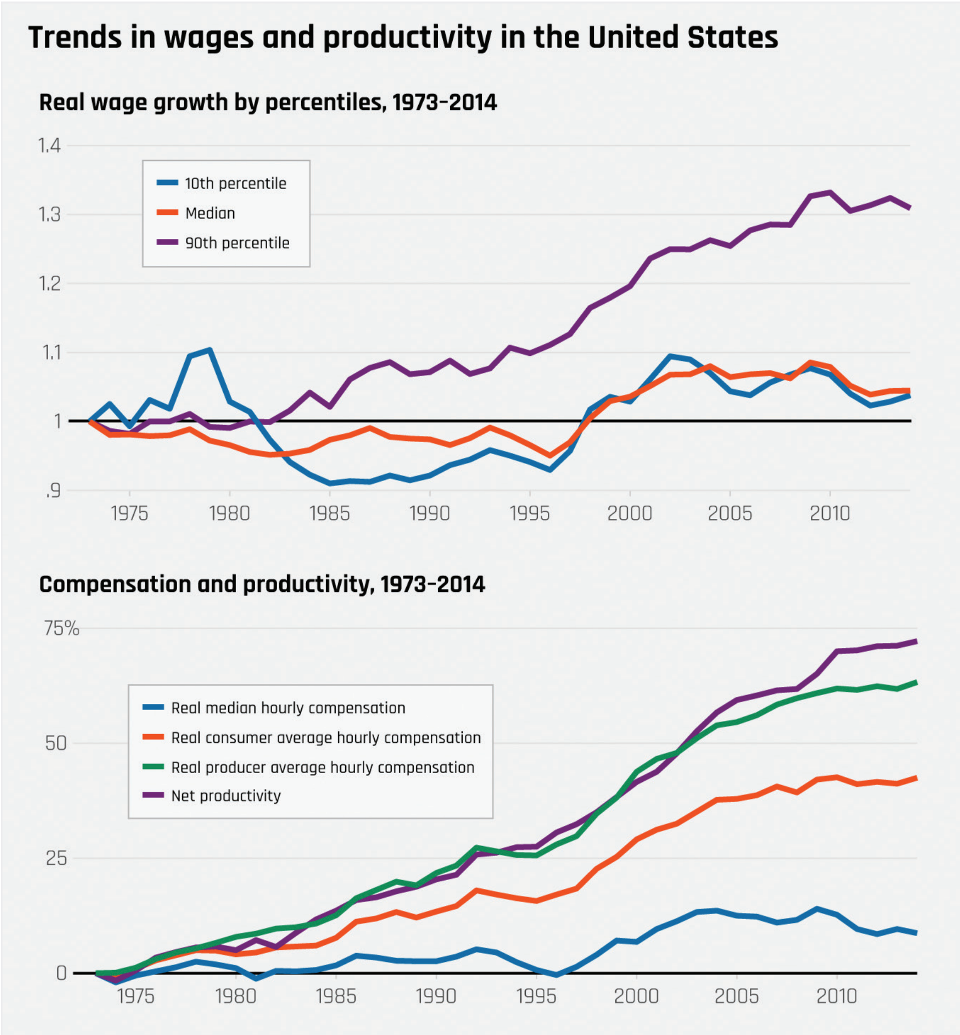

FIGURE 1

While net productivity grew by 72 percent between 1973 and 2014, median real compensation grew only by 8 percent over that same period.

Source: Josh Bivens and Larry Mishel, "Understanding the Historic Convergence Between Productivity and a Typical Worker's Pay," Figure C, Economic Policy Institute, September 2, 2015, available at https://www.epi.org/publication/understanding-the-historic-divergence-between-productivity-and-a-typical-workers-pay-why-it-matters-and-why-its-real/.

This essay first examines the evidence demonstrating that raising the federal minimum wage boosts the incomes of those workers at the bottom of the income distribution without any significant job losses for those workers. I then present the case for establishing so-called wage boards in the United States, akin to those now in place in Australia, where they set minimum pay standards by industry and occupation. Indeed, the legal infrastructure for wage boards in the United States is in place in several states already and could be emulated or expanded upon by policymakers.

If federal policymakers are interested in raising the pretax earnings for American workers in our nation, then these are important arrows in our policy quiver. As I detail below, raising the federal minimum wage (and indexing it to the median wage) is an obvious starting point. Going beyond just raising the minimum wage, policymakers should also consider wage boards, which could also raise wages for the typical U.S. middle-income worker.

Key Takeaways

THE EVIDENCE

- The United States is experiencing a sustained rise in wage and income inequality, reflecting both a disconnect between average wages and productivity and between wages at the top and bottom of the income ladder.

- The growing gap between median compensation and average productivity and between the capital and labor shares of national income means that net productivity grew by 72 percent between 1973 and 2014, yet median real compensation grew only by 8 percent.

THE SOLUTIONS

- Raising the federal minimum wage would boost the incomes of workers at the bottom of the income distribution without any significant job losses for those workers. Establishing wage boards to set minimum pay standards by industry and occupation would also raise wages for U.S. middle-income workers.

Raising the federal minimum wage

Between 1938 and 1968, wages throughout the wage distribution were generally growing together, and the minimum wage also kept up with the wages of most other workers in the U.S. economy. The high-water mark for the minimum wage was in 1968, when it reached $10.50 an hour in 2019 dollars. The minimum wage then began to decouple from both productivity and even the median wage starting around 1980, reaching a historic low of $6.63 an hour in 2006 (in 2019 dollars) and today stands at $7.25 per hour.

Consider also the shrinking size of the federal minimum wage compared to the median wage of full-time workers. This ratio (sometimes called the Kaitz index) reached a high of 55 percent in the United States in 1968. Today, it is around 35 percent, one of the lowest in the developed world. The stagnant federal minimum wage has led 29 states to raise their minimum wages above the federal standard. Yet for a large share of the U.S. workforce, the federal minimum is the only standard in effect—and this standard is at an all-time low in both historical and comparative terms.

A substantial increase in the federal minimum wage is an important lever for raising pretax earnings for those workers at the bottom of the pay distribution.

Are there unintended consequences of raising the minimum wage?

Minimum wages raise the pay of workers at the bottom of the income distribution, but one concern is that a higher minimum wage also may lead employers to cut back on hiring. There is a large and sometimes contentious literature that has looked at this question with varying conclusions.[3] In my assessment, the overall weight of recent research strongly supports the view that the minimum wage increases of the magnitude we have seen in the United States in recent years generate only modest employment effects.

In their 2014 book *What Does the Minimum Wage Do*?, economists Dale Belman at Michigan State University and Paul J. Wolfson at Dartmouth College's Tuck School of Business review a large body of literature, and conclude that it was unlikely that the minimum wage increases under study led to substantial job losses. A similar conclusion was reached by other economists doing formal meta analysis, a well-defined statistical approach of pooling the results from a large number of separate analyses. And a meta analysis conducted by economists Hristos Doucouliagos at Deakin University and T.D. Stanley at Hendrix College, along with one released in 2015 by Belman and Wolfson, also concludes that the overall impact of minimum wages on employment is small.[4]

While meta analyses are helpful in summarizing the overall state of the literature, not all studies are created equal. This is why policymakers and economists alike should put more weight on high-quality evidence. In a paper I co-authored that was recently published in the *Quarterly Journal of Economics*, we provide arguably the most complete picture to date of how minimum wages impact low-wage jobs.[5] The basic idea is simple. Imagine the minimum wage rises from $9 to $10 an hour in Nebraska. Clearly, there will be fewer jobs paying less than $9 per hour in Nebraska after the policy is enacted. Some of those jobs that would have paid less than $9 are now simply paying $9 or a bit more; other jobs may be destroyed if the costs exceed benefits to employers.

By comparing how many fewer jobs paying less than $9 there are due to the policy to how many additional jobs are paying $9 or slightly more, we can infer the total change in low-wage jobs caused by the minimum wage policy change. Of course, it's possible that wages would have risen even absent the policy change in Nebraska; to account for that, we compare the changes in sub-$9 jobs and above-$9 jobs in Nebraska to the same in other states that did not raise the minimum wage. Finally, we pool across 138 prominent minimum wage changes instituted between 1979 and 2016 across various states. The following figure summarizes our key findings. (See Figure 2.)

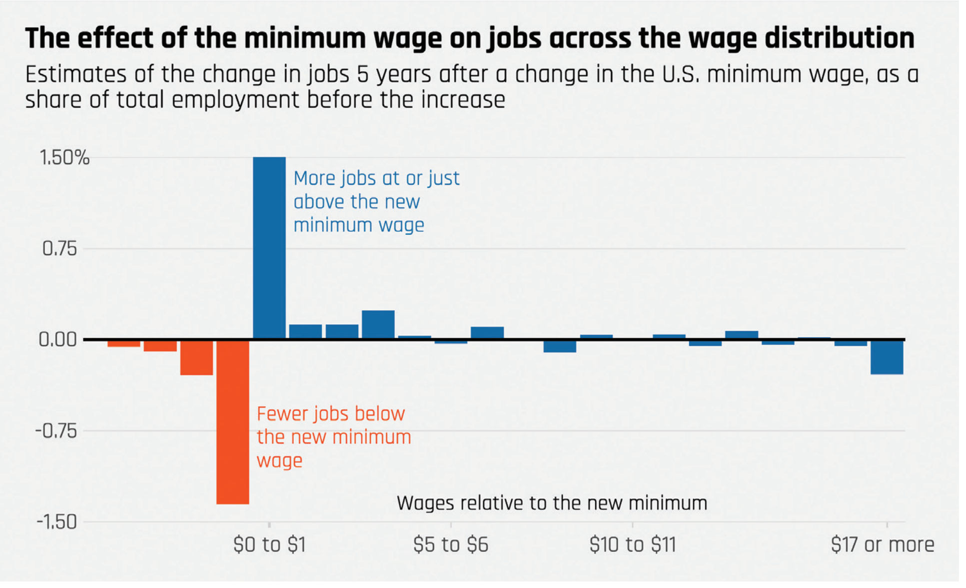

FIGURE 2

...minimum wage increases led to a clear reduction in jobs paying less than the new minimum wage...

Source: Arindrajit Dube, Doruk Cengiz, Atilla Lindner, and Ben Zipperer, "The Effect of Minimum Wages on Low-Wage Jobs", *Quarterly Journal of Economics* 2019, Volume 134 [3]; 1405–1454, available at https://academic.oup.com/qje/article/134/3/1405/5484905.

Figure 2 shows the effect of an average minimum wage increase on the wage distribution at each wage level relative to the minimum wage. As we would expect, minimum wage increases led to a clear reduction in jobs paying less than the new minimum wage, confirming employers are abiding by the law. Yet the reduction in jobs paying less than the minimum was balanced by a sharp increase in the number of jobs paying at the new minimum, along with additional increases in jobs paying up to $5 more than the new minimum.

As Figure 2 also shows, my co-authors and I found virtually no change in employment higher up in the wage distribution. Overall, then, low-wage workers saw a wage gain of 7 percent after a minimum wage increase, but little change in employment over the 5 years following implementation.

Our research also shows why methods used in some of the previous studies are more susceptible to biases resulting from shocks to local labor markets, especially when comparing across long periods of time. These methods also insufficiently focus on workers or jobs that are likely affected by minimum wage policies. In other words, our research doesn't just provide new evidence—we also show why it's better evidence. This is one reason why, in my assessment, the 2019 report by the Congressional Budget Office predicted job losses larger than warranted from a federal minimum wage increase by putting equal weight to some of the studies suggesting very large job losses that my co-authors and I showed were flawed.

Encouragingly, we found that minimum wages as high as 59 percent of the median wage generated little indication of job losses. Moreover, in new work updating the published *Quarterly Journal of Economics* study, I find that minimum wage increases in the seven states with the highest minimum wages have (through 2018) not experienced losses in low-wage jobs.[6] Finally, another recent study using sub-state variation focusing on low-wage areas reaches a similar conclusion.[7]

Overall, the weight of evidence suggests a substantial increase in the federal minimum wage is likely to attain its intended effects of boosting bottom wages and family incomes without substantial unintended consequences in the form of reduced employment growth.[8]

Beyond the minimum—reaching U.S. middle-income workers using wage boards

A major increase in the federal minimum wage can raise wages for tens of millions of U.S. workers, but its reach will still be limited to the bottom third of the workforce. What about those workers in the middle—what tools do we have to move their wages higher? First, let's look at why wage boards—defined in detail below—are necessary in the United States today.

In the era following World War II, the key countervailing force to employer-side power in the United States labor market came from unions. Overall union membership reached a height of around 35 percent of the workforce in the mid-1950s. Since then, however, union membership has steadily fallen, and stands at around 12 percent today—and less than 7 percent in the private sector. Unions affected wages both directly and indirectly through pattern bargaining, as in the so-called Treaty of Detroit agreement between the United Auto Workers and the Big Three automakers at the time—General Motors Co., Ford Motor Co., and Chrysler (now Fiat Chrysler Automobiles NV).[9]

The impact of falling union membership has been particularly acute due to the enterprise-level bargaining structure in the United States (and other countries such as the United Kingdom and Canada), which differs greatly from countries such as France, Germany, and Australia, where collective bargaining *coverage* (the share of jobs covered by collectively bargained contracts) is much greater than union *membership* rates.

France, for example, has an 8 percent union membership rate (similar to the United States), yet more than 95 percent of its workforce is covered by extensions of nationally negotiated collective bargaining contracts. While coverage rates also have fallen across the developed world over the past several decades, the outcomes have varied greatly among countries with different legal systems. Consider that:

- Union membership and coverage have remained high in so-called Ghent system countries such as Denmark, where labor unions are generally responsible for unemployment benefits rather than the government (and named after the city of Ghent in Belgium, where this system was first implemented in the early 20th century).
- Union coverage has remained high even as membership has fallen in countries with sectoral bargaining and extension of contracts (rather than negotiating a new collective bargaining agreement), such as France.
- Membership *and* coverage rates have both fallen sharply in countries with enterprise-level bargaining, as in the United States. Overall, this decline in union density has likely led to substantial reductions in wages of workers in the middle of the income distribution.[10]

While reforming labor laws to facilitate organzing is important, given the very low coverage rates in the United States today, such changes are unlikely to affect the overall wage distribution in the near term. One way to reach middle-income workers in the United States more immediately would be through instituting a wage board that sets multiple minimum pay standards by sector and occupation—potentially chosen using consultation with stakeholders, such as business and worker representatives.[11] This system would allow for raising wages not just for those workers at the very bottom of the overall pay scale, but also for those in the middle. This is effectively done in countries where there are extensions of collective bargaining contracts, but it also can be done by setting multiple minimum pay levels statutorily.

An example of a wage board approach comes from Australia, which has a combination of a national minimum wage, a system of industry- and occupation-specific minimum wages, and enterprise-level collective bargaining, called the Modern Awards system. Around 36 percent of the workforce is covered by collective bargaining contracts, but another 23 percent are covered by the wage board standards. Most of these standards are by industry, although some workers, among them nurses and pilots, are covered by occupation. There are 122 such standards, and within each one, there are a host of wage rates based on skill requirements or experience; there may be anywhere between a handful to several dozen pay grades specified in each agreement.

How to set up wage boards in the United States

In order to institute wage boards at the national level in the United States, federal law would need to be changed. But there are institutions in place already at the state level upon which to build or emulate.

At least five states (Arizona, Colorado, California, New Jersey, and New York) already have legislation on the books that allows for constituting wage boards by industry or occupations. But these boards have been used infrequently. Most prominently, they were used to raise the overall minimum wages in California in the 1990s, and more recently to establish a fast food minimum wage in New York. But there has been little effort to use the wage board mechanism to target wages for those in the middle of the income distribution.

At the same time, the machinery is in place to push for a broader array of wage standards. State experimentation with wage boards to set standards higher up in the wage distribution—as in the Australian case—could play a possibly useful role in mitigating wage stagnation and inequality. Moreover, other states can follow suit and establish similar wage board legislation to those in place in California.

While details can vary, a wage board system would set minimum pay standards by sector and occupation. This allows the mechanism to affect the distribution of wages not just at the very bottom but additionally toward the middle of the distribution. As an illustration, below I simulate the effect of a wage board by imposing region-by-industry-by-occupation standards, separately calculated by region (specifically using nine U.S. Census Bureau divisions), 17 two-digit industries, and six occupational groups—producing a total of 102 wage standards.

The choice of standards is, of course, a key issue. To show how this may affect wage inequality, I consider two standards. In the first, "low" standard, I set the minimum wage to 30 percent of the median wage in each of the 102 categories in that particular Census division. In the second, "high" standard, I set it to 35 percent of the median. While as a share of the median wage, these two standards seem to be not very far apart, they do imply quite different bites for the policy.

As a starting point, the wage standards would be binding for 20 percent and 31 percent of workers under the low and high standards, respectively. In other words, the low and the high standards straddle the Australian case—where around 23 percent of workers' wages are set by the Modern Award system. Australia, however, also has a substantially higher set of workers with collectively bargained wages (36 percent) than the United States (12 percent). Therefore, the high standard would still imply a smaller set of workers who are covered by either collective bargaining or by a wage board than in Australia. (See Figure 3.)

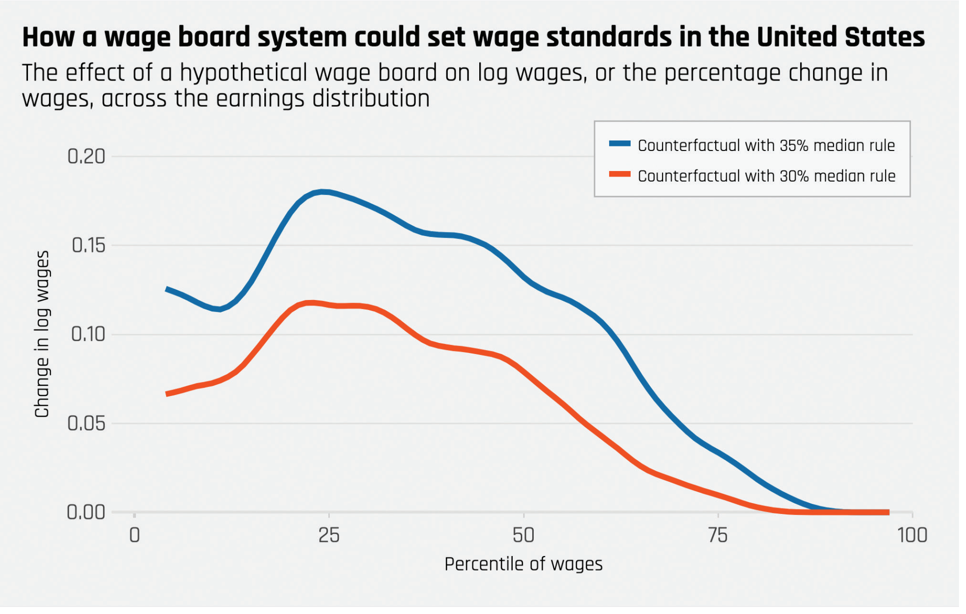

FIGURE 3

...both the high and low standards imply substantial wage gains, especially for the bottom and middle of the wage distribution.

Source: Author's calculations.

As shown in Figure 3, overall, both the high and low standards imply substantial wage gains, especially for the bottom and middle of the wage distribution. Under the low standard, the 20th, 40th, and 60th percentile of wages rises by 13 percent, 9 percent, and 4 percent, respectively. Under the high standard, the wage gains extend somewhat further. Wages at the same percentiles would rise by 19 percent, 15 percent, and 12 percent, respectively.

Contrast these distributional impacts of wage boards with those from typical minimum wage increases in the United States. The consequences of raising the federal minimum wage mostly fades out by the 20th percentile of the wage distribution, whereas the wage boards extend wage gains well into the middle of the distribution. In short, wage boards are much better positioned to deliver gains to middle-wage jobs than a single minimum pay standard.

Of course, these calculations are illustrative and make many simplifying assumptions such as ruling out additional spillover effects and changes in composition of jobs, to name a few. But what they show is that a suitably chosen wage standard can substantially raise middle and bottom wages and reduce wage inequality.

While it is difficult to definitively assess the impact of the Australian system of labor standards, there are broad metrics that offer a positive verdict. Household inequality in Australia is more muted compared to the United States: While Australian families at the 90th percentile earn around 4.3 times as much as those at the 10th percentile, in the United States, they earn around 6.3 times as much.[12] Importantly, the median wage has kept up with the mean wage in Australia much more than in the United States, where the median has stagnated since the 1980s.

At the same time, the more muted growth in inequality in Australia is not associated with any obvious differences in labor market performance. While the Australian unemployment rate in August 2019 was 5.3 percent as opposed to 3.7 percent in the United States, over the past 10 years, Australia has averaged 5.5 percent unemployment versus 6.9 percent in the United States. Focusing on younger or lower-skilled workers does not yield very different comparisons. Overall, the Australian evidence is broadly consistent with the perspective that judiciously applied wage setting using a wage board system can help ameliorate wage inequality without causing any serious harm to the labor market.

Finally, at the national level, a wage board system can complement efforts to reform labor law to allow sectoral bargaining in the United States. In particular, having statutory sectoral wage standards can serve as a backstop, which can be superceded by sectoral agreements between unions and employer associations if union membership exceeds a minimal threshold. Overall, policymakers would be well-advised to experiment with a variety of institutional reforms to help reverse wage stagnation and inequality than has afflicted the labor market in the United States.

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Endnotes

1 David H. Autor, Alan Manning, and Christopher L. Smith, "The Contribution of the Minimum Wage to US Wage Inequality over Three Decades: A Reassessment," *American Economic Journal: Applied Economics* 8 (1) (2016): 58–99, available at https://economics.mit.edu/files/3279.

2 Henry S. Farber and others, "Unions and Inequality Over the Twentieth Century: New Evidence from Survey Data" (Princeton University and National Bureau of Economic Research, 2018), available at https://scholar.princeton.edu/sites/default/files/kuziemko/files/union_submitted.pdf.

3 David Card and Alan B. Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," *American Economic Review* 84 (4) (1994): 772–793, available at http://

davidcard.berkeley.edu/papers/njmin-aer.pdf; David Card and Alan B. Krueger, “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply,” *American Economic Review* 90 (5) (2000): 1397–1420, available at http://davidcard.berkeley.edu/papers/reanal-ff-nj.pdf; David Neumark and William Wascher, “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Comment,” *American Economic Review* 90 (5) (2000): 1362–1396, available at https://www.aeaweb.org/issues/151; Arindrajit Dube, T. William Lester, and Michael Reich, “Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties.” Working Paper #157-07 (IRLE, 2010), available at https://irle.berkeley.edu/files/2010/Minimum-Wage-Effects-Across-State-Borders.pdf; David Neumark, J.M. Ian Salas, and William Wascher, “Revisiting the Minimum Wage-EmploymentDebate: Throwing Out the Baby with theBathwater?,” *ILRR Review* 67 (2014), available at https://www.socsci.uci.edu/~dneumark/neumark,salas,wascher-ilrr-14.pdf; Sylvia Allegretto and others, “Credible Research Designs for Minimum Wage Studies: A Response to Neumark, Salas, and Wascher,” *LR Review* 70 (3) (2017): 559–592, available at https://irle.berkeley.edu/files/2017/Credible-Research-Designs-for-Minimum-Wage-Studies.pdf.

4 Megan de Linde Leonard, T.D. Stanley, and Hristos Doucouliagos, “Does the UK Minimum Wage Reduce Employment? A Meta-Regression Analysis” (Conway, AR: Hendrix College Department of Economics and Business, 2015), available at https://www.hendrix.edu/uploadedFiles/Departments_and_Programs/Business_and_Economics/AMAES/UK-MinWage-BEMA.pdf; Paul J. Wolfson and Dale Belman, “15 Years of Research on U.S. Employment and the Minimum Wage” Working Paper No. 2705499 (Tuck School of Business, 2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2705499.

5 Arindrajit Dube and others, “The Effect of Minimum Wages on Low-Wage Jobs,” *Quarterly Journal of Economics* 134 (3) (2019): 1405–1454, available at https://academic.oup.com/qje/article/134/3/1405/5484905.

6 Arindrajit Dube, “Review of the international evidence on the impacts of minimum wages” (Report for Her Majesty’s Treasury, 2019), available at https://www.gov.uk/government/publications/impacts-of-minimum-wages-review-of-the-international-evidence.

7 Anna Godøy and Michael Reich, “Minimum Wage Effects in Low-Wage Areas” Working Paper No. 106-19 (IRLE, 2019), available at https://irle.berkeley.edu/files/2019/07/Minimum-Wage-Effects-in-Low-Wage-Areas.pdf.

8 Arindrajit Dube, “Using Wage Boards to Raise Pay,” *Economics for Inclusive Prosperity* 4 (2019), available at https://econfip.org/policy-brief/using-wage-boards-to-raise-pay/#.

9 Frank Levy and Peter Temin, “Inequality and Institutions in 20th Century America.” In Paul W. Rhode, Joshua L. Rosenbloom, and David F. Weiman, eds., *Economic Evolution and Revolution in Historical Time* (Stanford, CA: Stanford University Press, 2011), available at https://stanford.universitypressscholarship.com/view/10.11126/stanford/9780804771856.001.0001/upso-9780804771856-chapter-14.

10 Farber and others, “Unions and Inequality Over the Twentieth Century:New Evidence from Survey Data.”

11 Kate Andrias, “The New Labor Law,” *Yale Law Journal* 126 (2) (2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2853485; David Madland, “Wage Boards for American Workers” (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/economy/reports/2018/04/09/448515/wage-boards-american-workers/.

12 According to most recent data from the Organisation for Economic Co-operation and Development.

FAMILY ECONOMIC SECURITY

The Washington Center for Equitable Growth works to advance evidence-backed ideas that promote strong, stable, and broad-based U.S. economic growth. Economic growth that is truly broadly shared is experienced by families across the income distribution. Family economic security is fundamentally intertwined with growth: Families are the structures that support workers who provide the labor that fuels growth, and they are the economic units through which the fruits of economic growth are shared.

At Equitable Growth, we focus on four policy areas that structure the economic lives of families: paid family and medical leave, childcare and early education, work schedules, and the social safety net. Each of these support families as they engage in the labor market, making it possible for families to both care for each other and raise the next generation while also contributing to the economy through paid employment.

Equitable Growth's investments in academic research in each of these four areas—alongside our own policy analysis—helps policymakers understand the relevance of this research at the federal level, such as the reintroduction of the Federal Schedules That Work Act in 2019 and debates around a variety of federal paid leave proposals. And we are engaged, too, at the state and local level, where researchers in the Equitable Growth network are weighing in on proposed paid leave policy designs in Vermont and on fair scheduling legislation now under consideration in New Jersey.

Policymakers are hungry for innovative ideas that will raise living standards for families in this country. The following essays offer not just those ideas but also critical information on how research evidence squares with hotly debated ideas. It is my hope that each of the four essays contained in this section are the beginning of a longer dialogue between policymakers and academics on how we can leverage the evidence we have to enact smart policy that improves the well-being of people and families across the income distribution.

*—**Alix Gould-Werth**, Washington Center for Equitable Growth*

PAID FAMILY LEAVE

The economic imperative of enacting paid family leave across the United States

By Maya Rossin-Slater, Stanford University, and Jenna Stearns, University of California, Davis

Overview

Many workers across the United States have caregiving responsibilities. The majority of mothers and fathers of infants and small children work in the labor force, and the aging of the baby boomer population implies that many workers have parents and other older relatives who may require care. Paid family leave policies are designed to help employees balance the competing needs of work and family by allowing them to take time off from work with partial wage replacement to care for newborn or newly adopted children or ill family members.

Yet the United States remains one of only a few countries in the world without any national paid family leave policy and the only high-income country without one.[1] Only 17 percent of U.S. private-sector workers have access to paid family leave through their employers, and this access is highly unequal—meaning that low-income workers have much less access than their higher-income counterparts.[2] Federal law requires 12 weeks of job-protected *unpaid* leave under the 1993 Family and Medical Leave Act, but stringent eligibility requirements mean that less than two-thirds of the U.S. workforce is eligible. Not surprisingly, the majority of working parents report that their work-family balance is a significant challenge.[3]

Paid family leave is receiving significant attention in the political discourse. At the end of 2019, Congress and the Executive Branch reached agreement to extend six weeks of parental paid leave for a newly born or adopted child to the federal workforce. During the 2016 election, for the first time in U.S. history, both Democratic and Republican presidential candidates included paid leave proposals in their campaign platforms. Advocates credit paid family leave with encouraging career continuity and advancement for women and improving child and family health and well-being. There is also growing interest in encouraging men to take leave, in an effort to promote gender equality both at home and in the labor market. Yet some business groups and other opponents of paid family leave argue that it could impose substantial costs on employers. Paid time away from work could lower employees' attachment to their jobs, and even lead to discrimination against women (who are more likely than men to take leave).

In this essay, we first examine paid family leave programs at the state and local level, which are helping to set the stage for a federal paid leave program. We then describe the current research on the impacts of paid family leave on workers, children, and employers, with an eye toward understanding the economic costs and benefits of a potential federal program and the key policy levers to consider. We also briefly discuss how paid family leave may relate to the growth in economic inequality in America and whether a federal policy could help curb this trend.

Paid family leave policies can cover both bonding with a new child and caring for other relatives, but in this essay, we will focus the discussion on the effects of bonding leave. This restriction stems from a lack of research on the impacts of nonbonding leave and the fact that bonding leaves currently make up the vast majority of all claims in states with paid family leave programs.[4]

Key Takeaways

THE EVIDENCE

- Many U.S. workers have caregiving responsibilities for infants and small children, as well as parents and other older relatives, which means the lack of paid family leave at most low- and moderate-income jobs exacerbates inequality.
- Paid leave can help employees balance the competing needs of work and family by allowing for partial wage replacement to care for newborn or newly adopted children or ill family members while improving job continuity for caretakers.

THE SOLUTIONS

- Paid parental leave at the state and local level improves child health and development and maternal well-being while causing minimal negative impacts on employers, and paid leave at the federal level could help children from all backgrounds, curb the growth in inequality, and boost long-term U.S. economic growth and stability.

Paid family leave at the state and local level

There has been substantial policy action for paid family leave at the state and local level. California became the first state to enact legislation in 2004, followed by New Jersey (in 2009), Rhode Island (in 2014), and New York (in 2018). Washington state and the District of Columbia both recently passed legislation, with benefits available starting in 2020. Massachusetts, Connecticut, and Oregon also recently passed laws to start providing paid family leave benefits in 2021, 2022, and 2023, respectively.[5] At least 16 other states have introduced similar legislation.

The current state and local paid family leave laws are all similar in that they provide partial wage replacement during leave and cover a broad segment of the workforce through minimal eligibility requirements. But they differ on several key policy levers: duration, benefit amount, job protection, funding mechanism, and what constitutes a qualifying event.

Wage-replacement rates vary from 50 percent to 100 percent (up to a weekly maximum benefit amount) for 4–12 weeks. The maximum benefit amount currently ranges from $650 to $1,250 per week. While higher-income workers receive higher total benefit amounts, the replacement rate is higher for low-wage workers in California (as of 2018), the District of Columbia, Massachusetts, Washington state, Oregon, and Connecticut. Paid family leave legislation in California, New Jersey, and the District of Columbia do not have any provisions for job protection, which require that employers allow workers to return to their preleave jobs after the leave has ended, though eligible workers can simultaneously take job-protected unpaid leave under current federal or state law. The other states specifically include job security provisions for most employees in their paid family leave laws.

Most states fund paid family leave entirely through employee payroll taxes, while the District of Columbia has a payroll tax on employers. In Oregon and Washington state, the leave will be jointly financed between employees and employers. This payroll tax is currently between 0.1 percent and 1 percent of wages (up to a cap) across states.

All states cover leaves associated with the arrival of a new child (through birth, adoption, or foster care) and serious health conditions of close family members. But the definition of close family members varies somewhat across programs. Additionally, Massachusetts and Washington state will cover needs related to the military deployment of a family member. New Jersey and Oregon include specific provisions to cover victims of domestic violence and their caregivers.

Paid family leave and take-up by employees

Most Americans support a national paid family leave policy.[6] But how many workers would such a policy benefit? Evidence from California indicates both mothers and fathers value it. The leave-taking rate of mothers with infants nearly doubled after paid family leave became available, while fathers were 50 percent more likely to take leave.[7] This increase in leave-taking indicates that access causes new parents to take more time away from work following the birth of a new child than they would in the absence of the policy. But even those who do not change their leave-taking behavior may benefit by receiving partial wage replacement during periods of leave that would have otherwise been unpaid. Overall, a recent study by one of the co-authors of this essay, along with two other colleagues, estimates that about 47 percent of employed new mothers and 12 percent of employed new fathers in California made a paid family leave claim in 2014.[8]

Why don't all new parents access this paid family leave program? There are a number of barriers that may limit take-up, including lack of policy awareness, too-low pay, or the absence of job protection.[9] These barriers may be especially high for workers in low-wage jobs, who are less likely to be eligible for job protection through the current federal unpaid leave law and less likely to be able to afford to take even partially paid leave.[10]

Paid family leave and workers' labor market trajectories

Paid family leave could impact workers' subsequent labor market outcomes such as employment and wages in several different ways. Because paid leave increases the time parents spend away from work, it could lead to a loss of job-specific skills and make re-entry into the labor market more difficult. Yet the availability of paid family leave, particularly when job protection is available, may reduce the probability that new parents quit their jobs upon the birth of a child. This could have a positive effect on job continuity and future earnings.

Although employers are not responsible for paying employees during the leave, extended absences are costly in other ways. The productivity of firms, for example, may decrease if it is difficult to reassign tasks or hire a replacement while an employee is on leave for several weeks. Employers who find leaves particularly costly may discriminate against groups most likely to take up the leave—new mothers or women of childbearing age—by being less likely to hire them or offering them lower wages.

Studies on these programs in other countries typically find that provisions of leave up to 1 year in length increase the employment of mothers shortly after childbirth and have positive or zero effects on wages, though longer leave entitlements can have adverse effects on maternal long-term employment and wage trajectories.[11] There is no evidence that paternity leave impacts fathers' subsequent labor market outcomes.[12]

The evidence on the employment effects of paid family leave in the United States is mixed. While several studies have found the introduction of paid family leave in California had positive impacts on employment and wages of new mothers in the short term, recent work using large-scale administrative data finds zero or small negative impacts on long-term employment and wages.[13]

Moreover, it is possible that the design of the leave policy in terms of its specific components (such as duration, replacement rate, and the inclusion of job protection) matters. Yet there is limited research on this question because it is hard to isolate the effect of a particular policy lever from the other features that are implemented at the same time. That said, new research by one of the co-authors of this essay, along with two other colleagues, isolated the impact of the wage-replacement rate in California's paid family leave program for relatively high-income mothers, finding that higher benefit amounts do not affect either the duration of leave or the probability of making a claim, but may improve job continuity by increasing the likelihood that women return to their preleave employers.[14]

Paid family leave and family health outcomes

A lot of the discussion about the importance of paid family leave focuses on women's labor market trajectories, yet these policies may also be beneficial for families more broadly. For instance, paid leave could impact maternal and child health and well-being. Access to leave may lower maternal stress during pregnancy, which has been shown to adversely affect child well-being at birth and in later life.[15] Paid family leave also may impact breastfeeding duration, enable parents to obtain prompt healthcare for their infants, improve maternal postpartum physical and mental health, and strengthen parent-child bonds.

While studies of the impacts of extensions in already-generous paid family leave policies on children from other countries find no effects, they offer little guidance on what one might expect from the introduction of a shorter-but-similar federal program such as those now being considered in the United States.[16] There is one instructive example that comes from research on the long-term impacts of the 1977 implementation of a four-month paid maternity leave policy in Norway. That research shows that it led to a reduction in high school drop-out rates and an increase in adult earnings, concentrated among children from disadvantaged backgrounds.[17] Another study further shows that the same policy improved a range of maternal health indicators, with the benefits again concentrated among women from less advantaged backgrounds.[18]

We can also draw on a small body of research conducted in the U.S. context. One study shows that the introduction of paid maternity leave in five U.S. states lowered rates of low birth-weight and preterm births, with the largest impacts among African American and unmarried mothers. Improvements in these measures of health at birth have been correlated with improvements in long-term health, suggesting that paid leave may have long-lasting benefits for kids. The introduction of paid family leave in California also is associated with increases in the duration of breastfeeding, reductions in hospitalizations for infants due to avoidable infections and illnesses, and improvements in maternal mental health.[19]

Although paid family leave policies at the state and local level in the United States have not existed long enough to study the long-term impacts of children's health into adulthood, there is already some evidence of improvements in later childhood health. The introduction of California's paid family leave program is associated with lower rates of being overweight, attention deficit hyperactivity disorder, and hearing problems in Kindergarten.[20] Recent work finds that paid family leave also increases time mothers spend in childcare activities, suggesting that improvements in childhood health may be driven by both physiological and behavioral channels.[21]

Paid family leave and employers

A central concern among opponents of government-mandated paid family leave is the costs imposed on employers. Even if employers do not have to fund the leave, they could face indirect costs from the need to hire replacement workers, coordinate employee schedules, or reassign work tasks. Alternatively, employers could experience cost savings if workers who would have otherwise quit instead return to their jobs and reduce turnover rates.

The existing evidence on the impacts of paid family leave on employers is sparse. Surveys of selected firms in California and New Jersey find that the vast majority of employers report either positive or neutral effects on employee productivity, morale, and costs.[22] These studies do not find much evidence that program administration has been challenging or that employees resent their co-workers who take leave.

Then, there's the recent survey of small and medium-sized businesses in the food services and manufacturing sectors in Rhode Island, Connecticut, and Massachusetts just before and shortly after Rhode Island's paid family leave program went into effect.[23] Comparing Rhode Island employers pre- and post-law to Massachusetts and Connecticut employers over the same time period, the study found no evidence of significant impacts of the law on outcomes such as turnover rates or employee productivity. Still, the sample sizes were small, limiting the conclusions that could be drawn from this analysis.

One of the co-authors of this essay and another colleague used administrative data on nearly all California employers that ever existed between January 2000 and December 2014 to study how employers' labor costs and productivity respond to changes in employee leave-taking rates.[24] They find no evidence that employee turnover or wage costs change when leave-taking rates rise. In fact, the average firm has a lower per-worker wage bill and a lower turnover rate today than it did before California's paid family leave program was introduced.

But there still may be significant differences in the costs of paid family leave faced by different firms. Again using administrative from California, another recent analysis finds that take-up of paid leave is substantially higher in firms that pay similarly skilled workers relatively higher wages.[25] These firms also have higher employee retention following periods of leave. That research posits that better-paying firms may have cultures that are more conducive to leave-taking, suggesting that changing firm behavior and norms may be important for encouraging the use of leave more broadly.

Conclusion

As other states and the nation as a whole consider paid family leave legislation, it is critically important to understand the costs and benefits of existing programs and identify key policy features. The current research yields five key take-aways.

First, both mothers and fathers respond to the introduction of paid family leave programs through higher leave-taking rates and longer leave duration, but barriers to take-up remain, especially among low-wage workers in small firms. Job protection and high wage-replacement rates for workers at the bottom of the wage distribution may be important for encouraging more widespread take-up.

Second, relatively short leave entitlements can improve job continuity for women and increase their employment rates several years after childbirth. Paid leaves longer than 1 year, however, could have adverse consequences for mothers' long-term career opportunities.

Third, the current paid leave programs at the state and local level in the United States have positive impacts on child health and development, as well as maternal well-being. Thus, while there is no research identifying the "optimal" duration of leave precisely, it appears that programs of up to six months in length are likely to generate benefits for families without significant costs to women's careers.

Fourth, the current evidence shows minimal negative impacts of existing state programs on employers, suggesting that paid family leave programs afford benefits to workers and their families at little to no cost to the employers. These benefits may be especially important for the least advantaged families, in which workers are the least likely to have access to any employer-provided paid leave.

Finally, a growing body of evidence underscores that rising economic inequality and persistent intergenerational transmission of low socioeconomic status in the United States are perpetuated through disparities in early childhood circumstances.[26] The current research suggests that a federal paid family leave policy could level the playing field for children from all backgrounds and help curb the growth in inequality and boost long-term U.S. economic growth and stability.

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Endnotes

1 For information on paid family leave policies around the world, see: "Is paid leave available to mothers and fathers of infants?," available at https://www.worldpolicycenter.org/policies/is-paid-leave-available-to-mothers-and-fathers-of-infants/is-paid-leave-available-for-mothers-of-infants (last accessed September 17, 2019).

2 "Employee Benefits Survey," available at https://www.bls.gov/ncs/ebs/benefits/2018/ownership/civilian/table32a.htm (last accessed September 17, 2019).

3 See, for example, Pew Research Center, "Raising Kids and Running a Household: How Working Parents Share the Load" (2015), available at http://www.pewsocialtrends.org/2015/11/04/raising-kids-and-running-a-household-how-working-parents-share-the-load/.

4 For example, in California, bonding leaves currently make up about 87 percent of all claims. See California Employment Development Department, "Paid Family Leave (PFL) Program Statistics" (n.d), available at https://www.edd.

ca.gov/about_edd/pdf/qspfl_PFL_Program_Statistics.pdf.

5 California, New Jersey, New York, and Rhode Island already offered temporary disability insurance programs that provide similar wage replacement during own illness or injury prior to passing paid family leave legislation. Washington state, the District of Columbia, Massachusetts, Connecticut, and Oregon have passed paid family and medical leave laws, which will cover both caring for family members and own illness/injury.

6 National Partnership for Women & Families, "Voters' Views on Paid Family + Medical Leave: Findings from a National Survey" (2018), available at http://www.nationalpartnership.org/our-work/resources/workplace/paid-leave/voters-views-on-paid-family-medical-leave-survey-findings-august-2018.pdf.

7 Ann Bartel and others, "Paid Family Leave, Fathers' Leave-Taking, and Leave-Sharing in Dual-Earner Households," *Journal of Policy Analysis and Management* 37 (1) (2018): 10–37, available at https://doi.org/10.1002/pam.22030; Maya Rossin-Slater, Christopher J. Ruhm, and Jane Waldfogel, "The Effects of California's Paid Family Leave Program on Mothers' Leave-taking and Subsequent Labor Market Outcomes," *Journal of Policy Analysis and Management* 32 (2) (2013): 224–245, available at https://doi.org/10.1002/pam.21676.

8 Sarah Bana, Kelly Bedard, and Maya Rossin-Slater, "Trends and Disparities in Leave Use under California's Paid Family Leave Program: New Evidence from Administrative Data," *AEA Papers and Proceedings* 108 (2018): 388–91, available at http://www.aeaweb.org/articles?id=10.1257/pandp.20181113.

9 See, for example Eileen Appelbaum and Ruth Milkman, "Leaves That Pay: Employer and Worker Experiences with Paid Family Leave in California." Technical report (2011), available at https://escholarship.org/uc/item/6bm118ss; Ruth Milkman and Eileen Appelbaum, *Unfinished Business: Paid Family Leave in California and the Future of U.S. Work-Family Policy* (Ithaca, NY: ILR Press, 2013); Mark DiCamillo and Mervin Field, "Just 36% of voters aware of state's paid family leave program." Technical report (Field Research Corporation, 2015).

10 Sarah Fass, "Paid Leave in the States: A Critical Support for Low-wage Workers and Their Families." Technical report (2009), available at https://academiccommons.columbia.edu/doi/10.7916/D8XH0OVS.

11 See, for example: Christopher J. Ruhm, "The Economic Consequences of Parental Leave Mandates: Lessons from Europe," *Quarterly Journal of Economics* 113 (1) (1998): 285–317, available at https://doi.org/10.1162/003355398555586; Michael Baker and Kevin Milligan, "Evidence from Maternity Leave Expansions of the Impact of Maternal Care on Early Child Development," *Journal of Human Resources* 45 (1) (2010): 1–32, available at http://jhr.uwpress.org/content/45/1/1.short; Jochen Kluve and Marcus Tamm, "Parental Leave Regulations, Mothers' Labor Force Attachment and Fathers' Childcare Involvement: Evidence from a Natural Experiment," *Journal of Population Economics* 26 (3) (2013): 983–1005, available at https://doi.org/10.1007/s00148-012-0404-1; Francine D. Blau and Lawrence M. Kahn, "Female Labor Supply: Why is the United States Falling Behind?," *The American Economic Review* 103 (3) (2013): 251–256, available at https://www.aeaweb.org/articles?id=10.1257/aer.103.3.251; Gordon B. Dahl and others, "What is the Case for Paid Maternity Leave?," *Review of Economics and Statistics* 98 (4) (2016): 655–670, available at https://doi.org/10.1162/REST_a_00602; Jenna Stearns, "The Long-Run Effects of Wage Replacement and Job Protection: Evidence from Two Maternity Leave Reforms in Great Britain." Technical report (2018), available at https://dx.doi.org/10.2139/ssrn.3030808. For overviews of the paid family leave literature, see Maya Rossin-Slater, "Maternity and Family Leave Policy." In Susan L. Averett, Laura M. Argys, and Saul D. Hoffman, eds., *The Oxford Handbook on the Economics of Women* (New York: Oxford University Press, 2018); Claudia Olivetti and Barbara Petrongolo, "The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries," *The Journal of Economic Perspectives* 31 (1) (2017): 205–230, available at https://www.aeaweb.org/articles?id=10.1257/jep.31.1.205.

12 Sara Cools, Jon H. Fiva, and Lars J. Kirkebøen, "Causal Effects of Paternity Leave on Children and Parents," *Scandinavian Journal of Economics* 117 (3) (2015): 801–828, available at https://doi.org/10.1111/sjoe.12113; John Ekberg, Rickard Eriksson, and Guido Friebel, "Parental Leave—A Policy Evaluation of the Swedish 'Daddy-month' Reform," *Journal of Public Economics* 97 (2013): 131–143, available at https://doi.org/10.1016/j.jpubeco.2012.09.001; Ankita Patnaik, "Reserving Time for Daddy: The Consequences of Fathers' Quotas," *Journal of Labor Economics*, forthcoming, available at https://doi.org/10.1086/703115.

13 Rossin-Slater, Ruhm, and Waldfogel, "The Effects of California's Paid Family Leave Program on Mothers' Leave-taking and Subsequent Labor Market Outcomes"; Charles L. Baum and Christopher J. Ruhm, "The Effects of Paid Family Leave in California on Labor Market Outcomes," *Journal of Policy Analysis and Management* 35 (2) (2016): 333–356, available at https://

doi.org/10.1002/pam.21894; Sarah Bana, Kelly Bedard, and Maya Rossin-Slater, "The Impacts of Paid Family Leave Benefits: Regression Kink Evidence from Administrative Data" (Stanford, CA: Stanford University, 2018), available at https://www.nber.org/papers/w24438; Martha Bailey and others, "The Long-term Effects of California's 2004 Paid Family Leave Act on Women's Careers: Evidence from U.S. Tax Data" (University of Michigan, 2019).

14 Bana, Bedard, and Rossin-Slater, "The Impacts of Paid Family Leave Benefits: Regression Kink Evidence from Administrative Data."

15 Janet Currie and Maya Rossin-Slater, "Weathering the Storm: Hurricanes and Birth Outcomes," *Journal of Health Economics* 32 (3) (2013): 487–503, available at https://doi.org/10.1016/j.jhealeco.2013.01.004; Sandra E. Black, Paul J. Devereux, and Kjell G. Salvanes, "Does Grief Transfer Across Generations? Bereavements during Pregnancy and Child Outcomes," *American Economic Journal: Applied Economics* 8 (1) (2016): 193–223, available at https://www.aeaweb.org/articles?id=10.1257/app.20140262; Anna Aizer, Laura Stroud, and Stephen Buka, "Maternal Stress and Child Well-being: Evidence from Siblings," *Journal of Human Resources* 51 (3) (2016): 523–555, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5673140/; Petra Persson and Maya Rossin-Slater, "Family Ruptures, Stress, and the Mental Health of the Next Generation," *American Economic Review* 108 (4-5) (2018): 1214–1252, available at https://www.aeaweb.org/articles?id=10.1257/aer.20141406.

16 Baker and Milligan, "Evidence from Maternity Leave Expansions of the Impact of Maternal Care on Early Child Development"; Michael Baker and Kevin Milligan, "Maternity Leave and Children's Cognitive and Behavioral Development," *Journal of Population Economics* 28 (2) (2015): 373–391, available at https://doi.org/10.1007/s00148-014-0529-5; Qian Liu and Oskar Skans, "The Duration of Paid Parental Leave and Children's Scholastic Performance Children's Scholastic Performance," *The B.E. Journal of Economic Analysis & Policy* 10 (1) (2010): 1–33, available at https://doi.org/10.2202/1935-1682.2329; Dahl and others, "What is the Case for Paid Maternity Leave?"

17 Pedro Carneiro, Katrine Løken, and Kjell Salvanes, "A Flying Start: Maternity Leave Benefits and Long Run Outcomes of Children," *Journal of Political Economy* 123 (2) (2015): 365–412, available at https://doi.org/10.1086/679627.

18 Aline Butikofer, Julie Riise, and Meghan Skira, "The Impact of Paid Maternity Leave on Maternal Health." Discussion Paper No. 04/2018 (NHH Dept. of Economics, 2018), available at https://ssrn.com/abstract=3139823.

19 For evidence on birth outcomes, see Jenna Stearns, "The Effects of Paid Maternity Leave: Evidence from Temporary Disability Insurance," *Journal of Health Economics* 43 (2015): 85–102, available at https://doi.org/10.1016/j.jhealeco.2015.04.005. For evidence on breastfeeding, see Rui Huang and Muzhe Yang, "Paid Maternity Leave and Breastfeeding Practice Before and After California's Implementation of the Nation's First Paid Family Leave Program," *Economics & Human Biology* 16 (2015): 45–59, available at https://doi.org/10.1016/j.ehb.2013.12.009. For evidence on infant and maternal health, see Ariel Marek Pihl and Gaetano Basso, "Did California Paid Family Leave Impact Infant Health?" *Journal of Policy Analysis and Management* 38 (1) (2019): 155–180, available at https://doi.org/10.1002/pam.22101; Lindsey Bullinger, "The Effect of Paid Family Leave on Infant and Parental Health in the United States," *Journal of Health Economics* 66 (2019): 101–116, available at https://doi.org/10.1016/j.jhealeco.2019.05.006.

20 Shirlee Lichtman-Sadot and Neryvia Pillay Bell, "Child Health in Elementary School Following California's Paid Family Leave Program," *Journal of Policy Analysis and Management* 36 (4) (2017): 790–827, available at https://doi.org/10.1002/pam.22012.

21 Samantha Trajkovski, "California Paid Family Leave and Parental Time Use" (Syracuse, NY: Syracuse University, 2019), available at https://docs.wixstatic.com/ugd/c6de6e_7fcc7bf2b2ff47eca9fe9c7a9659ff34.pdf.

22 Appelbaum and Milkman, "Leaves That Pay: Employer and Worker Experiences with Paid Family Leave in California"; Miriam Ramirez, "The Impact of Paid Family Leave on New Jersey Businesses" (Bloustein School of Planning and Public Policy, 2012), available at https://bloustein.rutgers.edu/wp-content/uploads/2012/03/Ramirez.pdf; Sharon Lerner and Eileen Appelbaum, "Business As Usual: New Jersey Employers' Experiences with Family Leave Insurance" (Washington: Center for Economic and Policy Research, 2014), available at https://ideas.repec.org/p/epo/papers/2014-12.html.

23 Ann Bartel and others, "Assessing Rhode Island's Temporary Caregiver Insurance Act: Insights form a Survey of Employers" (Washington: U.S. Department of Labor Chief Evaluation Office, 2016), available at https://digitalcommons.ilr.cornell.edu/key_workplace/1597/.

24 Kelly Bedard and Maya Rossin-Slater, "The Economic and Social Impacts of Paid Family Leave in California: Report for the California Employment Development Department." Technical Report (2016), available at https://www.dol.gov/wb/media/CA_Final_Report_2015_Final_Report.pdf.

25 Bana, Bedard, and Rossin-Slater, "The Impacts of Paid Family Leave Benefits: Regression Kink Evidence from Administrative Data."

26 Anna Aizer and Janet Currie, "The Intergenerational Transmission of Inequality: Maternal Disadvantage and Health at Birth," *Science* 344 (6186) (2014): 856–861, available at https://science.sciencemag.org/content/344/6186/856; Janet Currie, "Inequality at Birth: Some Causes and Consequences," *The American Economic Review* 101 (3) (2011): 1–22, available at https://www.aeaweb.org/articles?id=10.1257/aer.101.3.1; Raj Chetty and others, "Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States," *The Quarterly Journal of Economics* 129 (4) (2014): 1553–1623, available at https://doi.org/10.1093/qje/qju022; Gary Solon, "Intergenerational Mobility in the Labor Market." In Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics* (Amsterdam: Elsevier, 1999), pp.1761–1800, available at https://doi.org/10.1016/S1573-4463(99)03010-2.

CHILDCARE

Addressing the need for affordable, high-quality early childhood care and education for all in the United States

By Taryn Morrissey, American University

Overview

In 2017–2018, most children in the United States under 6 years of age—68 percent of those in single-mother households and 57 percent in married-couple households—lived in homes in which all parents were employed.[1] Most of these families require nonparental early care and education, such as childcare centers, preschools, family childcare homes, or informal arrangements with relatives or neighbors, to care for their children while at work. In a typical week in 2011, the most recent year for which complete data are available from the U.S. Census Bureau, 12.5 million of the 20.4 million children under the age of 5 living in the United States (61 percent) attended some type of regular childcare arrangement.[2]

Unfortunately, on average, the early care and education settings attended by many young children, particularly low-income children or children of color, provide quality at levels too low to adequately promote children's learning and development.[3] This exacerbates socioeconomic and racial and ethnic inequalities. At the same time, in most regions of the country, families with young children are spending more on childcare than they are on housing, food, or healthcare.[4]

In this essay, I argue that greater policy attention to early childcare and education is warranted for three reasons:

- High-quality early care and education promotes children's development and learning, and narrows socioeconomic and racial/ethnic inequalities.

- Reliable, affordable childcare promotes parental employment and family self-sufficiency.

- Early care and education is a necessary component of the economic infrastructure.

I then provide the research underlying these three statements, and follow with a discussion of several policy solutions to address the current problems of affordability, quality, and supply of early care and education in the United States. The overwhelming evidence shows that more public investment is needed to help ease the cost burden for families and ensure that a trained, stable workforce has adequate compensation. A universal early care and education plan, particularly one with a sliding income scale to provide progressive benefits, may not pay for itself in the short term, but will very likely do so in the long term by boosting broad-based U.S. economic growth and stability while narrowing economic inequality.

Key Takeaways

THE EVIDENCE

- High-quality early care and education promotes children's development and learning, and narrows socioeconomic, racial, and ethnic inequalities while promoting parental employment and family self-sufficiency, yet most existing programs in the United States are expensive and difficult for parents to juggle alongside their jobs.

- Existing state and local paid family leave programs help parents manage their own health and their newborns' needs while maintaining their jobs and a basic income, but the transition to early care and education is often tumultuous for both parents and children, given the dearth of high-quality, affordable options.

THE SOLUTIONS

- Early care and education is a necessary component of the U.S. economic infrastructure. Following periods of paid leave and preceding preschool, families face gaps in affordable, high-quality, and stable early care and education arrangements that match their working hours. Expanding early care and education options can narrow pervasive social and economic inequalities and lead to greater U.S. economic growth.

High-quality early care and education promotes children's development and learning and narrows inequality

Early childhood, especially the first 3 years of life, constitutes a sensitive period of the life course, one during which caregiver warmth, responsiveness, and developmentally appropriate stimulation are vital for development.[5] Experiences during early childhood—whether positive, such as language exposure, or negative, such as high and chronic levels of stress or deprivation—have lasting effects.[6] Research demonstrates that socioeconomic disparities in cognitive skills and physical development are apparent in infancy.[7]

Over the past five decades, a wealth of research has examined how early care and education affects children's development. Most studies find that the majority of the intensive, high-quality, at-scale model programs promote children's academic school readiness in the short term. These include the Abecedarian project (studying a set of children born between 1972 and 1977 into their adult years), the Perry Preschool project (studying of a select group of children born between 1962 and 1967), the Infant Health and Development Program (a 1980s program that studied low birth-weight children in their first 3 years), and longstanding federal at-scale early care and education programs such as Head Start, state pre-Kindergarten programs, and high-quality center-based programs.[8] Effects are generally strongest for disadvantaged children, suggesting that early care and education may help to narrow socioeconomic, racial, and ethnic disparities in achievement.[9]

Among the early care and education programs in existence long enough to have data on long-term effects, research finds substantial and lasting benefits for educational and economic outcomes, including higher rates of high school completion, college attendance, and earnings, and reduced criminal activity and public assistance reliance into adulthood.[10] There also is emerging evidence for intergenerational benefits.[11] Yet the research is somewhat mixed for the mid-term effects of early care and education programs. Research finds benefits of participation for reduced grade retention, or repeating a grade in school.[12] The short-term benefits on test scores, however, appear to "fade out" or converge with children who did not attend early care and education programs as they age.[13] But some research suggests that may be due to the quality of the schools attended after early childhood.[14]

A largely separate body of research examines the health effects of early care and education. Studies find that the initial entrance of young children into group care is associated with a short-term increase in the incidence of communicable diseases.[15] But there are substantial and lasting benefits of early care and education participation for health, including increased on-time immunization rates, early screening rates, improved cardiovascular and metabolic health, and reduced smoking.[16]

Reliable, affordable childcare promotes parental employment and family self-sufficiency

Early care and education provides a context for child development, as well as temporary relief to parents for childcare, allowing them to work. Indeed, increased access to affordable childcare increases parents' labor force participation, particularly among single mothers. A recent review of the labor effects of childcare estimates that a 10 percent decrease in childcare costs would lead to a 0.25 percent to 1.25 percent increase in parental labor force participation.[17] Research finds that public preschool programs, which typically offer part-day, school-year programming, have some but potentially limited effects on parental employment.[18] But full-day, full-year early care and education—particularly for infants and toddlers for whom care is expensive and hard to find, and who are less likely to attend center-based care (See Figure 1)—would likely have larger effects on parental labor force participation.[19]

The childcare arrangements of U.S. children under the age of 5 with employed mothers

Percent of children in different childcare settings by age range, 2011

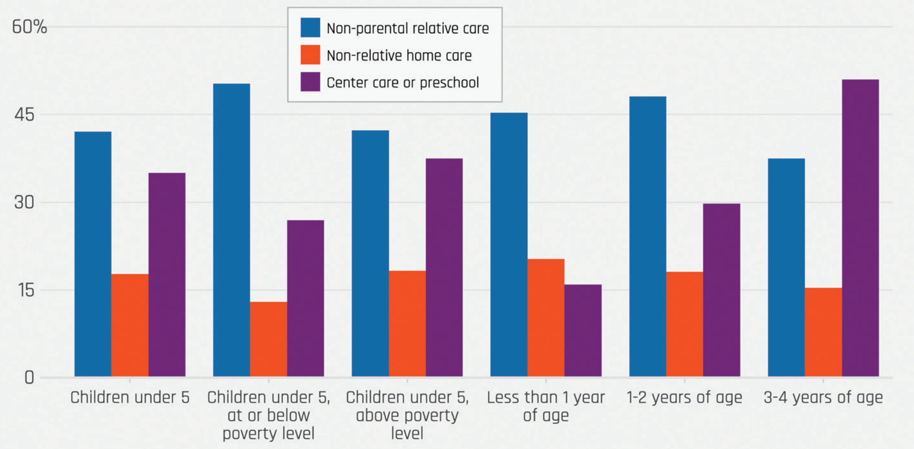

FIGURE 1

...full-day, full-year early care and education would likely have larger effects on parental labor force participation.

Source: Lynda Laughlin, "Who's Minding the Kids? Child Care Arrangements" (U.S. Census Bureau, 2013), 2011 Survey of Income and Program Participation data, available at https://www.census.gov/prod/2013pubs/p70-135.pdf.

Early care and education is a necessary economic infrastructure component

Childcare can be considered an infrastructure component akin to transportation. Without reliable, affordable sources, workers cannot regularly get to work or stay there. In the short term, early care and education settings support the productivity of two types of workers: employed parents and childcare workers. Research by University of Chicago economist and Nobel Laureate James Heckman and others suggests that many early childhood programs pay for themselves before children begin kindergarten via increased maternal employment, which generates both household income and tax revenue.[20] Further, research from the early 2000s suggests that investments in childcare have strong local economic development effects, or multiplier effects, because much of those dollars are spent on childcare worker wages that they, in turn, spend locally.[21]

In the long term, early care and education supports the preparedness and skills development of the future workforce of the country. Benefit-cost analyses of several intensive model programs and public early care and education programs indicate that the benefits—such as improved educational, economic, and health outcomes, and reduced criminal activity and receipt of public assistance—outweigh the initial program costs, demonstrating positive returns for participants, as well as the public.[22]

Barriers in accessing the promise of early care and education

Unfortunately, families with young children today face barriers in accessing and paying for the opportunities offered by early care and education. High-quality early care and education is expensive and hard to find, particularly for infants and toddlers.[23] Families with young children spend about 10 percent of their incomes on childcare expenses, but families in poverty—families below 100 percent of the Federal Poverty Level of about $12,000 per year for a family of three—spend 30 percent.[24] These expenses represent families' actual expenses at a mix of regulated centers and homes and informal lower-cost arrangements with relatives, not necessarily what they may choose to spend if more options were available.

In 2017, infant childcare at centers or licensed homes cost an average of $9,000 to $12,000 per year across the country, more than public college tuition in most states.[25] These high childcare costs accrue during a period when parents are at the lowest earning years of their careers and when the financing mechanisms of grants and low-interest loans are unavailable.[26] The public programs that exist to help families access early care and education—namely the Early Head Start/Head Start program and childcare subsidies provided under the federal and state Child Care and Development Block Grant program—serve a small fraction of those eligible. In 2016–2017, 35 percent of 3- to 5-year-old children in poverty attended Head Start, and 10 percent of children under age 3 in poverty attended Early Head Start.[27] In 2015, of the 13.5 million children eligible for childcare subsidies under federal rules, only 15 percent received them.[28]

Public investments in preschool contribute to dramatic increases in participation in early learning programs in the year or two prior to children's entry into kindergarten. Whereas in 1970, about 1.09 million (27 percent) 3- to 5-year old children in the United States attended preschool, by 2016, 4.701 million (60 percent) were enrolled.29 Yet these overall rates mask disparities in attendance. While income-based gaps in enrollment in preschool narrowed in recent decades, children in low-income families continue to be less likely to attend center-based care than their higher-income peers.30 As shown in Figure 1, among children under age 5 with employed mothers, only 28 percent of those in homes under the poverty line attend center-based care, versus 39 percent of those above the poverty line. This is problematic, as center-based settings tend to provide higher-quality, more stable care, on average, than unregulated arrangements. [31]

Further, centers that low-income children attend provide lower quality care, on average, than those attended by their higher-income peers.[32] Research shows that higher-income families are enrolling children in formal early care and education programs at increasingly younger ages.[33] In 2005, for example, 22 percent of 1-year-olds from families with incomes above 200 percent of the federal poverty line (at that time, about $32,000 per year for a family of three) attended center-based settings, compared to just 11 percent of 1-year-olds from families with incomes below 200 percent of the federal poverty line.[34] Our system's reliance on private family investment in early childhood is a driver of inequality, putting children on unequal playing fields well before they walk through the doors of their kindergarten classrooms.[35]

Despite their high expense, early care and education programs should actually cost more, not less. The quality of early care and education depends on the warmth and responsiveness of teachers and caregivers and on the strength and consistency of the caregiver-child relationships, which means economies of scale do not apply to childcare in the same way as with other economic sectors. For good reason, state and local regulations set child-adult ratios and group sizes and teacher training requirements. In turn, most childcare costs are directed to labor expenses.[36]

Yet, despite parents paying as much (or more) than they can afford, child-care workers are paid little. In 2018, the median hourly wage for childcare workers was $11.17 ($23,240 per year).[37] This is considerably less than the $16.56 median hourly wage for bus drivers ($34,450 per year).[38] What's more, there are wide racial and ethnic gaps in teacher pay and benefits such as health insurance coverage or paid sick leave.[39] Many workers earn so little that they rely on public assistance. Between 2014 and 2016, more than half (53 percent) of childcare workers lived in families that participated in one or more of four public programs.[40] This compares to 21 percent in the general population.[41]

Low pay and few benefits present barriers in attracting and retaining a skilled early care and education workforce. Teacher educational qualifications and stability are associated with the quality of early childhood settings and, in turn, a wide range of children's outcomes.[42] In 2012, 25 percent of childcare centers had turnover rates of 20 percent or higher.[43] A 2018 study found that 10 percent of children in Head Start (whose teachers average lower pay than those at public preschool programs) had a teacher who left Head Start entirely during the program year, with harmful consequences for children's outcomes.[44] Adequate caregiver and teacher compensation and training is necessary for supporting quality and stability in, and augmenting the supply of, early care and education.

This lack of reliable, affordable childcare has reverberating effects for parents, employers, and the U.S. economy. Interrupting a career due to a lack of adequate childcare—something more often done by mothers—has both short- and long-term economic ramifications for families in terms of lost wages, retirement savings, and other benefits, with an estimated average reduction of 19 percent in lifetime earnings.[45] Even when maintaining labor force participation, working parents and their employers feel the economic consequences of childcare inadequacy. A 2018 survey found that workers with children under the age of 3 lose an average of 2 hours per week of work time due to childcare problems, such as leaving early or arriving late. One-quarter of respondents reported they reduced regular work hours, turned down further education or training, or turned down a job offer due to childcare problems.[46] One recent study estimated that the childcare crisis results in $57 billion in lost earnings, productivity, and revenue each year.[47]

Policy solutions

Most early care and education policies are designed for one or both of two purposes: to provide care while parents work or to promote children's readiness to enter kindergarten by supporting cognitive, social-emotional, and behavioral development. This is a false dichotomy. As detailed above, high-quality, affordable, reliable programs accomplish both purposes. Yet there are simply too few high-quality, affordable, reliable programs in the United States today, and most are out of reach for low- and middle-income families.

In order to address families' and employers' early care and education needs, policies must address the affordability, quality, and supply problems in our current system. More public investment is needed to help ease the cost burden for families and ensure that a trained, stable workforce has adequate compensation, which will promote affordability and quality. Low-income families disproportionately shoulder the economic and other burdens caused by the lack of childcare, although middle-income families are also economically squeezed during the years in which their children are young.

A universal plan, particularly one with a sliding income scale to provide progressive benefits, may not pay for itself in the short term, but will likely do so in the long term.[48] A universal plan that offers benefits such as mixed-income classrooms may have beneficial peer effects.[49] And these kinds of plans have fewer administrative barriers and stigma, and a broader base of political support.[50] Further, an analysis of the Infant Health and Development Program estimates that socioeconomic achievement gaps would be substantially narrowed from universal programs.[51] Policies should be flexible enough to meet families' diverse needs, address the overall supply of early care and education, and cope with the gaps that are particularly troublesome for families today, such as care during nonstandard hours and for children with special needs.[52]

Two examples of universal policy solutions that would improve affordability, quality, and supply are the Child Care for Working Families Act and the Universal Child Care and Early Learning Act. Both of these proposed bills would increase public investment in early care and education to limit families' out-of-pocket payments to 7 percent of family income (the threshold recommended by the U.S. Department of Health and Human Services), increase childcare worker compensation and training, and expand public preschool and the supply of childcare for infants and toddlers. The Child Care for Working Families Act does so by expanding childcare subsidies, nearly doubling the number of children eligible.[53] The Universal Child Care and Early Learning Act relies more on public provision, expanding a network of early care and education options through federal-state or federal-local partnerships.[54]

Both bills, if passed by Congress and signed into law, would lead to substantial increases in the availability of high-quality, affordable early care and education programs. An analysis of the Child Care for Working Families Act estimated that, at full implementation, the availability of new childcare subsidies and reduced childcare costs would lead to 1.6 million more parents joining the labor force, the bill would create 700,000 new jobs in the childcare sector, and pay among teachers and caregivers would increase by 26 percent.[55]

Conclusion

The recent increases in state and local paid family leave programs in a handful of states and cities are laudable and help parents manage their own health and their newborns' needs, while maintaining their jobs and a basic income.[56] Likewise, federal and state public preschool programs and Head Start serve increasing numbers of children, with 44 percent of 4-year-olds and 16 percent of 3-year-olds enrolled in public programs across the country.[57] But in the years following the (relatively brief) period of paid leave and preceding the availability of preschool, families require affordable, high-quality, stable early care and education arrangements that match their working hours.

To ignore early care and education policy means to ignore a major expense and pressing concern for families and employers across the nation. Moreover, the research shows that early care and education can promote children's cognitive and other outcomes, narrowing disparities and leading to greater economic growth.[58] Our nation's current lack of investment in early care and education—unique among our peer countries—constitutes a lost economic opportunity to enhance our global competitiveness, as well as a lost opportunity for narrowing pervasive social and economic inequalities among families today.

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Endnotes

1 U.S. Bureau of Labor Statistics, "Employment Characteristics of Families Summary," *Economic News Release* (2019), available at https://www.bls.gov/news.release/famee.nro.htm.

2 Lynda Laughlin, "Who's Minding the Kids? Child Care Arrangements" (U.S. Census Bureau, 2013), available at https://www.census.gov/prod/2013pubs/p70-135.pdf.

3 S.W. Helburn and C. Howes, "Child Care Cost and Quality," *The Future of Children / Center for the Future of Children, the David and Lucile Packard Foundation* 6 (2) (1996):

62–82, available at http://www.ncbi.nlm.nih.gov/pubmed/18582984; National Survey of Early Care and Education, "Measuring Predictors of Quality in Early Care and Education Settings in the National Survey of Early Care and Education" (2015); A. Chaudry and others, *Cradle to Kindergarten: A New Plan to Combat Inequality* (New York: Russell Sage Foundation, 2017).

4 Child Care Aware of America, "The US and the High Cost of Child Care" (2018), available at https://cdn2.hubspot.net/hubfs/3957809/costofcare2018.pdf?__hstc=&__hssc=&hsCtaTracking=b4367fa6-f3b9-4e6c-acf4-b5d01d0dc570%7C94d3f065-e4fc-4250-a163-bafc3defaf20.

5 Board on Children, Youth, and Families and the National Academies of Science, *From Neurons to Neighborhoods: The Science of Early Childhood Programs*, J.P. Shonkoff and Deborah A. Phillips, eds. (Washington: National Academies Press, 2000); Douglas E. Sperry, Linda L. Sperry, and Peggy J. Miller, "Reexamining the Verbal Environments of Children From Different Socioeconomic Backgrounds," *Child Development* 00 (0) (2018): 1–16, available at https://doi.org/10.1111/cdev.13072; Ruth Feldman and Arthur I. Eidelman, "Biological and Environmental Initial Conditions Shape the Trajectories of Cognitive and Social-Emotional Development across the First Years of Life," *Developmental Science* 12 (1) (2009): 194–200, available at https://doi.org/10.1111/j.1467-7687.2008.00761.x.

6 Ariel Kalil, "Early Childhood Development." In *Delivering Equitable Growth: Strategies for the next Administration* (Washington: Washington Center for Equitable Growth, 2016), available at https://equitablegrowth.org/how-economic-inequality-affects-childrens-outcomes/; Jack P. Shonkoff and Andrew S. Garner, "The Lifelong Effects of Early Childhood Adversity and Toxic Stress," *Pediatrics* 129 (1) (2012): e232–46, available at https://doi.org/10.1542/peds.2011-2663; Jack P. Shonkoff, "Capitalizing on Advances in Science to Reduce the Health Consequences of Early Childhood Adversity," *JAMA Pediatrics* 170 (10) (2016): 1003–7, available at https://doi.org/10.1001/jamapediatrics.2016.1559; Greg J. Duncan, Katherine Magnuson, and Elizabeth Votruba-Drzal, "Moving Beyond Correlations in Assessing the Consequences of Poverty," *Annual Review of Psychology* 68 (2017): 413–34, available at https://doi.org/10.1146/annurev-psych-010416-044224; Greg J. Duncan, Kathleen M. Ziol-Guest, and Ariel Kalil, "Early-Childhood Poverty and Adult Attainment, Behavior, and Health," *Child Development* 81 (1) (2010): 306–25, available at https://doi.org/10.1111/j.1467-8624.2009.01396.x.

7 Tamara Halle and others, "Disparities in Early Learning and Development: Lessons from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B)" (Washington: Child Trends, 2009), available at http://www.childtrends.org/wp-content/uploads/2013/05/2009-52DisparitiesELExecSumm.pdf; Lindsey Hutchison, Taryn W. Morrissey, and Kimberly Burgess, "The Early Achievement and Development Gap" (Washington: U.S. Department of Health and Human Services, 2014), available at http://aspe.hhs.gov/hsp/14/achievementgap/rb_AchievementGap.pdf; Katherine Magnuson, Jane Waldfogel, and E. Washbrook, "The Development of SES Gradients in Skills during the School Years: Evidence from the United States and England." In J. Ermisch, M. Jantti, and T. Smeeding, eds., From *Parents to Children: The Intergenerational Transmission of Advantage* (New York: Russell Sage, 2012); Sean F. Reardon, "The Widening Academic Achievement Gap Between the Rich and the Poor: New Evidence and Possible Explanations." In Greg J. Duncan and Richard Murnane, eds., *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances* (New York: Russell Sage Foundation, 2011); Anne Fernald, Virginia A. Marchman, and Adriana Weisleder, "SES Differences in Language Processing Skill and Vocabulary Are Evident at 18 Months," *Developmental Science* 16 (2) (2013): 234–48, available at https://doi.org/10.1111/desc.12019.

8 Greg J Duncan and Katherine Magnuson, "Investing in Preschool Programs," *Journal of Economic Perspectives* 27 (2) (2013), available at https://doi.org/10.1257/jep.27.2.109; Deborah A. Phillips and others, "Puzzling It out: The Current State of Scientific Knowledge on Pre-Kindergarten Effects." In *The Current State of Scientific Knowledge on Pre-Kindergarten Effects* (Washington: The Brookings Institution, 2017); Hirokazu Yoshikawa and others, "Investing in Our Future: The Evidence Base on Preschool Education Investing in Our Future: The Evidence Base on Preschool Education" (Washington: Society for Research in Child Development, 2013); Pamela A. Morris and others, "New Findings on Impact Variation From the Head Start Impact Study: Informing the Scale-Up of Early Childhood Programs," *AERA Open* 4 (2) (2018): 1–16, available at https://doi.org/10.1177/2332858418769287; William T. Gormley, Deborah A. Phillips, and Sara Anderson, "The Effects of Tulsa's Pre-K Program on Middle School Student Performance," *Journal of Policy Analysis and Management* 37 (1) (2018): 63–87, available at https://doi.org/10.1002/pam.22023; Deborah A. Phillips, William T. Gormley, and Sara Anderson, "The Effects of Tulsa's CAP Head Start Program on Middle-School Academic Outcomes and Progress," *Developmental Psychology* 52 (8) (2016): 1247–61, available at

https://doi.org/10.1037/dev0000151; Christina Weiland and Hirokazu Yoshikawa, "Impacts of a Prekindergarten Program on Children's Mathematics, Language, Literacy, Executive Function, and Emotional Skills," *Child Development* 84 (6) (2013): 2112–30, available at https://doi.org/10.1111/cdev.12099; D.S. Ronsaville and R.B. Hakim, "Child Outcomes When Child Care Center Classes Meet Recommended Standards for Quality. NICHD Early Child Care Research Network Child Care in the United States: Racial Differences in Compliance with Guidelines," *Am J Public Health* 89 (7) (1999): 1072–77, available at https://doi.org/10.2105/ajph.89.7.107210.2105/ajph.90.9.1436; NICHD Early Child Care Research Network, "Does Quality of Child Care Affect Child Outcomes at Age 41/2?" *Developmental Psychology* 39 (3) (2003): 451–69, available at http://ovidsp.ovid.com.proxyau.wrlc.org/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=ovftf&AN=00063061-200305000-00009; National Institute of Child Health and Human Development Early Child Care Rearch Network, "Child Care Effect Sizes for the NICHD Study of Early Child Care and Youth Development," *American Psychologist* 61 (2006): 99–116.

9 William T. Gormley, "The Effects of Oklahoma's Pre-K Program on Hispanic Children," *Social Science Quarterly* 89 (4) (2008); Greg J Duncan and Aaron J. Sojourner, "Can Intensive Early Childhood Intervention Programs Eliminate Income-Based Cognitive and Achievement Gaps?" *Journal of Human Resources* 48 (4) (2013): 945–68; Phillips and others, "Puzzling It out: The Current State of Scientific Knowledge on Pre-Kindergarten Effects"; Katherine Magnuson and Greg J. Duncan, "Can Early Childhood Interventions Decrease Inequality of Economic Opportunity?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2 (2) (2017): 123, available at https://doi.org/10.7758/rsf.2016.2.2.05; Daphna Bassok, "Do Black and Hispanic Children Benefit More from Preschool? Understanding Differences in Preschool Effects across Racial Groups," *Child Development* 81 (6) (2010): 1828–45, available at https://doi.org/10.1111/j.1467-8624.2010.01513.x; Yoshikawa and others, "Investing in Our Future: The Evidence Base on Preschool Education"; Taryn W. Morrissey, Lindsey Hutchison, and Kimberly Burgess, "The Short- and Long-Term Impacts of Large Public Early Care and Education Programs" (Washington: U.S. Department of Health and Human Services, 2014), available at http://aspe.hhs.gov/hsp/14/longtermimpact/rb_longTermImpact.pdf; Marianne P. Bitler and others, "Experimental Evidence on Distributional Effects of Head Start." Working Paper (National Bureau of Economic Research, 2016), available at http://www.nber.org/papers/w20434.pdf.

10 David Deming, "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start," *American Economic Journal: Applied Economics* 1 (3) (2009): 111–34, available at https://doi.org/10.1257/app.1.3.111; Rucker C. Johnson, "The Health Returns of Education Policies from Preschool to High School and Beyond," *American Economic Review: Papers and Proceedings* 100 (2) (2010): 188–94; E. I. Knudsen and others, "Economic, Neurobiological, and Behavioral Perspectives on Building America's Future Workforce," *Proceedings of the National Academy of Sciences* 103 (27) (2006): 10155–62; Flavio Cunha and James J. Heckman, "The Technology of Skill Formation," *American Economic Review* 97 (2) (2007): 31–47, available at https://doi.org/10.1257/aer.97.2.31; Jens Ludwig and Deborah A. Phillips, "Long-Term Effects of Head Start on Low-Income Children," *Annals Of The New York Academy Of Sciences* 1136 (1) (2008): 257–68, available at https://doi.org/10.1196/annals.1425.005; Eliana Garces, Duncan Thomas, and Janet Currie, "Longer-Term Effects of Head Start," *American Economic Review* 92 (4) (2002): 999–1012, available at https://search.proquest.com/openview/466c6163e16cd99af4b4a38f4e0442e3/1.pdf?pq-origsite=gscholar&cbl=42182.

11 James Heckman and Ganesh Karapakula, "Intergenerational and Intragenerational Externalities of the Perry Preschool Project." Working Paper (National Bureau of Economic Research, 2019), available at https://doi.org/10.3386/w25889; Andrew Barr and Chloe R. Gibbs, "Breaking the Cycle? The Intergenerational Effects of Head Start" (2017).

12 Dana Charles Mccoy and others, "Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes," *Educational Researcher* 46 (8) (2017), available at https://doi.org/10.3102/0013189X17737739; Mariana Zerpa, "Short and Medium Run Impacts of Preschool Education: Evidence from State Pre-K Programs" (Washington: Washington Center for Equitable Growth, 2018).

13 Yoshikawa and others, "Investing in Our Future: The Evidence Base on Preschool Education"; Arya Ansari, "The Persistence of Preschool Effects From Early Childhood," *Journal of Educational Psychology* 110 (7) (2018): 952–73; Greg J. Duncan and Katherine Magnuson, "Investing in Preschool Programs," *Journal of Economic Perspectives* 27 (2) (2013): 109–32, available at https://doi.org/10.1257/jep.27.2.109.

14 Janet Currie and Duncan Thomas, "School Quality and the Longer-Term Effects of Head Start," *The Journal of Human Resources* 35 (4) (2000): 755, available at https://doi.org/10.2307/146372; Arya Ansari and Robert Pianta, "The Role of Elementary School Quality in the Persistence of Preschool Effects," *Children and Youth Services Review* 86 (2018):

120–27, available at https://doi.org/10.1016/j.childyouth.2018.01.025.

15 Robert H. Bradley and NICHD Early Child Care Research Network, "Child Care and Common Communicable Diseases in Children Aged 37 to 54 Months," *Arch Pediatr Adolesc Med* 157 (2) (2003): 196–200; Taryn W. Morrissey, "Multiple Child Care Arrangements and Common Communicable Illnesses in Children Aged 3 to 54 Months," *Maternal and Child Health Journal* 17 (7) (2013), available at https://doi.org/10.1007/s10995-012-1125-5.

16 Taryn W. Morrissey, "The Effects Of Early Care And Education On Children's Health," *Health Affairs* (2019), available at https://www.healthaffairs.org/do/10.1377/hpb20190325.519221/full/; Gabriella Conti, James J. Heckman, and Rodrigo Pinto, "The Effects of Two Influential Early Childhood Interventions on Health and Healthy Behavior," *Econ J* 91 (2) (2016): 165–71, available at https://doi.org/10.1016/j.chemosphere.2012.12.037.Reactivity; Frances Campbell and others, "Early Childhood Investments Substantially Boost Adult Health," *Science* 343 (6178) (2014): 1478–85, available at http://science.sciencemag.org/content/343/6178/1478; Pedro Carneiro and Rita Ginja, "Long-Term Impacts of Compensatory Preschool on Health and Behavior: Evidence from Head Start," *American Economic Journal of Economic Policy* 6 (4) (2014): 135–73, available at https://doi.org/10.1257/pol.6.4.135; Jens Ludwig and Douglas L. Miller, "Does Head Start Improve Children's Life Chances? Evidence From a Regression Discontinuity Design," *The Quarterly Journal of Economics* 122 (1) (2007): 159–208; Garces, Thomas, and Currie, "Longer-Term Effects of Head Start"; Kai Hong, Kacie Dragan, and Sherry A. Glied, "Seeing and Hearing: The Impacts of New York City's Universal Pre-Kindergarten Program on the Health of Low-Income Children," *Journal of Health Economics* (2019), available at https://doi.org/10.1016/j.jhealeco.2019.01.004; Terri J. Sabol and Lindsay Till Hoyt, "The Long Arm of Childhood: Preschool Associations with Adolescent Health," *Developmental Psychology* 53 (4) (2017): 752–63, available at https://doi.org/10.1037/dev0000287.

17 Taryn W. Morrissey, "Child Care and Parent Labor Force Participation: A Review of the Research Literature," *Review of Economics of the Household* 15 (1) (2017): 1–24, available at https://doi.org/10.1007/s11150-016-9331-3.

18 Rasheed Malik, "The Effects of Universal Preschool in Washington, DC: Children's Learning and Mothers' Earnings" (Washington: Center for American Progress, 2018), available at https://cdn.americanprogress.org/content/uploads/2018/09/14125635/Children-Learning-Mothers-Earning-report.pdf; Maria Donovan Fitzpatrick, "Preschoolers Enrolled and Mothers at Work? The Effects of Universal Prekindergarten," *Journal of Labor Economics* 28 (1) (2010): 51–85, available at https://doi.org/10.1086/648666; Elizabeth U. Cascio and Diane Whitmore Schanzenbach, "The Impacts of Expanding Access To High-Quality Preschool," Brookings Papers on Economic Activity (2013): 127–78.

19 Steven Jessen-Howard and others, "Understanding Infant and Toddler Child Care Deserts" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/early-childhood/reports/2018/10/31/460128/understanding-infant-toddler-child-care-deserts/; Child Care Aware of America, "The US and the High Cost of Child Care."

20 James J. Heckman, "Return on Investment in Birth-to-Three Early Development Programs," webinar on September 6, 2018, available at https://heckmanequation.org/www/assets/2018/09/F_ROI-Webinar-Deck_birth-to-three_091818.pdf [last accessed July 16, 2019].

21 Taryn W. Morrissey and Mildred E. Warner, "Why Early Care and Education Deserves as Much Attention, or More, than Prekindergarten Alone," *Applied Developmental Science* 11 (2) (2007): 57–70, available at https://doi.org/10.1080/10888690701384897.

22 Jill S. Cannon and others, "Investing Early," *RAND Health Quarterly* 7 (4) (2018): 6; Knudsen and others, "Economic, Neurobiological, and Behavioral Perspectives on Building America's Future Workforce."

23 R. Malik and others, "Child Care Deserts: An Analysis of Child Care Centers by ZIP Code in 8 States" (Washington: Center for American Progress, 2016), available at https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/; Jessen-Howard and others, "Understanding Infant and Toddler Child Care Deserts"; R. Malik and others, "America's Child Care Deserts in 2018" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/; NSECE, "Households' Geographic Access to Center - Based Early Care and Education: Estimates and Methodology from the National Survey of Early Care and Education" (2016), available at http://www.acf.hhs.gov/sites/default/files/opre/hh_geoaccessto_cb_ece_toopre_042916_b508.pdf; Deborah A. Phillips and Gina Adams, "Child Care and Our Youngest Children," *The Future of Children* 11 (2001): 34–51; Chaudry and others, *Cradle to Kindergarten: A New Plan to Combat Inequality.*

24 Laughlin, "Who's Minding the Kids ? Child Care Arrangements."

25 Child Care Aware of America, "The US and the High Cost of Child Care."

26 Amy Traub, Robert Hiltonsmith, and Tamara Draut, "The Parent Trap: The Economic Insecurity of Families with Young Children" (New York: Demos, 2016), available at http://www.demos.org/sites/default/files/publications/Parent Trap.pdf.

27 "Head Start," available at https://www.childtrends.org/indicators/head-start (last accessed August 30, 2019).

28 Eligibility determined using federal rules. Nina Chien, "Factsheet: Estimates of Child Care Eligibility & Receipt for Fiscal Year 2015" (Washington: U.S. Department of Health and Human Services, 2019), available at https://aspe.hhs.gov/system/files/pdf/260361/CY2015ChildCareSubsidyEligibility.pdf.

29 NCES IES, "Enrollment of 3-, 4-, and 5-Year-Old Children in Preprimary Programs, by Age of Child, Level of Program, Control of Program, and Attendance Status: Selected Years, 1970 through 2016" (2017), available at https://nces.ed.gov/programs/digest/d17/tables/dt17_202.10.asp.

30 Katherine Magnuson and Jane Waldfogel, "Trends in Income-Related Gaps in Enrollment in Early Childhood Education: 1968 to 2013," *AERA Open* 2 (2) (2016): 1–13, available at https://doi.org/10.1177/2332858416648933; Magnuson and Duncan, "Can Early Childhood Interventions Decrease Inequality of Economic Opportunity?"

31 Chaudry and others, Cradle to Kindergarten: A New Plan to Combat Inequality; Daphna Bassok and others, "Within- and Between-Sector Quality Differences in Early Childhood Education and Care," *Child Development* 87 (5) (2016): 1627–45, available at https://doi.org/10.1111/cdev.12551; Rachel A. Gordon and Robin S. Högnäs, "The Best Laid Plans: Expectations, Preferences, and Stability of Child-Care Arrangements," *Journal of Marriage and Family* 68 (2) (2006): 373–93, available at https://doi.org/10.1111/j.1741-3737.2006.00259.x.

32 Chaudry and others, *Cradle to Kindergarten: A New Plan to Combat Inequality*.

33 Magnuson and Duncan, "Can Early Childhood Interventions Decrease Inequality of Economic Opportunity?"; Chaudry and others, *Cradle to Kindergarten: A New Plan to Combat Inequality*.

34 Kimberly Burgess and others, "Trends in the Use of Early Care and Education, 1995-2011" (Washington: U.S. Department of Health and Human Services, 2014), available at http://aspe.hhs.gov/hsp/14/EarlyCareEducation/rb_ece.pdf.

35 Chaudry and others, *Cradle to Kindergarten: A New Plan to Combat Inequality*.

36 Simon Workman, "Where Does Your Child Care Dollar Go? Understanding the True Cost of Quality Early Childhood Education" (Washington: Center for American Progress, 2018).

37 "Childcare Workers," available at https://www.bls.gov/ooh/personal-care-and-service/childcare-workers.htm (last accessed August 30, 2019).

38 "Bus Drivers," https://www.bls.gov/ooh/transportation-and-material-moving/bus-drivers.htm (last accessed August 30, 2019).

39 Rebecca Ullrich, Katie Hamm, and Rachel Herzfeldt-Kamprath, "Underpaid and Unequal: Racial Wage Disparities in the Early Childhood Workforce" (Washington: Center for American Progress, 2016), available at https://cdn.americanprogress.org/wp-content/uploads/2016/08/01073800/NSECE-report2.pdf.

40 The Earned Income Tax Credit, or EITC; Medicaid or the Children's Health Insurance Program, or CHIP; the Supplemental Nutrition Assistance Program, or SNAP; or Temporary Assistance for Needy Families, or TANF.

41 Marcy Whitebook and others, "Early Childhood Workforce Index 2018" (Berkeley, CA: University of California, Berkeley, 2018), available at https://cscce.berkeley.edu/early-childhood-workforce-2018-index/.

42 Matthew Manning and others, "Is Teacher Qualification Associated With the Quality of the Early Childhood Education and Care Environment? A Meta-Analytic Review," *Review of Educational Research* 89 (3) (2019), available at https://doi.org/10.3102/0034654319837540. See also Tran Henry and Weinraub Marsha, "Child Care Effects in Context: Quality, Stability, and Multiplicity in Nonmaternal Child Care Arrangements During the First 15 Months of Life," *Developmental Psychology* 42 (3) (2006): 566, available at http://proquest.umi.com.proxyau.wrlc.org/pqdweb?did=1154133501&Fmt=7&clientId=31806&RQT=309&VName=PQD; S. Loeb and others, "Child Care in Poor Communities: Early Learning Effects of Type, Quality, and Stability," *Child Development* 75 (2004): 47–65; Martha Zaslow and others, "Quality Thresholds, Features, and Dosage in Early Care and Education: Introduction and Literature Review," *Monographs of the Society for Research in Child Development* 81 (2016): 7–27, available at https://doi.org/10.1111/mono.12236; Taryn W. Morrissey, "Multiple Child-Care Arrangements and Young Children's Behavioral Outcomes," *Child Development* 80 (1) (2009), available at

https://doi.org/10.1111/j.1467-8624.2008.01246.x; Alejandra Ros Pilarz and Heather D. Hill, "Unstable and Multiple Child Care Arrangements and Young Children's Behavior," *Early Childhood Research Quarterly* 29 (4) (2014): 471–83, available at https://doi.org/10.1016/j.ecresq.2014.05.007; Mary E. Bratsch-Hines and others, "Child Care Instability from 6 to 36 Months and the Social Adjustment of Children in Prekindergarten," *Early Childhood Research Quarterly* (2015), available at https://doi.org/10.1016/j.ecresq.2014.09.002; Taryn W. Morrissey, "Sequence of Child Care Type and Child Development: What Role Does Peer Exposure Play?" *Early Childhood Research Quarterly* 25 (1) (2010), available at https://doi.org/10.1016/j.ecresq.2009.08.005; NICHD Early Child Care Research Network, "Direct and Indirect Influences of Child Care Quality on Young Children's Development," *Psychological Science* 13 (2002): 199–206; Zaslow and others, "Quality Thresholds, Features, and Dosage in Early Care and Education: Introduction and Literature Review."

43 Marcy Whitebook, Deborah Phillips, and Carollee Howes. "Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study" (Berkeley, CA: University of California, Berkeley, 2014), available at https://cscce.berkeley.edu/files/2014/ReportFINAL.pdf.

44 Anna J. Markowitz and Daphna Bassok, "Teacher Turnover and Child Development in Head Start" (2018).

45 Michael Madowitz, Alex Rowell, and Katie Hamm, "Calculating the Hidden Cost of Interrupting a Career for Child Care" (Washington: Center for American Progress, 2016), available at https://cdn.americanprogress.org/wp-content/uploads/2016/06/17091517/ChildCareCalculator-methodology.pdf.

46 Clive R. Belfield, "The Economic Impacts of Insufficient Child Care on Working Families" (Washington: ReadyNation, 2018), available at https://strongnation.s3.amazonaws.com/documents/522/3c5cdb46-eda2-4723-9e8e-f20511cc9f0f.pdf?1542205790&inline;filename=%22The Economic Impacts of Insufficient Child Care on Working Families.pdf%22.

47 ReadyNation, "Want to Grow the Economy? Fix the Child Care Crisis" (2019), available at https://strongnation.s3.amazonaws.com/documents/602/83bb2275-ce07-4d74-bcee-ff6178daf6bd.pdf?1547054862&inline;filename=%22Want to Grow the Economy? Fix the Child Care Crisis.pdf%22.

48 William T. Gormley, "Universal vs. Targeted Prekindergarten: Reflections for Policymakers." In *The Current State of Scientific Knowledge on Pre-Kindergarten Effects* (Washington: The Brookings Institution, 2017), pp. 51–56.

49 Christina Weiland and Hirokazu Yoshikawa, "Does Higher Peer Socio-Economic Status Predict Children's Language and Executive Function Skills Gains in Prekindergarten?" *Journal of Applied Developmental Psychology* 35 (5) (2014), available at https://doi.org/10.1016/j.appdev.2014.07.001.

50 Elizabeth U. Cascio, "Does Universal Preschool Hit the Target? Program Access and Preschool Impacts." Working Paper 23215 (National Bureau of Economic Research, 2017), available at https://doi.org/10.3386/w23215; Gormley, "Universal vs. Targeted Prekindergarten: Reflections for Policymakers."

51 Greg Duncan and Aaron Sojourner, "Can Intensive Early Childhood Intervention Programs Eliminate Income-Based Cognitive and Achievement Gaps?" *Journal of Human Resources* 48 (4) (2013): 945–968.

52 Dani Carrillo and others, "Instability of Work and Care: How Work Schedules Shape Child-Care Arrangements for Parents Working in the Service Sector," *Social Service Review* 91 (3) (2017): 422–55, available at https://doi.org/10.1086/693750.

53 "Child Care for Working Families Act of 2019: Fact Sheet," available at https://www.help.senate.gov/imo/media/doc/CCFWFA Fact Sheet 116th Congress FINAL.pdf (last accessed August 30, 2019).

54 "S. 1878: Universal Child Care and Early Learning Act,"available at https://www.govtrack.us/congress/bills/116/s1878/text (last accessed July 16, 2019).

55 Ajay Chaudry and Katie Hamm, "The Child Care for Working Families Act Will Boost Employment and Create Jobs" (Washington: Center for American Progress, 2017), available at https://cdn.americanprogress.org/content/uploads/2017/12/06070052/ChildCareWorkforce-brief.pdf.

56 Maya Rossin-Slater, "Maternity and Family Leave Policy." In Susan L. Averett, Laura M. Argys, and Saul D. Hoffman, eds., *The Oxford Handbook of Women and the Economy* (Oxford, UK: Oxford University Press, 2017), available at https://doi.org/10.1093/oxfordhb/9780190628963.013.23; Christopher J. Ruhm, "Policies to Assist Parents with Young Children.," *The Future Of Children* 21 (2) (2011): 37–68, available at https://doi.org/10.1353/foc.2011.0015; Charles L. Baum and Christopher J. Ruhm, "The Effects of Paid Family Leave in California on Labor Market Outcomes," *Journal of Policy Analysis and Management* 35 (2) (2016), available at https://doi.org/10.1002/

pam.21894; Lindsey Rose Bullinger, "The Effect of Paid Family Leave on Infant and Parental Health in the United States," *Journal of Health Economics* 66 (2019): 101–16, available at https://doi.org/10.1016/j.jhealeco.2019.05.006; Alexandra B. Stanczyk, "Does Paid Family Leave Improve Household Economic Security Following a Birth ? Evidence from California," *Social Service Review* (2019); Shirlee Lichtman-Sadot and Neryvia Pillay Bell, "Child Health in Elementary School Following California's Paid Family Leave Program," *Journal of Policy Analysis and Management* 36 (4) (2017): 790–827, available at https://doi.org/10.1002/pam.22012.

57 Allison H. Friedman-Krauss and others, "The National Institute for Early Education Research: The State of Preschool 2018" (New Brunswick, NJ: NIEER, 2018), available at http://nieer.org/wp-content/uploads/2019/04/YB2018_Full-ReportR2.pdf.

58 Yoshikawa and others, "Investing in Our Future: The Evidence Base on Preschool Education"; Phillips and others, "Puzzling It out: The Current State of Scientific Knowledge on Pre-Kindergarten Effects"; Duncan and Magnuson, "Investing in Preschool Programs." See also Pau Balart, Matthijs Oosterveen, and Dinand Webbink, "Test Scores, Noncognitive Skills and Economic Growth," *Economics of Education Review* 63 (2018): 134–53, available at https://doi.org/10.1016/j.econedurev.2017.12.004; Katherine A. Magnuson and Jane Waldfogel, "Early Childhood Care and Education: Effects on Ethnic and Racial Gaps in School Readiness," *The Future of Children / Center for the Future of Children, the David and Lucile Packard Foundation* 15 (1) (2005): 169–96; Magnuson and Duncan, "Can Early Childhood Interventions Decrease Inequality of Economic Opportunity?"

FAIR SCHEDULING

Fair work schedules for the U.S. economy and society: What's reasonable, feasible, and effective

By Susan Lambert, University of Chicago

Overview

Scheduling practices in low-wage jobs are the focus of increasing public concern in the United States, as awareness has grown of their potential harmful effects on workers and families. Changing work schedules requires changing the behaviors of frontline managers because they are the ones who schedule employees. Policymakers in the next Congress and administration can enact new federal laws to shift incentives on the frontlines of firms to help establish work-hour standards that benefit both employers and employees.

In this essay, I first detail the problematic scheduling practices prevalent in today's U.S. economy and their serious ramifications for firm productivity and worker well-being. I draw on recent evidence indicating that improving work schedules can be good for families, employees, and employers alike. I then suggest two promising directions for public policy: legislating new work-hour standards in low-wage jobs and helping businesses meet them.

Key Takeaways

THE EVIDENCE

- Scheduling practices in low-wage U.S. jobs are problematic for hourly U.S. workers due to fluctuating hours, short notice of work schedules, and little input into when and how much they work.

- Problematic work schedules make it difficult for these workers to care for loved ones, do well in school, and achieve economic security.

THE SOLUTIONS

- Improving work schedules for hourly U.S. workers requires policies aimed at changing the behaviors of frontline managers because they are the ones who schedule employees, and these managers can improve the predictability and stability of employees' schedules while also meeting business imperatives.

Problematic scheduling practices: Serious ramifications, widespread prevalence, and unproductive results

Research tells us that several dimensions of work schedules in today's jobs—instability, unpredictability, inadequacy, and lack of input—undermine worker health and family economic security. Specifically:

- Schedule instability and unpredictability make it difficult to fulfill a host of family responsibilities, from arranging childcare and attending parent-teacher conferences to securing benefits through public safety-net programs.[1]

- Shortfalls in weekly work hours fuel financial insecurity and distrust in societal institutions, including Congress.[2]

- Problematic scheduling practices are more strongly associated with psychological distress, sleep quality, and unhappiness than are low wages.[3]

These problematic scheduling practices are widespread in today's labor market, especially among low-paid workers. More than three-quarters of hourly-paid workers in the bottom third of the wage distribution report fluctuations in weekly work hours that average more than a full day of pay.[4] Fully 40 percent of hourly workers say that they "know when they will need to work" one week or less in advance, and 1 in 6 know their schedule a day or less in advance.[5] What's more, between 2007 and 2015, involuntary part-time employment increased almost five times faster than voluntary part-time work and about 18 times faster than all work.[6] And about half of hourly workers report that they have little or no input into the number or timing of the hours they work.[7]

Work scheduling problems are multidimensional problems. The most disadvantaged workers experience fluctuating, unpredictable, and scarce hours, determined by their employers. A larger proportion of black than white workers have highly fluctuating work hours at the behest of their employer, not by choice.[8] And a larger proportion of low-paid than higher-paid workers, and black than white workers, experience the "triple whammy" of work-hour volatility, short advance notice, plus lack of schedule control.[9]

Importantly, evidence indicates that scheduling practices that are problematic for employees can also be problematic for employers. The latest research on the operations of retail firms reveals an inverted U-shaped curve between store-level labor flexibility and profit, demonstrating that too much labor flexibility undermines business goals.[10] A recent randomized experiment at the U.S. retailer Gap, Inc. finds that improving schedule stability and predictability for hourly sales associates increased labor productivity and store sales, suggesting that improving scheduling practices can yield positive business benefits.[11]

Policy answers to problematic scheduling practices

Depending solely on employers to improve work schedules voluntarily is risky if policymakers are to improve the quality of jobs and quality of life for all U.S. workers and their families.[12] The business models revered by Wall Street emphasize the importance of minimizing the cost of labor in order to maximize returns to shareholders.[13] These pressures trickle down to frontline managers who are held accountable for operating within increasingly tight labor budgets.[14]

Frontline managers adopt practices that allow them to keep their workers' schedules flexible so they can readily adjust staffing levels to perceived business needs. Key among managers' labor-flexibility tools are the scheduling practices that create the problems for workers: posting schedules with little advance notice, making last-minute changes, and maintaining a large pool of workers just in case they need more.[15] The incentive structures of firms make it difficult for frontline managers to change their scheduling behaviors.

Public policy can shift incentives on the frontlines of firms. Since 2014, one state (Oregon) and six municipalities (San Francisco, Seattle, New York City, Philadelphia, Chicago, and Emeryville, California) have passed comprehensive scheduling laws, and more than a dozen additional cities have legislative initiatives underway. The new regulations are intended to establish universal standards for scheduling hourly employees in targeted industries, primarily in retail, food service, and hospitality, and in large corporations.[16]

Although the administrative rules vary across municipalities, these laws are coalescing around common provisions that align with the problematic dimensions of work schedules. By addressing multiple dimensions of work schedules, the laws are consistent with social science research indicating a multidimensional approach is needed to accomplish meaningful change. The major provisions included in current legislation and the scheduling dimension each one is intended to improve are compiled in Table 1.

TABLE 1

The major provisions included in current legislation and the scheduling dimension each one is intended to improve are compiled here.

Problematic scheduling practices at U.S. firms and some common provisions in scheduling legislation

Oregon and six municipalities* have implemented these kinds of scheduling provisions, with other state and local legislators considering similar action

Dimensions of problematic work schedules				
Instability: Fluctuations in the number and timing of employees' work hours	**Unpredictability:** The difficulty of employees anticipating when they will work and when they will not	**Inadequate hours:** Not working enough hours to earn an adequate living	**Lack of input:** Not having a say in how much or when you work	**Nonstandard timing:** Working during times outside the conventional Monday-through-Friday daytime schedule
Major provisions in scheduling legislation				
A good-faith estimate requires firms to provide employees with an accurate estimate of the number (and, in some locations, also the timing) of hours they will work, including any on-call shifts, which also improves predictability	**Two-week advance notice** by firms of employees' work schedules **"Predictability pay"** to employees for employer-driven changes to their original work schedule **The right of employees to refuse** to work shifts different than on the original schedule, which also improves schedule input	**Access to hours** requires employers to offer available hours to current employees before hiring new staff	**The right of employees to request** a change in their regular work schedule without fear of retaliation, and the right to receive accommodation for major life events, such as school and caregiving	**The right to rest,** also called a "clopening" provision, which gives employees the right to refuse to work back-to-back shifts and extra compensation when agreeing to do so

*The six municipalities are San Francisco, Seattle, New York City, Philadelphia, Chicago, and Emeryville, California.

Source: Author's analysis.

Scheduling legislation is designed to preserve flexibility for both employers and employees

One concern of employers is that regulating scheduling practices will impede profitability by limiting their ability to adjust labor to changing demand. But the provisions of the laws place more emphasis on improving schedule predictability rather than schedule stability. This focus on predict-ability preserves labor flexibility for employers. Notably, even though workers' schedules are to be posted two weeks in advance of each workweek, these laws do not prohibit employers from making changes to the schedules once they are posted. Instead, the laws require employers to provide a premium—"predictability pay"—to workers when a manager requests a change, commonly an extra hour of pay.

Predictability pay for schedule changes is a risk-sharing approach. It acknowledges that schedule changes create costs for workers such as by disrupting childcare arrangements, school and training schedules, and transportation arrangements. Just as an overtime premium compensates hourly employees for working beyond what is conventionally viewed as a reasonable workweek, predictability pay helps to compensate employees for the adjustments they have to make when accommodating employer requests for flexibility. Predictability pay also provides an incentive to managers to limit schedule changes to those literally worth it to the business.

Of equal concern is that by increasing the cost to employers of schedule changes, scheduling legislation will reduce flexibility for employees. But the predictability premium only pertains to employer-driven schedule changes. The laws do not require that employers pay a premium when employees swap shifts with one another or actively initiate a change, including requesting additional hours or even leaving work early.

Moreover, although it may seem logical that employers may become hesitant to grant an employee's request for time off out of fear that they will have to provide predictability pay to another employee who works those hours, the administrative rules governing the implementation of current laws outline procedures employers can follow to respond to such employee-driven schedule changes without having to pay a predictability premium. And the "right to request" and "access to hours" provisions, along with the "right to refuse" to work hours not on the original work schedule, expand employee control over work hours.

In sum, the concern that scheduling legislation will necessarily curtail employer or employee flexibility appears overstated, as does the assumption that low-paid jobs provide substantial flexibility to begin with—more than 50 percent of low-paid hourly workers say they have little or no input into the number or timing of their work hours.[17] Nonetheless, such concerns are important and are being addressed in ongoing research on the implementation and effects of current scheduling legislation, described below.

Problematic scheduling practices are often driven by factors under employers' control

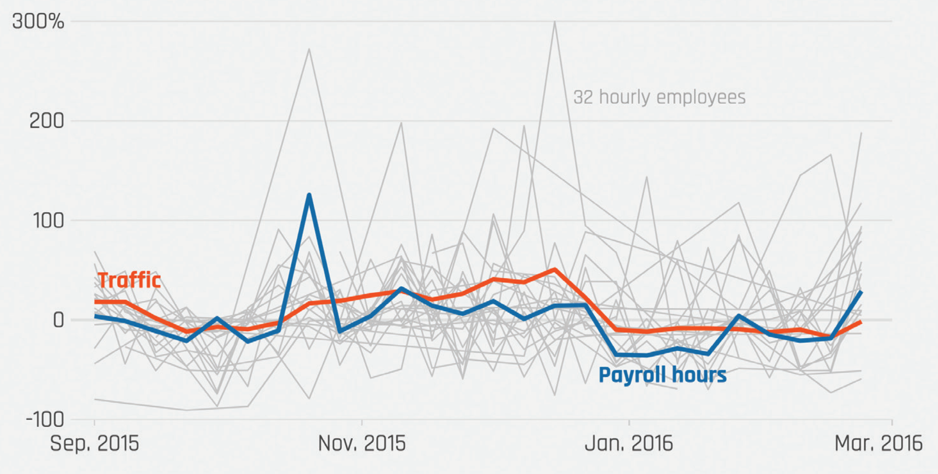
The common view is that schedule instability and unpredictability are driven by factors outside the control of employers, notably variations in consumer demand. But research indicates that much of the variation in employees' schedules is driven by internal corporate processes, such as the accountability practices discussed above and adjustments to scheduled sales promotions and deliveries rather than by changing consumer demand.[18]

A telling case in point is data from one store that participated in the Gap scheduling experiment referenced above. Specifically, the data show that although there are certainly peaks and valleys in traffic and overall store labor hours, individual employees' hours vary much more dramatically. (See Figure 1.)

FIGURE 1

Hourly worker schedule instability is not only due to retail store customer traffic

Work-hour instability at a Gap retail store compared to customer traffic



...the data show that although there are certainly peaks and valleys in traffic and overall store labor hours, individual employees' hours vary much more dramatically.

Source: Susan Lambert and others, "The Stable Scheduling Study" (2019). Details available from author.

Each thin line represents a store employee and shows how much an individual employee's hours diverged from his/her average hours over a six-month period. The thick blue line graphs how much the store's overall labor hours varied from its mean over the months. And the orange line shows how much customer traffic varied. As is evident, although there are certainly peaks and valleys in traffic and overall store labor hours, individual employees' hours vary much more dramatically. This and other evidence indicates that there is more stability and predictability already in business that can be passed on to workers by improving basic business and scheduling practices.[19]

Is scheduling legislation effective?

Given that scheduling legislation is new, so too is research on its effects. To date, state-of-the-art studies conducted in Seattle and Emeryville, California suggest these laws are making a difference in the lives of workers in jobs in retail and food service. By comparing survey responses of retail and food-service employees working in the same firms but in municipalities with and without scheduling legislation, sociologists Kristen Harknett and Véronique Irwin at the University of California, San Francisco and Daniel Schneider at UC Berkeley are able to isolate changes in workers' scheduling experiences due to Seattle's Secure Scheduling Ordinance, which became law in 2017. They find that just eight months after the new scheduling law went into effect, the share of covered employees reporting at least 14 days advance notice increased by almost 20 percent (more than 9 percentage points). The new law also more than doubled the reported receipt of "predictability pay" for schedule changes (a 7 percentage point increase relative to baseline).[20] In the second year of the evaluation of Seattle's scheduling ordinance, Schneider and Harknett will examine the possible effects on employee health and well-being.

In Emeryville, economist Elizabeth Ananat at Columbia University and child development expert Anna Gassman-Pines at Duke University have fielded time-diary studies with mothers of young children that enable them to track the effects of scheduling legislation on parents' daily well-being. They find that the Emeryville Fair Workweek Ordinance decreased daily instances of schedule unpredictability overall and also reduced last-minute schedule changes. They also find an overall effect on the well-being of working parents, with the law improving subjective reports of sleep quality.[21]

Research conducted by myself and my colleague Anna Haley at Rutgers University on the implementation of scheduling laws by frontline managers in Seattle, New York City, and Philadelphia indicates that compliance will take time. The laws are complex, and firms and managers are still figuring out strategies of implementation.[22] The full effects of the laws may not be realized for some time.

A consistent challenge for managers is complying with requirements for documentation of the scheduling process, especially documenting schedule changes. Even though most covered employers are part of large chains, not all use sophisticated software, and the manager/owners of franchises are often left to develop their own systems. The federal government could help businesses by subsidizing research and development of technology to ease compliance and documentation, facilitating enforcement too.

Is federal legislation a useful next step?

The federal-level Fair Labor Standards Act of 1938 was informed by decades of prior state-level legislation demonstrating that businesses could, in fact, thrive without child labor and testing employer incentives to reduce the punishingly long work hours characteristic of the industrial revolution—what is now our overtime premium. Eight decades later, similar policy innovation at the state and local level to improve the quality of U.S. jobs in the 21st century lays a foundation for federal legislation, providing evidence of the feasibility of changing employer scheduling practices and the consequences for workers, families, and firms of doing so.[23]

In addition to establishing universal work-hour standards, federal legislation might also lessen implementation challenges. Both corporate representatives and software vendors express a reluctance to change their scheduling and "workforce optimization" technologies, given that administrative rules vary from one city to another.[24] Perhaps most importantly, without federal legislation, there is no clear incentive for corporations to change the labor-cost accountability structures that drive these practices.

Conclusion

Workers in low-paid hourly jobs often face a constellation of problematic scheduling conditions, among them fluctuating hours, short notice of their work schedules, too few scheduled hours, and little input into when and how much they work. Research is clear that the consequences of these conditions can be grim. Unstable, unpredictable hours over which workers have little control make it difficult to care for loved ones, do well in school, and achieve economic security.

But change is feasible. The best available evidence indicates that it is possible for employers to improve the predictability and stability of employees' schedules while also meeting business imperatives. Currently, firms' accountability metrics focus managers' attention on the instability and unpredictability in business demands, leading managers to discount the substantial stability and predictability that also exists. Scheduling legislation shifts incentive structures and the focus of managers. With the right tools and assistance, managers can learn to identify and deliver greater stability and predictability to workers. The federal government has an opportunity to provide leadership in transforming problematic scheduling practices into fair scheduling standards that will support the vitality of U.S. families and firms.

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Endnotes

1 Dan Clawson and Naomi Gerstel, *Unequal Time: Gender, Class, and Family in Employment Schedules* (New York: Russell Sage Foundation, 2014); Anna Haley-Lock and Linn Posey-Maddox, "Fitting It All In: How Mothers' Employment Shapes Their School Engagement," *Community, Work & Family* 19 (3) (2016): 302–321; Julia R. Henly and others, "Determinants of Subsidy Stability and Child Care Continuity" (Washington: Urban Institute, 2015), available at https://www.urban.org/sites/default/files/publication/65686/2000350-Determinants-of-Subsidy-Stability-and-Child-Care-Continuity.pdf.

2 Susan J. Lambert, Julia R. Henly, and JaeSeung Kim, "Precarious Work Schedules as a Source of Economic Insecurity and Institutional Distrust," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 5 (4) (2019): 218–57.

3 Daniel Schneider and Kristen Harknett, "Consequences of Routine Work-Schedule Instability for Worker Health and Well-being," *American Sociological Review* 84 (1) (2019): 82–114.

4 Lambert, Henly, and Kim, "Precarious Work Schedules as a Source of Economic Insecurity and Institutional Distrust."

5 Ibid.

6 Lonnie Golden, "Still Falling Short on Hours and Pay: Part-time Work Becoming New Normal" (Washington: Economic Policy Institute, 2016), available at https://www.epi.org/publication/still-falling-short-on-hours-and-pay-part-time-work-becoming-new-normal/.

7 Lambert, Henly, and Kim, "Precarious Work Schedules as a Source of Economic Insecurity and Institutional Distrust"; Schneider and Harknett, "Consequences of Routine Work-Schedule Instability for Worker Health and Well-being."

8 Susan J. Lambert and others, "The Magnitude and Meaning of Work Hour Volatility among Millennials in the U.S. Labor Market" (under review; available from author).

9 Ibid.

10 Kesavan Saravanan, Bradley R. Staats, and Wendell Gilland, "Volume Flexibility in Services: The Costs and Benefits of Flexible Labor Resources," *Management Science* 60 (8) (2014): 1884–1906.

11 Joan C. Williams and others, "Stable Scheduling Increases Productivity and Sales: The Stable Scheduling Study" (2018), available at https://www.ssa.uchicago.edu/sites/default/files/uploads/2018_Stable_Schedules_Study_Report.pdf.

12 Susan J. Lambert, "The Limits of Voluntary Employer Action for Improving Low-level Jobs." In Marion Crain and Michael Sherraden, eds., *Working and Living in the Shadow of Economic Fragility* (New York: Oxford University Press, 2014).

13 Francoise Carré and Chris Tilly, *Where Bad Jobs are Better: Why Retail Jobs Differ across Countries and Companies* (New York: Russell Sage Foundation, 2014); Eileen Appelbaum and Rosemary Batt, *Private Equity at Work: When Wall Street Manages Main Street* (New York: Russell Sage Foundation, 2017).

14 Carré and Tilly, *Where Bad Jobs are Better: Why Retail Jobs Differ across Countries and Companies*; Arne L. Kalleberg, *Precarious Lives: Job Insecurity and Well-being in Rich Democracies* (Cambridge, UK: Polity Press, 2018).

15 Susan J. Lambert, "Passing the Buck: Labor Flexibility Practices that Transfer Risk onto Hourly Workers," *Human Relations* 61 (9) (2008): 1203–1227.

16 In addition to jobs in retail, food service, and hospitality, the Chicago Fair Workweek Ordinance covers janitorial, maintenance, and security services, healthcare, manufacturing, warehouse services, and nonprofit organizations. Jobs must pay less than $26 per hour or $50,000 a year. The Chicago ordinance goes into effect July 1, 2020.

17 Lambert, Henly, and Kim, "Precarious Work Schedules as a Source of Economic Insecurity and Institutional Distrust."

18 Williams and others, "Stable Scheduling Increases Productivity and Sales: The Stable Scheduling Study"; Zeynep Ton, *The Good Jobs Strategy: How the Smartest Companies Invest in Employees to Lower Costs and Boost Profits* (Boston: Houghton Mifflin Harcourt, 2014).

19 Marshall Fisher, Santiago Gallino, and Serguei Nestessine, "Retailers are Squandering their Most Potent Weapons," *Harvard Business*

Review (2019), available at https://hbr.org/2019/01/retailers-are-squandering-their-most-potent-weapons; Susan J. Lambert and Julia R. Henly, "Managers' Strategies for Balancing Business Requirements with Employee Needs" (Chicago: University of Chicago, 2010), available at https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/3/1174/files/2018/06/univ_of_chicago_work_scheduling_manager_report_6_25_0-1gq8rxc.pdf; Ton, *The Good Jobs Strategy: How the Smartest Companies Invest in Employees to Lower Costs and Boost Profits*.

20 West Coast Poverty Center, "Evaluation of Seattle's Secure Scheduling Ordinance: Year 1 Findings" (Seattle: University of Washington, 2019), available at https://www.seattle.gov/Documents/Departments/CityAuditor/auditreports/SSO_EvaluationYear1Report_122019.pdf.

21 Elizabeth O. Ananat, Anna Gassman-Pines, and J. Fitz-Henley, "The Effects of the Emeryville, CA Fair Workweek Ordinance on the Daily Lives of Low-wage Workers and Their Families," Paper presented at the Society for Research in Child Development Biennial Meeting, Baltimore, MD, 2019.

22 West Coast Poverty Center, "Evaluation of Seattle's Secure Scheduling Ordinance: Year 1 Findings."

23 The Schedules That Work Act has been introduced into Congress during three sessions: 2015–2016, 2017–2018, and 2019–2020. The lead sponsors are Sen. Elizabeth Warren (D-MA) in the Senate and Rep. Rosa DeLauro (D-CT) in the House. The bill incorporates most of the provisions included in municipal-level legislation.

24 West Coast Poverty Center, "Evaluation of Seattle's Secure Scheduling Ordinance: Baseline Report and Considerations for the Year 1 Evaluation" (Seattle: University of Washington, 2018), available at https://www.seattle.gov/Documents/Departments/CityAuditor/auditreports/SecureSchedulingReport.pdf.

EARNINGS INSTABILITY

Earnings instability and mobility over our working lives: Improving short- and long-term economic well-being for U.S. workers

By Emily E. Wiemers, Syracuse University, and
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Overview

Rising inequality in earnings is a fact of the U.S. economic landscape. The rise in earnings inequality has occurred because earnings have become more unstable in the short term, and because the more stable, or permanent, part of earnings has become more unequal in the long term. As permanent earnings have become more unequal, workers find it harder to move up the earnings distribution over their careers.[1]

Instability in year-to-year earnings, or earnings volatility, can result from economywide trends such as increases in unemployment or decreases in work hours during recessions, or from more microeconomic trends such as changes in the prevalence of precarious work arrangements, job turnover, or bonuses and other types of performance pay.[2] Some volatility, such as receiving a large bonus or switching to a higher-paying job, is welcome. Yet an unexpected negative earnings shock can be difficult to manage, especially for low-income workers facing an involuntary or unanticipated decline in earnings.[3]

Permanent earnings inequality reflects longer-term trends in the U.S. labor market such as changes in the returns to education and other skills, international trade and technological change, changes in unionization, and the value of the minimum wage.[4] Growing permanent earnings inequality not only increases persistent disparities in living standards among workers but also is associated with declines in long-run earnings mobility. The result is that an increasing number of workers will have persistently low earnings while other workers will spend large parts of their working lives at the very top of the earnings distribution.[5]

In this essay, we briefly review what recent research suggests about trends in short-run earnings volatility, permanent earnings inequality, and mobility, as well as the causes of these trends. We then offer a number of policy recommendations that we think will help alleviate some of the negative effects of these recent changes. In particular, we discuss the merits of incentives and reforms to boost household incomes and savings alongside education reforms to help today's workers find good jobs and our future workers be better prepared early in life to contribute productively over the long term.

Key Takeaways

THE EVIDENCE

- Rising U.S. earnings inequality is due to earnings becoming more volatile in the short term while the more stable, or permanent, part of earnings become more unequal in the long term.

- U.S. workers consequently find it harder to move up the earnings ladder over their careers. This trend is exacerbated by the growing precarity of work, especially for less-educated and low-income workers.

THE SOLUTIONS

- U.S. workers need more accessible and robust public safety net programs and incentives to increase private savings to buffer short-term declines in earnings and spells of unemployment, alongside investments in education and pathways to high-quality employment to reduce long-term earnings inequality and improve upward earnings mobility.

What do we know about earnings volatility, permanent earnings inequality, and mobility?

Most evidence shows that year-to-year volatility in men's wage and salary earnings increased considerably from the 1970s through the early 1980s as inequality increased rapidly.[6] Since the 1980s, short-term earnings volatility for men is highly cyclical, increasing during recessions and declining during expansions, though whether the trend is broadly increasing, flat, or decreasing differs between datasets and studies.[7]

Earnings volatility is the highest for men with less education and with lower earnings—that is, for workers who likely have the hardest time maintaining their well-being during periods of low earnings.[8] For women, earnings are more stable than in the past, with falling earnings volatility since the 1970s, though earnings volatility for women is higher than for men.[9] Volatility in family income—which includes both wage and salary earnings and other sources of income such as transfers from government programs, including the Earned Income Tax Credit and Supplemental Nutrition Assistance Program—is rising over time, and government transfers are less able to buffer earnings fluctuations than in the past.[10]

Even ignoring the year-to-year fluctuation in earnings and focusing instead on the more constant part of earnings over a lifetime, permanent earnings inequality is growing rapidly. Much of this increase is driven by an increase in inequality in earnings early in workers' careers.[11] This increase in permanent earnings inequality means that individuals are more "stuck in place" in the earnings distribution throughout their careers, with smaller chances of upward mobility than in the past.[12]

What are the risks that U.S. workers face?

Workers face two distinct types of risk. Despite the relatively flat trend in short-term earnings instability since the 1990s for all workers, short-term earnings risk remains large and is growing for less-educated and lower-earning workers. Unanticipated declines in earnings are particularly problematic for low-income families and less-educated adults who have little in savings. Only 29 percent of low-income households have savings for unexpected emergencies, and 42 percent of adults with a high school degree or less could not pay their monthly bills if faced with an unexpected $400 expense.[13] These workers have limited ability to weather earnings shocks because of the weakening of the public safety net, because low earnings make saving difficult, and because they lack access to formal low-cost credit markets.

At the same time, the vast majority of workers face a new risk: If early-career earnings are low, the likelihood that earnings remain low has increased. Workers with more education are more likely to have high earnings, but even for these workers, the likelihood of rising up through the earnings distribution over a career is declining.

These dual risks necessitate investment in policies that reduce short-run earnings volatility and enhance workers' ability to cope with temporarily low earnings, particularly for workers with fewer resources, alongside policies to promote careers that provide for long-run upward mobility.

Policy remedies for short-term earnings volatility

Earnings can be volatile because of both positive changes such as end-of-year bonuses, or negative ones such as unexpected cuts in work hours. We focus on policies that address the source and consequences of negative earnings changes, particularly for families who are less likely to be able to adequately weather periods of lower earnings.

Policies to reduce volatility

Outside of employment transitions, we know relatively little about the sources of earnings volatility, which makes articulating policies that reduce volatility difficult. Reducing employment transitions reduces earnings volatility. We focus on policies to reduce earnings volatility from two specific sources—poor health and family caregiving responsibilities—that would be particularly helpful to lower-income families.

The first policy is to increase access to paid leave for workers' own healthcare needs and for family caregiving. Employees' access to such leave is more common among high earners than low earners, though eight states, the District of Columbia, and the federal government for its own employees have enacted paid leave policies. Access to paid leave may reduce the instability of earnings for workers who themselves become ill or whose family members (including infants) require care.[14]

Similarly, access to flexible, low-cost childcare may also promote stable earnings. Such childcare arrangements would provide insurance against unanticipated childcare needs that can disrupt work and would be compatible with the irregular work schedules that are common for low-income workers.[15]

Policies to help families cope with downward earnings shocks

Because unexpected negative earnings changes are inevitable, families must be able to maintain basic living standards during periods of low earnings.

The Supplemental Nutrition Assistance Program is one of the most effective transfer programs to help all families cope with temporary spells of unemployment or low earnings because benefits through this program can be obtained quickly.[16] Eliminating work requirements for this program entirely or establishing a national unemployment trigger in which work requirements would be automatically suspended when unemployment is high would help workers during recessions when short-term earnings volatility spikes.[17] Because low-income and less-educated individuals face persistently volatile earnings, policymakers also should increase the value of benefits—for example, by accounting for the time required for food preparation and the geographic variation in food prices—helping those workers who face volatile earnings in both recessionary and expansionary periods.[18]

Government policies can also help households save to self-insure against short-term earnings losses. A suite of small policy changes would facilitate higher levels of savings for low-income households. First, improving access to banking services for low-income families would encourage saving. Only 17 percent of households without a bank account report saving for unexpected emergencies, compared to more than 55 percent of households who have at least one checking or savings account.[19] These expansions must encourage savings vehicles such as no-overdraft accounts to prevent households with low levels of savings from incurring substantial costs from banking.[20]

Second, we should provide incentives for individuals to save regularly from each paycheck or from lump sum amounts from government transfer programs such as the Earned Income Tax Credit or the child tax credit. Encouraging employers to offer nonretirement savings plans to workers though payroll deductions and for households to receive tax refunds through direct deposit to a bank account would both help encourage saving.[21] Ten states and one city have enacted legislation allowing for state-facilitated retirement savings programs, some of which feature autoenrollment, and nonretirement savings plans could follow a similar model.[22] Direct deposit of tax refunds from the Earned Income Tax Credit are particularly relevant for low-income families and are large, worth an average of $2,488 in 2018.[23]

Policy remedies to address long-term inequality and stagnant mobility over our working lives

Policy proposals to decrease long-term inequality and increase long-term economic mobility should help young adults start their careers in strong economic positions. Many of these policies would be cost effective because the costs of the programs are offset by increased tax revenues and decreased transfer payments over the working lives of adults.

These policies start from early childhood. Expanding access to high-quality preschool has been shown to increase educational attainment and to improve income and health in adulthood, particularly for children from low-income families.[24] Moreover, these programs have high rates of return: $1 invested in the Perry Preschool program—one of the most successful high-quality preschool interventions for black children with risk factors of failing in school—returned $7 to $12 back to society.[25]

Promoting college graduation is also important for reducing long-term earnings inequality and increasing long-term earnings mobility. The gap in college completion between individuals from high- and low-income families is growing.[26] Because college-educated workers have higher levels of long-term mobility than less-educated workers, and because these workers begin their career at higher points in the earnings distribution and are more likely to stay there throughout their working lives, promoting college completion among children from low-income families is critical.[27]

There are several policy options to consider. The expansion of Pell Grants, which target low-income college students, is one such policy. Its costs are recouped within 10 years.[28] Increasing state funding for community colleges to provide more clear pathways to both associates degrees and four-year colleges would also improve graduation outcomes for low-income students.[29]

Because much of lifetime earnings inequality is driven by inequality in early-career earnings, and permament inequality is growing even among college graduates, young adults must start their careers on a solid trajectory.[30] Assisting four-year and community colleges to develop programs to teach students how to conduct a job search to find a high-quality first job or to establish explicit pathways to apprenticeships for high-demand careers is another step toward maximizing early-career earnings and improving long-term earnings mobility.[31]

Conclusion

Workers in the United States face the risks of high short-term earnings volatility for less-educated and lower-income workers, declining rates of mobility, and increasing permanent earnings inequality for most workers. To cope with these risks, workers require a combination of more accessible and robust public safety net programs and incentives to increase private savings to buffer short-term declines in earnings and spells of unemployment, alongside investments in education and pathways to high-quality employment to reduce long-term earnings inequality. Importantly, increases in education and high-quality employment—both of which reduce long-term inequality and increase long-term mobility—also reduce the number of workers with particularly high levels of short-term earnings volatility, thus providing a double benefit to U.S. workers.

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Endnotes

1 Steven J. Haider, "Earnings Instability and Earnings Inequality of Males in the United States: 1967 – 1991," *Journal of Labor Economics* 19 (4) (2001): 799–836; Wojchiech Kopczuk, Emmanuel Saez, and Jae Song, "Earnings Inequality and Mobility in the United States: Evidence from Social Security Data Since 1937," *Quarterly Journal of Economics* 125 (1) (2011): 91–128; Robert A. Moffitt and Peter Gottschalk, "Trends in the Transitory Variance of Male Earnings: Methods and Evidence," *Journal of Human Resources* 47 (1) (2012): 204–236.

2 Moffitt and Gottschalk, "Trends in the Transitory Variance of Male Earnings: Methods and Evidence"; Donggyun Shin and Gary Solon, "Trends in men's earnings volatility: What does the Panel Study of Income Dynamics show?" *Journal of Public Economics* 95 (2011): 973–982.

3 Richard Blundell, Luigi Pistaferri, and Ian Preston, "Consumption Inequality and Partial Insurance," *American Economic Review* 98 (5) (2008): 1887–1921; Kopczuk, Saez, and Song, "Earnings Inequality and Mobility in the United States: Evidence from Social Security Data Since 1937." For a discussing of similar causes for rising in wage inequality, see David H. Autor, Lawrence F. Katz, and Melissa S. Kearney, "Trends in U.S. Wage Inequality: Revising the Revisionists," *Review of Economics and Statistics* 90 (2) (2008): 300–323, and Thomas Lemieux, "Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?" *American Economic Review* 96 (3) (2006): 461–514.

4 Peter Gottschalk and Robert A. Moffitt, "The Rising Instability of U.S. Earnings," *Journal of Economic Perspectives* 23 (4) (2009): 3–24; David H. Autor, David Dorn, and Gordon H. Hanson, "Untangling Trade and Technology: Evidence from Local Labour Markets," *Economic Journal* 125 (584) (2015): 621–646.

5 Michael D. Carr and Emily E. Wiemers, "The Decline in Lifetime Earnings Mobility in the U.S.: Evidence from Survey-Linked Administrative Data." Working Paper (Washington Center for Equitable Growth, 2016).

6 Haider, "Earnings Instability and Earnings Inequality of Males in the United States: 1967 – 1991"; Moffitt and Gottschalk, "Trends in the Transitory Variance of Male Earnings: Methods and Evidence"; Shin and Solon, "Trends in men's earnings volatility: What does the Panel Study of Income Dynamics show?"; James P. Ziliak, Bradley Hardy, and Christopher Bollinger, "Earnings volatility in America: Evidence from matched CPS," *Labour Economics* 18 (2011): 742–754. Though the paper focuses on household income volatility, for a table with results from many other studies of male earnings volatility, see Karen Dynan, Douglas Elmendorf, and Daniel Sichel, "The Evolution of Household Income Volatility," *The B.E. Journal of Economic Analysis & Policy* 12 (2) (2012): 1–42.

7 Michael D. Carr and Emily E. Wiemers, "New Evidence on Earnings Volatility in Survey and Administrative Data," *American Economic Review Papers & Proceedings* 108 (2018): 287–291; Molly Dahl, Thomas DeLeire, and Jonathan A. Schwabish, "Estimates of Year-to-Year Volatility in Earnings and Household Incomes from Administrative, Survey, and Matched Data," *Journal of Human Resources* 46 (4) (2011): 750–774; John Sabelhaus and Jae Song, "Earnings Volatility Across Groups and Time," *National Tax Journal* 2 (62) (2009): 347–364; John Sabelhaus and Jae Song, "The Great Moderation in Micro Labor Earnings," *Journal of Monetary Economics* 57 (2010): 391–403.

8 Gottschalk and Moffitt, "The Rising Instability of U.S. Earnings"; Fatih Guvenen, Serdar Ozkan, and Jae Song, "The Nature of Countercyclical Income Risk," *Journal of Political Economy* 22 (3) (2014): 621–660; Bradley Hardy and James P. Ziliak, "Decomposing Trends in Income Volatility: The 'Wild Ride' at the Top and Bottom," *Economic Inquiry* 52 (1) (2014): 459–476.

9 Dynan, Elmendorf, and Sichel, " The Evolution of Household Income Volatility"; Ziliak, Hardy, and Bollinger, "Earnings volatility in America: Evidence from matched CPS."

10 Dynan, Elmendorf, and Sichel, "The Evolution of Household Income Volatility"; Hardy and Ziliak, "Decomposing Trends in Income Volatility: The 'Wild Ride' at the Top and Bottom."

11 Kopczuk, Saez, and Song, "Earnings Inequality and Mobility in the United States: Evidence from Social Security Data Since 1937"; Fatih Guvenen and others, "Lifetime Incomes in the United States over Six Decades." Working Paper no. 23371 (National Bureau of Economic Research 2017).

12 Carr and Wiemers, "The Decline in Lifetime Earnings Mobility in the U.S.: Evidence from Survey-Linked Administrative Data."

13 Federal Deposit Insurance Corporation, *2017 FDIC National Survey of Unbanked and Underbanked Households* (2017); Federal Reserve Board, *Report on the Economic Well-Being of U.S. Households in 2018* (2019).

14 LeaAnne Derigne and others, "Paid Sick Leave and Preventive Health Care Service Use Among U.S. Working Adults," *Preventative Medicine* 99 (2017): 58–62; Maya Rossin-Slater, Christopher J. Ruhm, and Jane Waldfogel, "The Effects of California's Paid Family Leave Program on Mothers' Leave-Taking and Subsequent Labor Market Outcomes," *Journal of Policy Analysis and Management* 32 (2) (2013): 224–245.

15 Janice Compton and Robert A. Pollak, "Family Proximity, Childcare, and Women's Labor Force Attachment," *Journal of Urban Economics* 79 (2014): 72–90.

16 For a review of the effectiveness of SNAP, see Janet Currie, "U.S. Food and Nutrition Programs." In Robert A. Moffitt, ed., *Economics of Means-Tested Transfer Programs in the United States* (Chicago: Chicago Press, 2003), pp. 199–289; Hilary Hoynes and Diane Whitmore Schanzenbach, "U.S. Food and Nutrition Programs." In Robert A. Moffitt, ed., *Economics of Means-Tested Transfer Programs in the United States, Volume 1* (Chicago: Chicago Press, 2016), pp. 219–301.

17 Hilary Hoynes and Diane Whitmore Schanzenbach, *Strengthening SNAP as an Automatic Stabilizer* (Washington: The Hamilton Project at The Brookings Institution, 2019).

18 James P. Ziliak, *Modernizing SNAP Benefits* (Washington D.C.: The Hamilton Project at The Brooking Institution, 2016).

19 Federal Deposit Insurance Corporation, *2017 FDIC National Survey of Unbanked and Underbanked Households*.

20 Michael S. Barr, "Banking the Poor," *Yale Journal on Regulation* 21 (1) (2004): 121–128.

21 Karen Dynan, "Proposal 6: Better Ways to Promote Savings though the Tax System." In Michael Greenstone, Max Harris, Karen Li, Adam Looney, and Jeremy Patashnik, eds., *15 Ways to Rethink the Federal Tax System* (Washington D.C.: The Hamilton Project and The Brookings Institution, 2013), pp. 36–40.

22 Georgetown Center for Retirement Initiatives, "State-Facilitated Retirement Savings Programs: A Snapshot of Program Design Features" (2019).

23 "EITC Fast Facts," available at https://www.eitc.irs.gov/partner-toolkit/basic-marketing-communication-materials/eitc-fast-facts/eitc-fast-facts (last accessed October 4, 2019).

24 Pedro M. Carneiro and James J. Heckman, "Human Capital Policy." In Benjamin Friedman, ed., *Inequality in America: What Role for Human Capital Policies?* (Cambridge, MA: MIT Press, 2003), pp. 77–240; David Deming, "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start," *American Economic Journal: Applied Economics* 1 (3) (2009): 111–134.

25 James J. Heckman and others, "The Rate of Return to the High/Scope Perry Preschool Program," *Journal of Public Economics* 94 (1-2) (2010): 114–128; Nathanial Hendren and Ben Sprung-Keyser, "A United Welfare Analysis of Government Policies." Working Paper (Opportunity Insists, 2019). Both show generally that programs targeted to children (including college students) have a high Marginal Value of Public Funds, or MVPF.

26 Martha J. Bailey and Susan M. Dynarski, "Inequality in Postsecondary Education." In Greg J. Duncan and Richard J. Murnane, eds., *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children* (New York: Russel Sage Foundation and Chicago: Spencer Foundation, 2011), pp. 117–132.

27 Carr and Wiemers, "The Decline in Lifetime Earnings Mobility in the U.S.: Evidence from Survey-Linked Administrative Data."

28 Jeffrey T. Denning, Benjamin M. Marx, and Lesley J. Turner, "ProPelled: The Effects of Grants on Graduation, Earnings, and Welfare," *American Economic Journal: Applied Economics* 11 (3) (2019): 193–224.

29 Harry J. Holzer and Sandy Baum, *Making College Work: Pathways to Success for Disadvantaged Students* (Washington: Brookings Institution Press, 2017).

30 Guvenen and others, "Lifetime Incomes in the United States over Six Decades."

31 Holzer and Baum, *Making College Work: Pathways to Success for Disadvantaged Students*.

SNAP

Policies to strengthen our nation's Supplemental Nutrition Assistance Program

By Hilary Hoynes, University of California, Berkeley and Diane Whitmore Schanzenbach, Northwestern University

Overview

Our nation's Supplemental Nutrition Assistance Program, previously known as food stamps, is a central element of the U.S. social safety net. SNAP is the nation's primary food support program, providing electronic vouchers that can be used to purchase most foods at participating retail outlets and helping low-income families afford the food that they need.

SNAP reaches a broad range of low-income individuals, including the elderly, disabled, families with children, workers, and the unemployed. During a typical month in 2018, the program helped 40 million people—about 1 out of every 8 Americans—afford the food they need. SNAP is means tested, and eligibility for the program requires that net household income (equal to total income less allowable deductions) be no higher than 100 percent of the poverty line, or about $1,780 per month for a family of three. This benefit is designed to supplement out-of-pocket spending on food, and benefits average about $4 per person per day. The result of this targeting is one of the most important anti-poverty programs in the United States.

A recent National Academy of Sciences report on child poverty finds that the elimination of the program would raise the child poverty rate from 13 percent to 18.2 percent. Only two federal refundable tax credits—the Earned Income Tax Credit and the refundable portion of the Child Tax Credit—are more successful at alleviating child poverty. Further, the report found that this supplemental nutrition assistance is the most effective program at reducing deep child poverty (income below 50 percent of the poverty line). Eliminating it would raise deep child poverty from 2.9 percent to an estimated 5.7 percent.

SNAP caseloads can quickly respond to increased need—for example, during economic downturns or natural disasters—and benefits are quickly spent, generally in the recipient's community, which also stimulates the local economy. This program increases households' spending on food, reduces recipients' likelihood of experiencing food insecurity, and improves economic and health outcomes.[1]

A key priority of the next US. Congress and administration in 2021 should be to preserve this important program and to enact policies that enhance its impacts on the macroeconomy and on children. This essay examines currently proposed changes to key policy components of the Supplemental Nutrition Assistance Program—its broad-based eligibility category, and its "public charge" critieria for legal immigrants, and conditions under which work requirements are waived—and then offers ways to strengthen the program's ability to protect young children by increasing SNAP benefits to their families, as well as enhance its recession-fighting power.

Key Takeaways

THE EVIDENCE

- The Supplemental Nutrition Assistance Program is effective and efficient, providing food benefits to a wide range of needy individuals and families, who purchase the foods they desire from local food retailers.

- Supplemental nutrition assistance reaches a broad range of low-income individuals, helping about 1 out of every 8 Americans afford the food they need.

THE SOLUTIONS

- Congress should repair the damage done to the program in the Trump era by reversing the rule changes for eligibility and the public charge determinations for legal immigrants, and strengthening the program's ability to protect young children by increasing these benefits to their families and enhancing the program's recession-fighting power.

Preserve work supports built into the Supplemental Nutrition Assistance Program

An increasing share of SNAP participants are low-wage working families, reflecting our nation's recent shift toward a work-based safety net for those who are not elderly. Today, about 80 percent of the federal safety net spending on families with children goes to working families, compared to about a third in 1990.[2] Per-child spending directed to nonworking families decreased in real terms by 20 percent over this period.[3]

But two recent policy changes by the Trump administration make it harder for many working families to receive SNAP benefits. First, the administration proposes to eliminate the program's broad-based category eligibility, which allows families with total incomes above 130 percent of poverty to participate if they have certain characteristics, such as high expenses for housing or childcare, or if the earned-income deduction in the SNAP formula gives them eligibility (they must still meet the net income test whereby net income is below 100 percent of the poverty line). The overwhelming majority of benefits paid under this broad-based eligibility go to households with total incomes between 131 percent and 150 percent of the poverty line. This category also allows the program itself to be more efficient by waiving the requirement to collect detailed information on a household's assets. Most SNAP participants have no or very low levels of assets, and documenting this for every case is costly to families that must provide documentation, as well as states that must collect it.

Families that include employed, elderly, or disabled family members are disproportionately represented among families receiving supplemental nutrition assistance through the broad-based category eligibility. The Trump administration's proposed elimination of broad-based eligibility introduces a sharp cliff in benefits that may act to discourage these SNAP participants from working, which would hurt working families. States' option to adopt broad-based category eligibility should be reinstated.

Second, the Trump administration has proposed changes to the public charge rule, a long-standing administrative rule that determines whether to confer citizenship to an immigrant, with one factor for consideration being whether the applicant is likely to become a "public charge" of the state. Recently, the Trump administration announced a change to the interpretation of this public charge rule, which will make it difficult for members of families of documented immigrants who receive SNAP benefits to obtain citizenship. This rule provides strong incentives for documented immigrants who are eligible for supplemental nutrition assistance to not participate in the program and other safety net benefit programs. Immigrant households make up a small share (only 6 percent) of the total SNAP caseload, yet the program provides an important source of supplemental food benefits to these families, many of which also include U.S. citizen children. Households that tap nutrition assistance often have immigrant members who are more likely to be employed than U.S. citizens who avail themselves of the program.

Removing documented immigrant families from the Supplemental Nutrition Assistance Program will cause harm to these families and to their local economies, as we note below. This proposed "public charge" categorization is grossly out of line with the modern realities of SNAP and related social safety net programs. Today, a large share of social benefits spending goes to support working families who need an extra boost to afford the food and medical care that they need, due to market realities such as stagnant wages and instability in employment and hours. The radical reforms proposed by the Trump administration that define anyone who is likely to use even modest amounts of SNAP benefits temporarily as a "public charge" should be rejected.

Supplemental nutrition assistance helps stimulate the economy

SNAP is an effective "automatic stabilizer" that responds quickly at times, in places, and for individuals experiencing the effects of periodic economic downturns.[4] At the depths of the Great Recession of 2007–2009, 15 percent of Americans received benefits from the program. At the time, Congress authorized a temporary increase in maximum benefits, which was a very effective fiscal stimulus—every dollar in new SNAP benefits during this period was estimated to spur $1.74 in economic activity.[5] We have elsewhere argued in more detail that temporary reforms to SNAP during the Great Recession were highly effective at increasing family well-being and fiscal stimulus.[6]

Learning from this experience, the next Congress and administration should implement two automatic-stabilizer reforms that would automatically kick in when an economic downturn occurs. Both would be triggered when the national unemployment rate rises at least 0.5 percentage points above its low in the prior 12 months, according to the so-called Sahm rule, developed by Claudia Sahm, the former chief of the Consumer and Community Development Research Section at the Federal Reserve in Washington, D.C.[7] (Sahm is now Director of Macroeconomic Policy at Equitable Growth.) First, maximum SNAP benefits should be automatically increased by 15 percent. Second, existing SNAP work requirements would automatically be waived by the U.S. Department of Agriculture when the Sahm rule indicates that a recession has begun. Automatic waivers at the beginning of a recession will quickly help alleviate hardship and stimulate the economy without costly delays. Note that this stands in contrast to the Trump Administration's recent final rule on work requirement waivers to SNAP, which makes it more difficult for areas to qualify for waivers even when unemployment is increasing.[8]

Strengthen the protection of young children and intergenerational benefits

An increasing base of evidence demonstrates that children's access to adequate resources in early life improves later-life health and economic outcomes.[9] In particular, research by the two authors of this essay and another colleague used a variation in the original introduction of SNAP across counties to estimate the impact of having access to the program from conception through age 5.[10] We found that access to food stamps before age 5 leads to large and statistically significant reductions in the subsequent adult incidence of "metabolic syndrome" (obesity, high blood pressure, heart disease, diabetes).

In addition, our research found that access to food stamps in early childhood for women (but not for men) leads to an increase in economic self-sufficiency. Our measure included current earnings and family income, and indicator variables for whether the individual graduated from high school, is currently employed, is currently not living in poverty, and is not participating in the Temporary Assistance for Needy Families program or SNAP. The effects were largest among those children who had access at the youngest ages and among those who spent their childhoods in the most disadvantaged counties.

More recent research extends our work and finds that early life access to SNAP benefits leads to improvements in long-term earnings and education, reductions in mortality, as well as a reduction in incarceration among black men.[11] And other research finds that access to the program between conception and age 5 improves the child's parent-reported health in later childhood, measured at ages 6 to 16 (with suggestive evidence of reductions in school days missed, doctors' visits, and hospitalizations at ages 6 to 16).[12]

Despite the evidence on the importance of resources during early childhood, young children in the United States face high rates of poverty: 13 percent of children overall, 18 percent of black children, and 22 percent of Hispanic children live in families with income below the poverty line.[13] Some straightforward changes to SNAP would yield a double dividend by reducing poverty for families with young children and improving the children's life trajectories.

To address the unmet needs of families with young children, we propose introducing a "young child multiplier" that would increase maximum SNAP benefits by 20 percent for households with children between ages 0 and 5. For any family with a qualifying child in the household, the maximum benefit will be multiplied by 1.2, then the family's benefits would be calculated according to the standard benefit formula for deductions and net income calculations.

Although SNAP is a universal program with no additional targeting besides income and asset criteria, it nonetheless serves a large number of young children and would be an effective lever for increasing resources in families with young children. As of 2017, more than one in five households receiving these benefits has a young child (aged 0 to 5), and 12.9 percent of all individuals receiving these benefits are young children. Of the $60.6 billion spent by the federal government to provide SNAP benefits in 2018, about $24 billion (40 percent of the total) went to families with young children.

A strength of the Supplemental Nutrition Assistance Program, compared to other programs such as the Earned income Tax Credit, is that SNAP benefits are paid monthly and can be incorporated into a household's regular expenses on an ongoing basis. We estimate the annual cost of the young child multiplier to be $6.5 billion. This would serve as a supplement to the current Women, Infants and Children, or WIC, social benefit program that already targets low-income families with young children. Paying additional benefits through the Supplemental Nutrition Assistance Program would be more efficient and effective than expanding WIC for several reasons. First, SNAP benefits are more flexible than WIC benefits and are expected to have a stronger protective effect on other aspects of a family's financial well-being. Furthermore, the WIC program is hampered by low participation rates among families with children—the participation rate drops from 35 percent of 1-year-olds to only 15 percent of 4-year-olds, while SNAP participation rates are relatively high, estimated at 85 percent in 2016[14] and steady across these ages.[15]

Continue the progress of increasing take-up rates for SNAP benefits

Like any safety net program, for SNAP to be effective, it must reach those who need it. Participation rates have been steadily increasing in recent years, up from a low of 53 percent in 2001. Despite this progress, high take-up rates are not universal. There is substantial variation in take-up rates across states—from 72 percent in California and 73 percent in Texas, to near 100 percent in Illinois, Oregon, and Michigan.[16] Participation rates are lower for the elderly and for those with lower expected benefit levels, such as eligible households with income above the poverty threshold.

Recent work shows that providing information on eligibility or information plus application assistance can meaningfully increase these rates for the elderly.[17] Other work shows that regular recertification periods contribute to incomplete take-up.[18] Overall, we need more experimentation and attention to maintaining and increasing SNAP participation.

Conclusion

The Supplemental Nutrition Assistance Program has been effective and efficient, providing food benefits to a wide range of needy individuals and families that, in turn, purchase the foods they desire from local food retailers. The next Congress and administration should repair the damage done to the program by recent rulemaking in the Trump era, reversing the rule changes for eligibility and public charge determinations for legal immigrants, and preserving the ability to appropriately waive work requirements during economic downturns. And policymakers should strengthen the program's ability to protect young children by increasing SNAP benefits to their families, as well as enhance its recession-fighting power. Each proposal would be a well-targeted incremental reform that would strengthen the program to better serve U.S. families.

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Endnotes

1 Janet Currie, "US Food and Nutrition Programs." In Robert A. Moffitt, ed., *Means-Tested Transfer Programs in the United States* (Chicago: University of Chicago Press, 2013), pp. 199– 289; Hilary Hoynes and Diane Whitmore Schanzenbach, "US food and nutrition programs." In Robert A. Moffitt, ed., *Economics of Means-Tested Transfer Programs in the United States*, vol. 1 (Chicago: University of Chicago Press, 2016), pp. 219–301.

2 The programs covered in this calculation include the Supplemental Nutrition Assistance Program, the Temporary Assistance for Needy Families program and its predecessor, the Aid to Families with Dependent Children program, the Earned Income Tax Credit, and the Child Tax Credit. Spending via the AFDC includes federal and state spending, and spending on TANF includes the federal block grant to states.

3 Hilary Hoynes and Diane Whitmore Schanzenbach, "Safety Net Investments in Children" (Washington: The Brookings Institution, 2018).

4 Alan S. Blinder and Mark Zandi, "The financial crisis: Lessons for the next one" (Washington: Center on Budget and Policy Priorities, 2015); Brynne Keith-Jennings and Dottie Rosenbaum, "SNAP Benefit Boost in 2009 Recovery Act Provided Economic Stimulus and Reduced Hardship" (Washington: Center on Budget and Policy Priorities, 2015).

5 Blinder and Zandi, "The financial crisis: Lessons for the next one."

6 Hilary Hoynes and Diane Whitmore Schanzenbach, "Strengthening SNAP as an Automatic Stabilizer" (Washinton: The Hamilton Project, 2018).

7 Claudia Sahm, "Direct Stimulus Payments to Individuals" (Washinton: The Hamilton Project, 2019).

8 Lauren Bauer, Jana Parsons and Jay Shambaugh, "New SNAP Rule Change Just Made It Harder to Combat Future Recessions," Washington: The Hamilton Project 2019), available at https://www.brookings.edu/blog/up-front/2019/12/04/new-snap-rule-change-just-made-it-harder-to-combat-future-recessions/.

9 Douglas Almond, Janet Currie, and Valentina Duque, "Childhood Circumstances and Adult Outcomes: Act II," *Journal of Economic Literature* 56 (4) (2018): 1360–1446; Hoynes and Schanzenbach, "Safety Net Investments in Children."

10 Hilary Hoynes, Diane Whitmore Schanzenbach, and Douglas Almond, "Long-run impacts of childhood access to the safety net," *American Economic Review* 106 (4) (2016): 903–34.

11 Martha Bailey and others, "Is the Social Safety Net a Long-Term Investment? Large-Scale Evidence from the Food Stamps Program." Working Paper (Goldman School of Public Policy, 2019).

12 Chloe N. East, "The Effect of Food Stamps on Children's Health: Evidence from Immigrants' Changing Eligibility," *Journal of Human Resources* (2018).

13 National Academies of Sciences, Engineering, and Medicine, "A Roadmap to Reducing Child Poverty" (2019).

14 U.S. Department of Agriculture, "Reaching Those in Need: Estimates of State Supplemental Nutrition Assistance Program Participation Rates in FY 2016" (2019).

15 Diane Whitmore Schanzenbach and Betsy Thorn, "Food Support Programs and their Impacts on Very Young Children," *Health Affairs* (2019).

16 U.S. Department of Agriculture, "Reaching Those in Need: Estimates of State Supplemental Nutrition Assistance Program Participation Rates in FY 2016."

17 Amy Finkelstein and Matthew J. Notowidigdo, "Take-up and Targeting: Experimental Evidence from SNAP." Working Paper 24652 (National Bureau of Economic Research, 2018).

18 Tatiana Homonoff and James Somerville, "Program Recertification Costs: Evidence from SNAP." Working Paper (2019).

TAX & MACROECONOMICS

A strong economy operates at its potential and delivers high living standards to the entire population. Monetary, fiscal, and tax policies all help determine the level and distribution of income, wealth, and economic well-being. As the distribution of income and wealth have changed in recent decades—with inequality rising—this trend has implications for the efficacy of policy tools we have now and new ones we need to strengthen the economy.

The Washington Center for Equitable Growth's work on tax policy aims to improve our understanding of how taxation, inequality, and U.S. economic growth relate to one another. This improved understanding will inform policies that promote strong, stable, and broad-based growth. Here, it is important to construe growth broadly, with consideration to the range of factors that contribute to economic well-being. Broad measures of economic well-being should reflect both the costs and the benefits of output growth. In contrast, Gross Domestic Product—a common measure of growth—largely ignores the costs and focuses only on the benefits.

With macroeconomic policy, Equitable Growth has two priorities. First, we want to understand how policies for the aggregate U.S. economy interact with the large differences across households—referred to as heterogeneity—in income, wealth, and economic well-being. Second, we want to identify policies that will allow the U.S. economy to achieve and remain at its potential. Proposals in our *Recession Ready* book with the Hamilton Project at The Brookings Institution show several ways to automatically support the economy in a recession. A less severe recession would keep more people employed, and stronger safety net programs, such as Unemployment Insurance, would help those who do lose their jobs. We also fund research on the effect of inequality and heterogeneity on inflation, the efficacy of monetary policy, and the factors that make recessions more severe.

The essays in this section demonstrate the far-reaching effects of the tax and macroeconomic policies in the United States. We hope that they are useful and contribute to the public debate.

—***Greg Leiserson*** *and* ***Claudia Sahm****,*
Washington Center for Equitable Growth

TAXES

A modest tax reform proposal to roll back federal tax policy to 1997

By Owen Zidar, Princeton University, and
Eric Zwick, University of Chicago

Overview

The fiscal position of the United States was much healthier in the late 1990s than it is today. The federal government now collects 3 percent less of Gross Domestic Product than it did two decades ago, yet the nation faces a number of pressing needs for new spending, including on infrastructure, research and development, education, and healthcare. This essay draws on new research to present a modest proposal to address this problem: roll back federal tax policy to 1997.

We propose a set of reforms to the individual income tax and estate tax, with particular attention to the tax treatment of "pass-through" income—profits from certain types of businesses that, for tax purposes, pass through to individual owners who then pay income tax on those profits. These reforms would raise revenues by $5 trillion over the next decade and reduce after-tax income inequality.

In terms of tax revenues, it's important to recognize that pass-through firms generate more taxable income than traditional C corporations, so the tax treatment of these business entities and their owners is key. Higher tax rates on individual income and these reforms for pass-through taxation represent important steps for taxing substantial amounts of income.

Key Takeaways

THE EVIDENCE

- The federal government now collects 3 percent less of Gross Domestic Product in tax revenues than it did two decades ago, yet the nation faces a number of pressing needs for new spending, including on infrastructure, research and development, education, and healthcare.

- Within the base of taxable income, nearly half of the rise since 1980 in the top 1 percent income share comes from pass-through businesses, which generate more taxable income than traditional C corporations, so higher tax rates on individual income and on pass-through income represent important steps for taxing substantial amounts of income.

THE SOLUTIONS

- Reforms to the individual income tax and estate tax, with particular attention to the tax treatment of pass-through income, would raise revenues by $5 trillion over the next decade and reduce after-tax income inequality.

Top incomes and U.S. tax policy

The rise in income inequality over the past several decades presents a natural place for federal policymakers to start to raise revenue. The rise of top incomes since the mid-1990s coincided with a series of changes to tax policy that reduced top tax burdens and contributed to rising federal budget deficits. These revenue reductions include the 2001 income tax cuts, the 2003 dividend tax cut, the 2001 estate tax cuts, and the reduction in capital gains taxes in 1997 and again in the early 2000s.

More recently, changes include the permanent extension of part of the 2001 income tax cuts and the personal and business income cuts in the 2017 tax law. While there were modest increases in income taxes in 2013, the net effect over the past 25 years of federal income tax policy has been to reduce the overall revenue collected from top earners. (See Figure 1.)

Our research seeks to characterize the nature of top income inequality and understand the drivers of its recent rise. Within the base of taxable income, nearly half of the rise since 1980 in the top 1 percent of income share comes from pass-through businesses, which includes the ordinary income earned by partners in partnerships and the profits of S corporation owners.[1] While this income is taxed as business profits, its underlying nature more closely reflects the labor income of the business owners.[2]

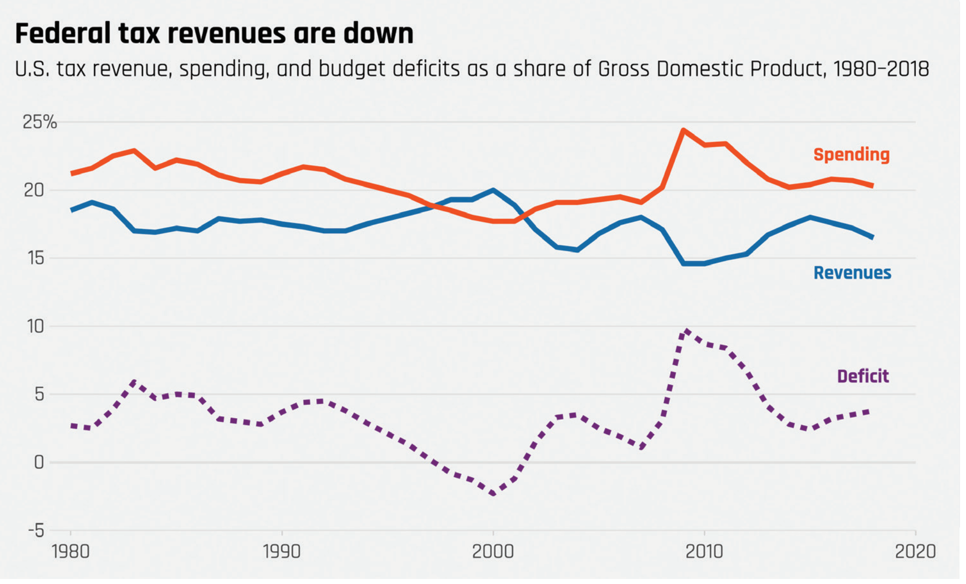

FIGURE 1

The rise in income inequality over the past several decades presents a natural place for federal policymakers to start to raise revenue.

Source: White House Office of Management and Budget, Historical Tables Table 1.2 — Summary of Receipts, Outlays, and Surpluses or Deficits (-) as Percentages of GDP: 1930–2024 (2019), available at https://www.whitehouse.gov/omb/historical-tables/.

We highlight three implications of these findings. First, policymakers need to look at income beyond wage income to understand top incomes and how to tax them. More than sixty cents of every dollar of income for top earners comes from nonwage sources. (See Figure 2.)

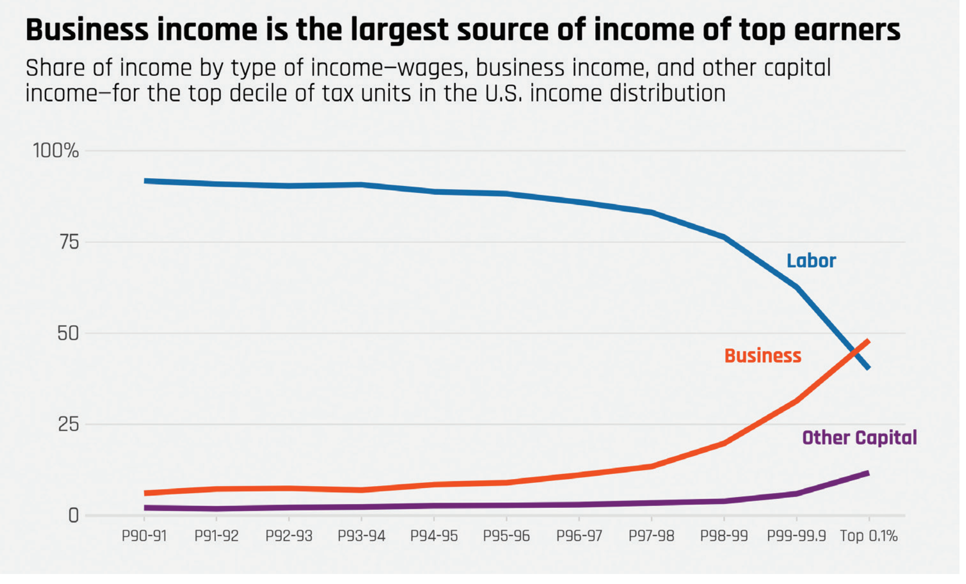

FIGURE 2

More than sixty cents of every dollar of income for top earners comes from nonwage sources.

Source: Matthew Smith and others, "Capitalists in the Twenty-First Century," The Quarterly Journal of Economics 134 (4) (2019): 1675–1745, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3340159.

Second, the data reveal a striking world of business owners who prevail at the top of the income distribution. Most top earners are pass-through business owners—a group that encompasses consultants, lawyers, doctors, and owners of large nonpublicly traded businesses such as autodealers and beverage distributors. More than 69 percent of the top 1 percent of income earners and more than 84 percent of the top 0.1 percent of income earners accrued some pass-through business income in 2014, the most recent year for which complete data are available.[3]

In 2014, in absolute terms, that amounts to more than 1.1 million pass-through owners with annual incomes of more than $390,000, and 140,000 pass-through owners with annual incomes of more than $1.6 million. In both number and aggregate income, these groups far surpass that of top public company executives, who have been the focus of much inequality commentary. (See Figure 3.)

Pass-through business owners account for a much larger share of people and income in the top 1 percent than public company executives

The number of individuals (thousands) and income (billions of dollars) accounted for by public company executives and pass-through business owners in the top 1 percent in the United States, 2014

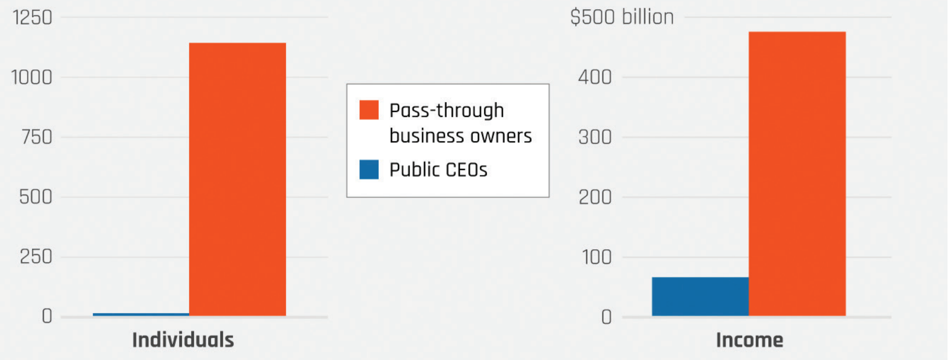

FIGURE 3

In both number and aggregate income, these groups far surpass that of top public company executives, who have been the focus of much inequality commentary.

Source: Matthew Smith and others, "Capitalists in the Twenty-First Century," The Quarterly Journal of Economics 134 (4) (2019): 1675–1745, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3340159.

Third, policymakers need to take seriously the nebulous boundary between labor and capital income, especially among business owners who can flexibly characterize their income to minimize taxes. Politicians in both parties, for example, have successfully lowered their taxes through the so-called Gingrich-Edwards loophole, named after former Speaker of the House Newt Gingrich (R-GA) and former Sen. John Edwards (D-NC), which involves characterizing compensation for consulting and speaking fees as business profits rather than wages.

Our tax reform proposal

The growth of pass-through businesses in recent decades and the concentration of ownership make the taxation of pass-throughs a central element of reform. While we believe that reforming the broader corporate tax system is important, detailing reforms to the corporate tax system is beyond the scope of this proposal. In terms of tax revenues, however, it's important to recognize that pass-through firms generate more taxable income than traditional C corporations.[4]

The tax treatment of these pass-through business entities and their owners is a critical part of reform. Higher tax rates on individual income and these reforms for pass-through taxation represent important steps for taxing substantial amounts of income. Rolling back tax policy to 1997 entails reforms in four main areas: marginal income tax rates, business income taxes, taxes on dividends and capital gains, and estate taxes. Let's consider each one in turn.

Marginal income tax rates

We propose returning the personal tax rate and bracket structure, adjusted for inflation, to where it was in January 1997. For married couples, taxes would amount to 36 cents instead of 24 cents of their 300,001st dollar. For those making $500,000, marginal rates would increase to 39.6 percent from 35 percent.

These changes will raise average tax rates on top incomes considerably. Rolling back the 2001 and 2017 income tax cuts would also entail modest increases throughout the income distribution. Under our proposal, a tax credit similar to the Making Work Pay tax credit from the 2009 Recovery Act would offset tax increases for low- and middle-class earners in a targeted way. Figure 4 shows how this change (without the Making Work Pay credit) would affect marginal tax rates relative to the 2016 and 2019 tax rate schedules.

Business income taxes

We propose removing the active business income exclusion from the net investment income tax and repealing the recently enacted deduction for people who receive income from pass-through businesses. These provisions offer lower tax rates on income from some pass-through firms. These changes will increase taxes on private business owners who prevail at the top of the income distribution and ensure parity in the tax rates between people who receive income in different forms.

Reverting to the 1997 schedule would increase marginal tax rates across the income distribution

U.S. federal statutory marginal income tax rates under our proposal (before accounting for the Making Work Pay credit) and under 2016 and 2019 law, in thouands of 2019 dollars

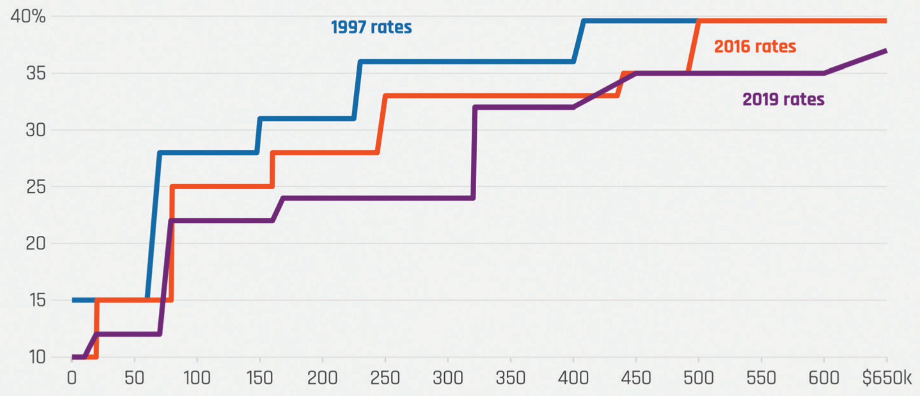

FIGURE 4

Under our proposal, a tax credit similar to the Making Work Pay tax credit from the 2009 Recovery Act would offset tax increases for low- and middle-class earners in a targeted way. Figure 4 shows how this change would affect marginal tax rates...

Source: Tax Foundation, "Historical Income Tax Rates and Brackets, 1862-2013" (2018), available at https://taxfoundation.org/us-federal-individual-income-tax-rates-history-1913-2013-nominal-and-inflation-adjusted-brackets/; Kyle Pomerleau, "Tax Brackets in 2016" (Washington: Tax Foundation, 2019), available at https://taxfoundation.org/2016-tax-brackets/; Amir El-Sibaie, "Tax Brackets in 2019" (Washington: Tax Foundation, 2018), available at https://taxfoundation.org/2019-tax-brackets/; U.S. Bureau of Economic Analysis, "GDP Price Deflator" (2019), available at https://www.bea.gov/data/prices-inflation/gdp-price-deflator.

We also propose taxing nonpublicly listed C corporations at the top personal income tax rate rather than the otherwise applicable corporate rate of 21 percent. This change would prevent entrepreneurs from using retained earnings and deferral as a strategy for avoiding higher income tax rates.

Dividends and capital gains

We propose returning the dividend and capital gains tax rates to their 1997 levels. This change would increase the top federal tax rate to 39.6 percent from 20 percent for the recipients of most taxable dividends. For capital gains, this change would bring maximum long-term capital gains tax rates back to 28 percent from 20 percent today.

We also propose extending the time horizon for preferential capital gains rates to 10 years to treat more carried-interest compensation as wage income while preserving incentives for long-term investment. Dividends, and especially capital gains realizations, are quite concentrated at the top of the income distribution. In recent years, more than 50 percent of taxable dividends and 80 percent of capital gains realizations have gone to the top 1 percent of income earners.[5] These changes will increase taxes at the top of the income distribution.

Estate taxes

We propose unwinding the 2001 and 2017 reductions in estate and gift taxation by returning to a 55 percent top rate and setting a $1 million effective exemption. We also propose eliminating the so-called step up in basis at death, a policy that exempts from income tax any capital gains on assets held by a taxpayer at death.

Our proposal also treats charitable contributions and gifts as realization events, meaning that taxes would be due on any unrealized capital gains at that time. Reinvigorating the estate tax should also be paired with careful steps to curtail abusive private business valuations.[6] These changes will help reduce wealth concentration, raise revenue, and increase the fairness of the tax system.

Revenue and distribution analysis

Our proposal would raise $5.1 trillion over the next 10 years, according to the Penn Wharton Budget Model. The largest contributors to this increase are $1.8 trillion from the increase in tax rates on ordinary income net of the Making Work Pay credit, $1.7 trillion from taxing privately held C corporations as pass-throughs, and $0.6 trillion from increasing taxes on capital gains and dividends. Without the Making Work Pay Credit, the other changes raise $6.9 trillion, with the increase in tax rates on ordinary income accounting for $3.6 trillion instead of $1.8 trillion. (See Table 1.)

TABLE 1

Our proposal would raise $5.1 trillion over the next 10 years, according to the Penn Wharton Budget Model.

Our federal tax proposal would raise $5 trillion over the first decade

Conventional revenue estimates in billions of dollars, 2021–2030

Policy	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Budget window
1) Eliminate stepped-up basis	5	8	10	11	13	14	15	16	17	17	127
2) Raise the estate tax	17	24	25	26	27	27	21	18	19	19	222
3) Increase tax rates on ordinary income	224	290	302	313	331	130	63	57	48	51	1,809
4) Increase tax rates on capital gains and dividends	42	54	55	57	60	59	61	64	67	68	586
5) Close the Gingrich-Edwards loophole	20	26	27	29	31	27	27	28	28	29	273
6) Repeal Section 199A	37	65	73	76	78	26	11	4	2	1	373
7) Tax privately-held C corps as pass-throughs	771	292	82	83	84	81	85	83	81	81	1,724
Total	1,116	759	574	595	623	364	283	271	262	267	5,114

Source: Analysis provided by the Penn Wharton Budget Model.

Most of the revenues from our proposal come from the top of the income distribution. Specifically, the top 10 percent, 5 percent, 1 percent, and 0.1 percent account for 83 percent, 70 percent, 46 percent, and 23 percent of the increase, respectively. The average after-tax income of the top 0.1 percent, whose average pretax income is $2.1 million, would fall by 14 percent, or $220,000. The average after-tax income of the fourth quintile, whose average pretax income is $98,000, would fall by 2.5 percent, or $2,000. In contrast, the bottom three quintiles do not face tax increases due to the Making Work Pay credit. The estimates highlight the extent to which the changes since 1997 have been concentrated at the top. (See Table 2.)

Our federal tax proposal would increase taxes on the top two income quintiles with the largest tax increases among the top 1 percent

Average tax change, share with tax increase, and percent change in after-tax income, 2022

Income group	Average tax change	Share with tax increase	Percent chnage in after tax income
Bottom quintile	-$145	1%	4.4%
Second quintile	-$775	8%	3.1%
Middle quintile	-$110	46%	0.2%
Fourth quintile	$2.120	81%	-2.5%
80-90%	$5,770	100%	-4.3%
90-95%	$12,810	100%	-6.7%
95-99%	$29,930	100%	-9.5%
99-99.9%	$128,295	100%	-14.6%
Top 0.1%	$1,054,650	100%	-14.2%

TABLE 2

Most of the revenues from our proposal come from the top of the income distribution.

Source: Analysis provided by the Penn Wharton Budget Model.

Addressing potential criticisms

In 1997, tax revenue was 3 percent higher as a share of GDP. Top federal rates were approximately 40 percent, tax rates on labor and capital income for entrepreneurs were more closely aligned, and the tax base was broader. The subsequent evolution in pass-through income has raised the stakes in how we tax nonwage income, especially for closely held firms. Our proposal would directly address this development in aligning the taxation of private C corporations with pass-through businesses.

One might criticize this proposal for jeopardizing economic growth. Recent research, however, about the growth effects of taxing top incomes suggests this criticism is overstated. In response to the dividend tax cut of 2003—one of the exact policies we propose to roll back—economist Danny Yagan at the University of California, Berkeley finds a large increase in payout and no change in investment in a large sample of private firms, whose ownership likely skews toward top incomes.[7]

One of the co-authors of this essay finds that tax changes of the magnitude seen in the post-World War II period for top earners have small impacts on employment growth.[8] These findings suggest returning to modestly higher top income tax rates and to a dividend tax closer to the personal rate will have small effects on investment and growth. Indeed, estimates of this plan prepared by the Penn Wharton Budget Model suggest it would have no discernable impact on growth in the first two decades but ultimately would increase growth by 2050.

While some critics may cite large taxable income elasticities as evidence for large distortions, Matthew Smith at the U.S. Department of the Treasury, UC Berkeley's Yagan, and the two co-authors of this essay document a large shifting response to the difference between top entrepreneurial income treated as wages versus that treated as profits.[9] Prior to the 2017 tax reform, the tax-preferred form was pass-through profits because this form benefited from lower social insurance and passive investment income tax.

Because much of this income is better thought of as reflecting human capital, the literature documenting small labor-supply responses to income taxes applies to most pass-through income as well. Proposals that align tax rates on different income sources receive additional support in the literature that finds large reporting responses to tax changes.

A second criticism is that this proposal is modest. Indeed it is! We view it as a point of departure for tax reform and are sympathetic to additional steps that focus on top incomes and enforcement. We view our approach as complementary to more ambitious revenue-raising proposals, such as a national value-added tax, a carbon tax, and a wealth tax.

—***Owen Zidar*** *is an associate professor of economics and public affairs at Princeton University.* ***Eric Zwick*** *is an associate professor of finance at the University of Chicago's Booth School of Business.*

Endnotes

1 Michael Cooper and others, "Business in the United States: Who Owns It, and How Much Tax Do They Pay?," *Tax Policy and the Economy* 30 (1) (2016): 91–128, available at https://ideas.repec.org/a/ucp/tpolec/doi10.1086-685594.html.

2 Matthew Smith and others, "Capitalists in the Twenty-First Century," *The Quarterly Journal of Economics* 134 (4) (2019): 1675–1745, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3340159.

3 Ibid.

4 Cooper and others, "Business in the United States: Who Owns It, and How Much Tax Do They Pay?"

5 Matthew Smith, Owen Zidar, and Eric Zwick, "Top Wealth in the United States: New Estimates and Implications for Taxing the Rich." Working Paper (2019), available at http://ericzwick.com/wealth/wealth.pdf.

6 Wojciech Kopczuk, "U.S. Capital Gains and Estate Taxation: A Status Report and Directions for a Reform." In Alan Auerbach and Kent Smetters, eds., *The Economics of Tax Policy* (Oxford: Oxford University Press, 2017), pp. 265–291.

7 Danny Yagan, "Capital Tax Reform and the Real Economy: The Effect of the 2003 Dividend Tax Cut," *American Economic Review* 105 (12) (2015): 3531–3563.

8 Owen Zidar, "Tax Cuts for Whom? Heterogeneous Effects of Tax Changes on Growth and Employment," *Journal of Political Economy* 127 (3) (2019): 1437–1472, available at https://scholar.princeton.edu/sites/default/files/zidar/files/zidar_tcfw_jpe_2019.pdf.

9 Smith and others, "Capitalists in the Twenty-First Century."

MONETARY POLICY

Good U.S monetary policy can't fix bad U.S. fiscal policy

By John Sabelhaus, Washington Center for Equitable Growth

Overview

In August 2018, Federal Reserve Chair Jerome Powell gave a speech in which he explained the macroeconomic "stars" that guide monetary policy.[1] The three stars are the values for the unemployment rate (u), inflation (π), and the short-term interest rate (r), which together are consistent with long-run macroeconomic equilibrium. These three equilibrium variables are generally written with "stars"—as in u^*, π^*, and r^*—in the mathematical representation of the New Keynesian macroeconomic models used by macroeconomists to discern the direction of economic activities. Powell stated in his speech that the stars were all aligned, with the exception that the Fed probably needed to continue gradually raising the federal funds rate, as in previous expansions.

U.S. stock markets became rattled shortly after Powell's speech because the Fed continued to signal that it intended to move gradually to "normalize" (meaning raise) interest rates over the next few years. The steep decline in stock prices in October 2018 led to a change of tone by Fed officials by the end of 2018. Fed officials at first suggested there might be no need for future interest rate increases, and then completely switched direction and cut the target range for the federal funds rate by 50 basis points in 2019, from 2.25–2.5 to 1.75–2.0.

Many academic economists and other voices across the political spectrum argued that the Fed simply misjudged the value of r^* (the equilibrium short-term interest rate, which in this essay will be used interchangeably) in recent years. John C. Williams, president of the New York Fed and vice chair of the Federal Open Market Committee, has long advanced the idea that r^* has declined in recent decades.[2] Williams is certainly not alone, with voices from both ends of the political spectrum arguing that maintaining low interest rates is crucial for continued economic expansion.[3]

In terms of the macroeconomic stars invoked by Fed Chairman Powell, there is widespread agreement that the U.S. economy today seems to be at or near full employment ($u=u^*$ in mathematical parlance) and that inflation is not rising ($\pi \leq \pi^*$). Therefore, higher interest rates would only do harm to an otherwise well-functioning economy. In contrast, fiscal policy (government revenues and spending) is holding back the U.S. economy because needed government investments in human capital, scientific research, or infrastructure are not happening.

This is the conundrum facing the monetary policymakers at the Fed. Lowering its benchmark federal funds rate will increase asset valuations and provide some economic stimulus, but without boosting potential long-run economic growth. The Fed may have little choice because fiscal policymakers, most of whom remain mistakenly fixated on rising government spending rather than on falling government revenue, will not support the government investments needed to boost long-term economic growth and prosperity. Should a recession occur, as one eventually will, Fed efforts to boost growth by lowering the short-term interest rate will be ineffective. Thus, in the event of a downturn, fiscal policymakers may once again be forced by events to provide short-term stimulus spending, but they will likely again fail to make the real investments necessary to boost long-run growth.

In this essay, I examine why a falling r^* matters to the Fed, how lower interest rates increase asset valuations in the economy without boosting necessary investments, and then why fiscal policy has to change by recognizing that it is not rising government budget deficits that are a danger to future U.S. economic growth but rather falling government revenues. In short, I argue that appropriate monetary and fiscal policies in tandem will boost the incomes of the many—not just the values of assets owned by the few—to create the macroeconomic conditions most suitable for sustained and broad-based economic growth.

Key Takeaways

THE EVIDENCE

- The U.S. economy today seems to be at or near full employment, and inflation is not rising, which means higher interest rates would only do harm to an otherwise well-functioning economy while lower interest rates would increase asset valuations in the economy without boosting necessary investments.

- In contrast, restrained fiscal policy (government revenues and spending) is holding back the U.S. economy because needed government investments in public goods such as human capital, scientific research, and infrastructure are not happening at the scale required for sustained and broad-based economic growth.

THE SOLUTIONS

- Appropriate monetary and fiscal policies in tandem will boost the incomes of the many—not just the values of assets owned by the few—to create the macroeconomic conditions most suitable for sustained and broad-based economic growth.

Why has r* fallen, and why does it matter?

There is an active academic literature about a declining equilibrium short-term interest rate (r*) and the implications for Fed policy.[4] The research on why r* has fallen mostly focuses on two key determinants: productivity growth and an aging population. Through the lens of New Keynesian macroeconomic models, when productivity growth slows, the demand for investment falls, and when populations age, the supply of saving rises. Declining demand for borrowed funds along with an increasing supply of saving pushes r* down.

Accepting the proposition that r* has fallen does not mean the crucial monetary policy questions are all resolved. When r* is low, for example, monetary policymakers have to be more concerned about limits on nominal interest rates. The real interest rate—the nominal rate minus inflation—is what impacts real behavior in New Keynesian models. So, if inflation and real interest rates are both low when the economy is expanding, then there is little room for monetary policymakers to cut real rates in the event of a downturn, because zero is a natural lower bound on nominal rates.[5]

A second practical issue associated with lower r* is that the return to risk-free savings is reduced. Low risk-free rates of return are most important for securing retirement incomes for both individual savers and institutional funds with guaranteed pension benefits and other forms of annuities. Savers are forced to accept greater risks in order to get positive financial returns in a world with low r* or to compensate for low returns in some other way, such as saving even more.

One potential benefit in a low-r^* economy is that the cost of borrowing is also lower, but that assumes the risk premium—the wedge between private and government borrowing costs—remains stable. Unfortunately, risk premia are not stable, and large increases in risk premia are generally associated with the end of an economic expansion. At the end of an expansion, investors become worried that growth will slow, and thus borrowers will have difficulty repaying their debts. Lenders are willing to supply less in the way of new loans to businesses and consumers at any given interest rate. Even if the Fed can lower the risk-free interest rate, movements in the actual cost of borrowing for businesses and consumers will depend on what is happening with risk premia.

Movements in risk premia and other economic fundamentals affecting r^* point to a broader set of questions connecting risk, return, and asset values. In particular, the value of corporate stock is the discounted present value of the future profits the corporation is expected to earn. For a given stream of expected profits and a given risk premium to compensate for the uncertainty of those profits, a lower r^* increases the value of a share of stock.[6] If the owners of the corporation can borrow to fund their operations more cheaply, then their profits will be higher, everything else equal.

What can the current level of U.S. stock markets tell us about r^* and other economic fundamentals? The famous value investor Warren Buffet has long advocated the following measure of stock market valuation: Add up all outstanding shares of corporate stock at current market values and divide by the size of the overall economy. A high ratio of stock market valuation to Gross Domestic Product indicates an overvalued market. At the end of 2018 the so-called Buffett Ratio was near the recent historical high that had oc-

The higher the stock market's valuation to GDP, the greater the overvaluation of stocks

The ratio of stock market capitalization and nonresidential capital stock* to U.S. Gross Domestic Product, 1969–2018

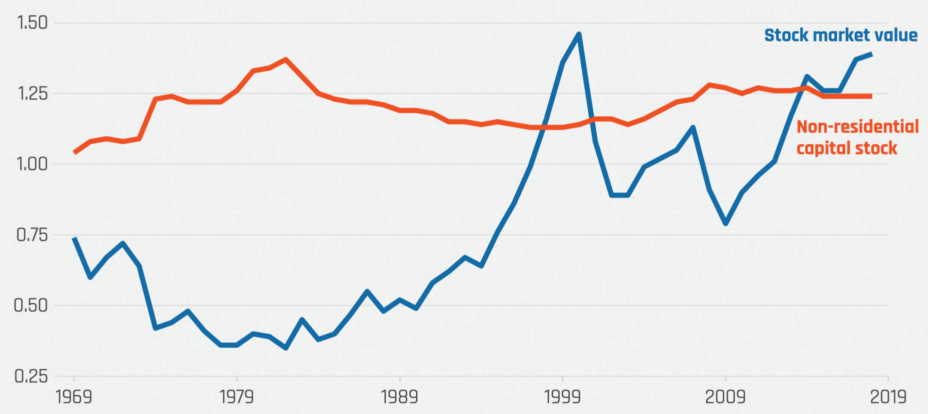

FIGURE 1

...the so-called Buffett Ratio was near the recent historical high that had occurred before the crash of 2000, and, in general, the ratio has been higher and much more volatile in recent decades.

*Nonresidential capital stock is accumulated investment in the economy minus housing stock.

Source: U.S. Bureau of Economic Analysis, Federal Reserve Economic Data.

curred before the crash of 2000, and, in general, the ratio has been higher and much more volatile in recent decades. (See Figure 1.)

One possible explanation for a higher Buffett Ratio is more corporate investment, which will happen if people save more and capital markets convert that additional saving into real investment. Yet the other line in Figure 1 shows that accumulated investment in nonresidential capital stock relative to GDP has been stable. This means the level of interest rates and stock market valuations are not associated with greater real investments in the U.S. economy.
The share of national income going to corporate profits can also push up the Buffett Ratio because a higher profit share means the expected level of profits is higher. The ratio of measured corporate profits to GDP, however, cannot explain the increasing Buffett Ratio either, because there has been no corresponding increase in the corporate profits share.[7]

All of this evidence suggests that current stock market values are being maintained at historically high levels by the combination of low risk-free interest rates and low-risk premia. This ties the hands of the Fed because maintaining high asset-valuation ratios becomes essential for sustaining aggregate demand. Asset owners are willing to borrow, spend, and invest in productive capital when they feel wealthier. But if risk premia rise and asset values fall, then the resulting decreases in asset values will have disproportionate negative effects on spending and investment.[8]

Is U.S. monetary policy constrained by bad U.S. fiscal policy?

Evidence about asset valuation and asset price volatility suggests that describing economic fluctuations in terms of deviations from a New Keynesian equilibrium that ignores the risk premium is at best incomplete. The now-widespread belief that the Fed should simply acknowledge that r^* has fallen goes hand in hand with accepting the inherent risk of keeping the economy growing by boosting the values of assets owned by the few, rather than boosting the incomes earned by the many.

This is where better fiscal policy becomes important. Although targeting a lower r^* may be the best monetary policy given current fiscal policy, it is possible to change fiscal policy in ways that address the underlying reasons for declining r^*. Better fiscal policy would make it possible for the Fed to conduct better monetary policy, meaning the Fed could achieve full employment and stable inflation—the U.S. central bank's "dual mandate"—without the inherent financial market valuation issues and instability associated with a low r^* equilibrium.

Examining the composition of federal spending and the composition of federal revenues relative to GDP can provide a high-level perspective on fiscal policy over the past 50 years. The data clearly reject the narrative that increased government spending is the primary reason for rising government deficits in recent years. Total spending, at about 20 percent of GDP in 2018, is close to its 50-year average. (See Figure 2.)

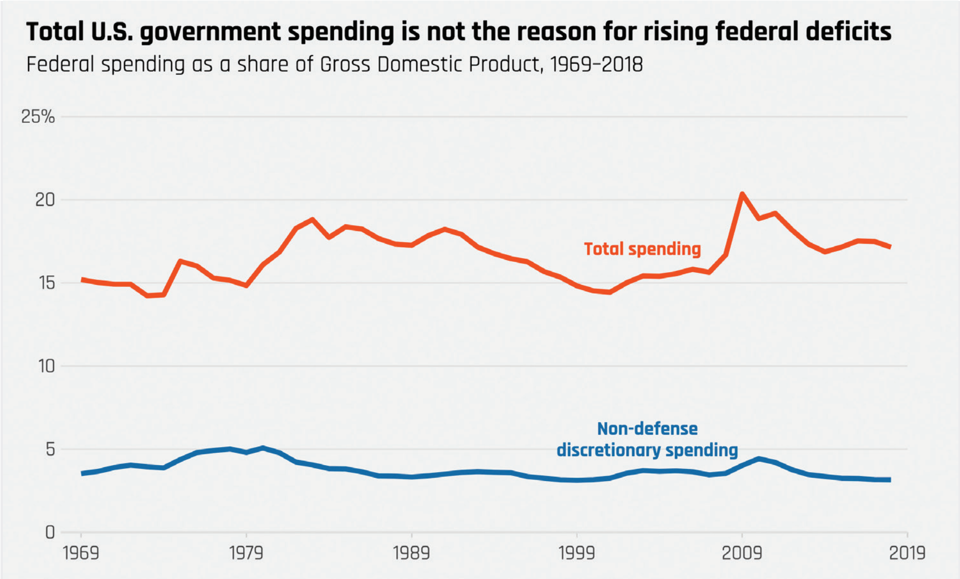

FIGURE 2

Total spending, at about 20 percent of GDP in 2018, is close to its 50-year average.

Source: Congressional Budget Office.

In contrast, total federal revenue relative to GDP is well below its 50-year average. (See Figure 3.)

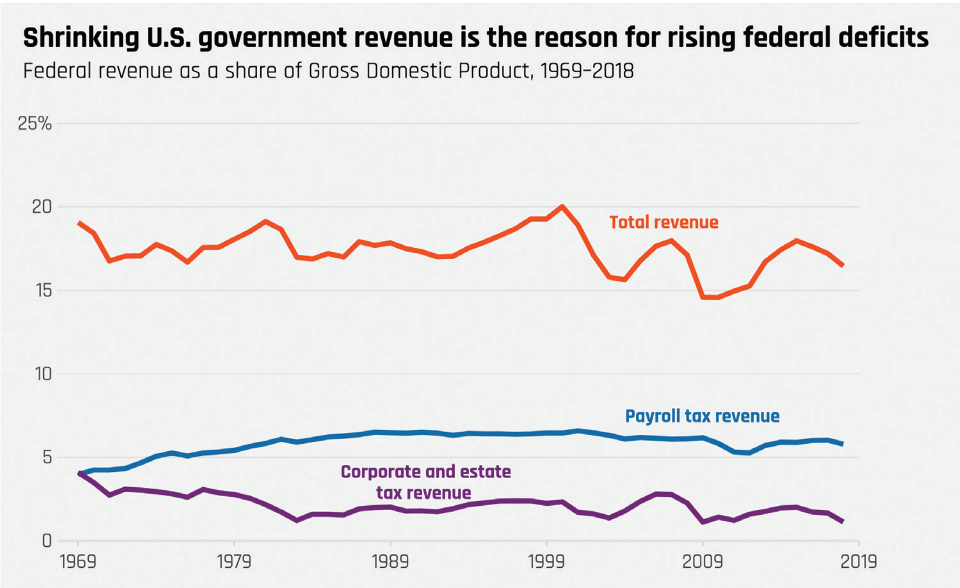

FIGURE 3

In contrast, total federal revenue relative to GDP is well below its 50-year average.

Source: Congressional Budget Office.

A closer look at the composition of spending in Figure 2 cuts further against the narrative about rising government spending. The component of spending associated with direct government intervention in the real economy—nondefense discretionary spending—has *fallen* as a share of GDP in recent decades. The fastest growing categories of outlays are for programs such as Social Security, Medicare, and Medicaid, all of which are government programs generally financed by payroll taxes on the same group of low- and moderate-wage earners who also are the beneficiaries of these programs. The increase in payroll taxes used to fund these programs is evident in Figure 3. Thus, another crucial takeaway from this high-level perspective is that the overall decline in total revenues relative to GDP is because corporate, estate, gift, and income taxes have fallen even more than payroll taxes have increased.

Most analysis of fiscal policy focuses on the economic effect of deficits, without regard for why the deficits were created. The trends in the composition of spending and revenue shown above are suggestive that all deficits are not created equal. A deficit created by increased nondefense discretionary spending focused on investment in human capital, scientific research, or infrastructure has positive effects on aggregate demand and boosts productivity. Such policies have the potential to reverse the downward pressure on r^*.

A deficit generated by reducing taxes on capital incomes, in contrast, has only short-run effects on aggregate demand, mostly through increased asset prices. Indeed, the effect of such fiscal policies is to reinforce a low-r^* equilibrium because the after-tax return from owning stock is higher, and thus standard asset-valuation models tell us the stock should be worth more. Yet experience with those sorts of policies over the past two decades shows they do not lead to the sorts of investments that will make the U.S. economy grow and help alleviate the downward pressure on r^*.[9]

The recent history of fiscal and monetary policies suggests that bad fiscal policy and constrained monetary policy have increasingly reinforced each other in recent decades, contributing to a slowdown in overall U.S. economic growth alongside rising income and wealth inequality and financial instability. Fiscal policymakers have abdicated their responsibility to make the investments in people, technology, and infrastructure that private investors cannot and will not make.

The good news is that a continued slowdown in economic growth and lower r^* is not inevitable. Understanding how to reverse the decline in r^* just involves a deeper understanding of the proper role of government in today's economy.

Policies for the next Congress and administration

Bad fiscal policy has increasingly constrained monetary policy, and thus the first set of policies to embrace involve rethinking government intervention more broadly. On the spending side, the federal government needs to step up and identify areas where more investment is warranted in human capital, science and technology, and infrastructure. Federal investment in these areas will not be displacing private investments because those investments are simply not happening now. These sorts of investments will increase productivity growth, providing a direct offset to the otherwise-declining r^*.

Increasing government investment may involve deficit spending in the short run, thus the second policy recommendation is to transform the way policymakers and the public think about spending and taxes. When a private citizen makes an investment, the payoff is in the form of profits, dividends, or interest. When government makes an investment, the fiscal payoff is in the form of higher taxes on the additional income that is generated. Most of the policy discussion about taxes involves the negative consequences of taxing some positive outcomes, but policymakers need to remember that those positive outcomes are, sometimes in large part, the payoff on public investment. Our tax system is increasingly allowing those who have benefitted the most from public investments in science and technology to pay less in taxes.

Although better fiscal policy is the key to better monetary policy, there are some monetary policy principles the Fed can and should embrace if economic conditions deteriorate. Economic shocks generally involve both financial effects and real effects in the economy, with the wealthy experiencing declines in their net worth but the less wealthy experiencing job losses. In the past, the Fed has focused on propping up the financial system—for example, bailing out mortgage lenders but not mortgage borrowers. The Fed needs to expand their policy purview if the fiscal authorities won't act in the interests of all the people, and make sure the next round of Quantitative Easing—Fed speak for the central bank's purchase of financial securities in the marketplace to boost liquidity in the economy—or other extraordinary monetary policy actions do not simply rescue those who benefitted from the mistakes that led to problems in the first place.

*—**John Sabelhaus** is a visiting scholar at the Washington Center for Equitable Growth. Previously, from 2011 to mid-2019, he was assistant director in the Division of Research and Statistics at the Board of Governors of the Federal Reserve System, and prior to that, his roles at the Federal Reserve Board included oversight of the Microeconomic Surveys and Household and Business Spending sections, including primary responsibility for the Survey of Consumer Finances.*

Endnotes

1 Jerome H. Powell, "Montary Policy in a Changing Economy," speech given at Changing Market Structure and Implications for Monetary Policy Symposium, August 24, 2018, available at https://www.federalreserve.gov/newsevents/speech/powell20180824a.htm.

2 In addition to leading the research on the topic, Williams has been very outspoken in public about declining r*. For example, in May 2019, he gave a speech titled "When the Facts Change..." which lays out the case for why r* has fallen and what that implies for Fed policy. See John C. Williams "When the Facts Change...," speech given at High-Level Conference on the International Monetary System, May 14, 2019, available at https://www.newyorkfed.org/newsevents/speeches/2019/wil190514.

3 In general, the argument for raising interest rates when the economy comes out of a recession is based on preventing higher inflation down the road, an approach often characterized as "hawkish" and usually associated with more conservative political philosophies. The lack of price inflation in recent decades has dampened those arguments, and thus very few observers are willing to argue that the Fed should be targeting a higher r*.

4 The empirical literature is well captured in a paper by Kathryn Holston, Thomas Laubach, and John C. Williams, "Measuring the natural rate of interest: International trends and determinants," *Journal of International Economics*, (108): S59–S75. A good example of the theory that can explain declining r* is in a paper by Gauti B. Eggertsson, Neil M. Mehrotra, and Jacob A. Robbins, "A Model of Secular Stagnation: Theory and Quantitative Evaluation." Working Paper 23093 (National Bureau of Economic Research, 2017).

5 One approach to avoiding the ZLB in a low r* environment is to increase the nominal inflation target (π^*). See the recent paper by Philippe Andrade and others, "The Optimal Inflation Target and the Natural Rate of Interest." Papers on Economic Activity (The Brookings Institution, 2019).

6 The formulas relating the present value of a share of corporate stock to expected dividends, the risk-free interest rate, and the risk premium are well-described in the Wikipedia entry on the "Dividend discount model," available at https://en.wikipedia.org/wiki/Dividend_discount_model (last accessed October 30, 2019). A very useful site with data on stock value fundamentals is Robert Shiller's repository built around his book, *Irrational Exuberance*, "Online Data Robert Shiller," available at http://www.econ.yale.edu/~shiller/data.htm (last accessed October 30, 2019).

7 Although much is made of declining labor income shares in recent decades, the offset has not been reflected in increasing corporate profit shares, which, in principle, is the key input into stock price valuation models. Rather, the offset to declining measured labor income seems to be mostly in noncorporate business income, including returns to labor at the very top of the income and wealth distributions. See Matthew Smith and others, "Capitalists in the 21st Century." Working Paper 25442 (National Bureau of Economic Research, 2019). On the other hand, the measured profit share of GDP may be biased over time, suggesting that decreased competition and rising markups may be at least in part the source of an increasing Buffet Ratio. See, for example, Simcha Barkai, "Declining Labor and Capital Shares" (London Business School, 2017).

8 The asymmetric relationship between asset values and aggregate demand could be due to pure wealth effects or the sorts of "financial accelerator" principles advanced by researchers such as Ben Bernanke and Mark Gertler, as described in the Wikipedia entry, "Financial accelerator," available at https://en.wikipedia.org/wiki/Financial_accelerator (last accessed October 30, 2019). Corporate equities are only one of various types of assets owned by households where prices matter, and indeed, the boom and bust in house prices generally gets more attention than stock prices in discussions about the post-2000 period. It is important to note that house prices are subject to the same sorts of valuation principles as stocks, with the rental value of a house serving as the counterpart to the flow of future profits in determining what a house is worth. Indeed, slowing economic growth and a declining r* would have likely been more evident sooner had it not been for the boom and bust in housing.

9 The 2017 Tax Cuts and Jobs Act reduction in corporate tax rates was just the most recent example of indefensible tax base erosion or tax rate reductions affecting capital incomes. Beginning in 1997 with the Taxpayer Relief Act, Congress has acted several times to reduce effective taxes on various forms of capital incomes, repeatedly justifying the cuts based on promises of future macroeconomic benefits that never materialize. The history of tax law changes in recent decades is well-described by the Tax Policy Center, "Laws and Proposals," available at https://www.taxpolicycenter.org/laws-proposals (last accessed October 30, 2019).

MACROECONOMICS

Fighting the next recession in the United States with law and regulation, not just fiscal and monetary policies

By Yair Listokin, Yale Law School

Overview

Is the United States ready for the next recession? According to many experts, the answer is no.[1] Our nation's primary recession-fighting tools—monetary stimulus by the Federal Reserve and fiscal stimulus by Congress—appear hamstrung. New policy options are desparately needed. In this essay, I outline what I call countercyclical regulatory policy as a new macroeconomic policy option. Like monetary and fiscal policy, regulatory policy affects total spending in the U.S. economy. Regulatory actions that encourage banks to lend, firms to invest, and consumers to spend can increase demand and reduce unemployment when the next recession hits—even if (as is likely) monetary and fiscal stimulus falter.

In the next recession, the Fed will be constrained in its ability to reduce interest rates to stimulate investment and consumption spending and lower unemployment. Today's historically low rates leave the Fed little space to stimulate the economy by lowering interest rates before they hit their effective lower bound around zero. Interest rates cannot go deeply into negative territory because savers will hoard cash or prepay taxes rather than accept a negative return.[2]

When monetary policy is constrained during a recession, the textbook macroeconomic policy response is fiscal stimulus.[3] Increases in government spending and decreases in taxes raise total spending—also known as aggregate demand—to offset the weakness in spending causing the recession.

Yet partisan gridlock and fears about excessive deficits during the most recent economic downturn, the Great Recession of 2007–2009, caused the size of fiscal stimulus passed by Congress in 2009 to fall well short of what was needed to effectively relieve unemployment.[4] Because partisan gridlock is, if anything, worse than a decade ago and public debt as a percentage of Gross Domestic Product has increased since 2009, we cannot depend on fiscal stimulus during the next recession.

As I explain in my latest book, *Law and Macroeconomics: Legal Remedies to Recessions*,[5] law and regulation offer a wide variety of stimulus options in recessions across many parts of the U.S. economy. Many federal regulatory program affect the business cycle. Regulatory options are not subject to the constraints of monetary and fiscal policy. If regulators and administrators systematically favor policies promoting spending and employment in recessions, then they could collectively have an important stimulating effect on the U.S. economy. At the very least, these proposed countercyclical regulatory policy options could avoid the unintentionally pro-cyclical effects of many current laws and regulations.

Key Takeaways

THE EVIDENCE

- In the next recession, the Federal Reserve will be constrained in its ability to reduce interest rates to stimulate investment and consumption and lower unemployment.
- Fiscal stimulus can offset this monetary policy shortcoming by sparking economic demand, yet partisan gridlock means fiscal stimulus could fall well short of what is needed.

THE SOLUTIONS

- Countercyclical regulatory policies to encourage banks to lend, firms to invest, and consumers to spend can increase demand and reduce unemployment during a recession, without the approval of Congress.

What is countercyclical regulatory policy?

Countercyclical regulatory policy directs regulators to apply a rule that promotes spending during recessions and a different and more restrictive rule during periods of robust economic growth. In financial regulation, conventional wisdom favors countercyclical regulatory policy. The Basel III accords—a set of international standards of bank regulation—highlight the value of "countercyclical capital buffers," which apply a relatively strict regulatory regime to financial institutions in good times and a more lenient one during recessions.[6]

Unfortunately, U.S. financial regulators have been reluctant to implement countercyclical rules in practice.[7] With countercyclical monetary and fiscal policy constrained, the next administration should appoint financial regulators more willing to implement countercyclical financial regulation as a means of avoiding lending bubbles during the next boom and stimulating the economy in the next recession.

The logic of countercyclical regulation does not apply to financial regulation alone. It should apply to every regulatory regime that affects aggregate demand and unemployment, among them energy, housing, and utility regulation.

Using permits and mandates as countercyclical regulatory policy tools

Many investment projects require approval from federal regulators. The federal Bureau of Ocean Energy Management, for example, reviews applications for the construction of offshore wind turbines.[8] Federal regulations grant this agency within the U.S. Department of the Interior considerable discretion over applications, authorizing rejection of projects that cause "undue harm" to other interests.[9]

Outside of recessions, decisions made by the Bureau of Ocean Energy Management have relatively little effect on unemployment. If unemployment is already low, then the approval of a new wind turbine project is unlikely to significantly reduce unemployment or increase investment. Instead, project approval shifts workers and capital from other uses to offshore wind turbine construction. During recessions, however, many workers are unemployed and capital lies dormant. If the agency approves an outstanding offshore turbine application during a recession that it might not have approved otherwise, then investment spending increases and unemployment decreases. Regulatory policy can stimulate the economy.

Of course, the business cycle should not be the sole determinant of regulatory decisions during recessions. The Bureau of Ocean Energy Management must still determine whether the project causes "undue harm" to other interests. Because of the stimulus value of a new investment project during a recession, however, some projects should be approved that might be rejected at other times. The economic value of the project to the economy as a whole changes with the business cycle. As a result, the determination of what is "undue harm" should change as well.

Because federal regulators are generally reviewing many billions of dollars of investment proposals at any given time, systematic countercyclical regulatory policy, in financial regulation and outside of it, offers the prospect of significant stimulus during a recession. Yet countercyclical regulatory policy does not always entail deregulation during recessions.[10] In some cases, new mandates can increase spending and reduce unemployment.

Consider Section 8 housing vouchers, which provide rental assistance to low-income families. The U.S. Department of Housing and Urban Development, which oversees the program, determines a housing property's compliance with "housing quality standards" and thus eligibility for Section 8 vouchers.[11] If HUD imposed a more robust energy efficiency requirement to its housing quality standards during the next recession, then the new mandate would likely increase property investment in millions of units.

Utility regulation as a countercyclical regulatory policy tool

While countercyclical regulatory policy could deliver meaningful stimulus during a recession, the first policy task is simply to avoid making business cycles worse. Too many legal and regulatory regimes are implicitly pro-cyclical, exacerbating recessions without intending to do so. The regulation of utilities, implemented jointly by federal and state regulators, provides an example of regulation that unintentionally affects private-sector spending pro-cyclically. Ending this pro-cyclical bias and moving to a neutral or even countercyclical stance should enable tens of billions of dollars of stimulus during the next recession—without increasing the national debt.

At present, utility regulators generally approve proposed utility prices consistent with returns of 8 percent to 10 percent on invested capital per year.[12] When profits fall below this baseline, regulators often permit price increases.[13] In recessions, demand for utilities goes down. Utility profits follow, falling below the profit baseline used by the regulators. In response, utilities request rate increases from their regulators. The regulators oblige. Retail prices in electricity (the largest rate-regulated sector) have increased substantially amid the past two recessions. Prices in the regulated water and trash-collection sectors, set by a combination of regulation and direct government provision, also experienced their highest price increases of the past 20 years during late 2008 and 2009.[14] (See Figure 1.)

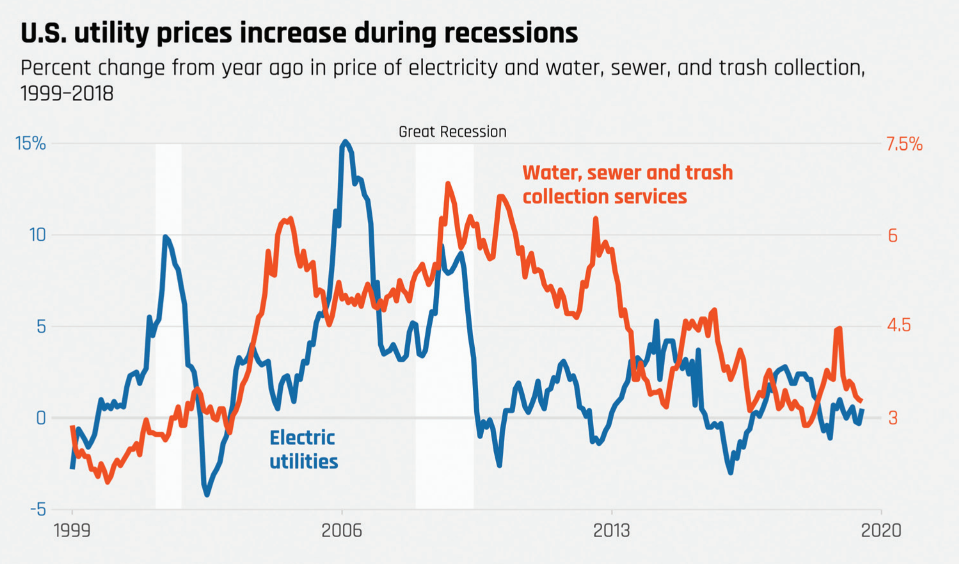

FIGURE 1

Retail prices in electricity have increased substantially amid the past two recessions.

Source: U.S. Bureau of Labor Statistics, "Consumer Price Index: Electricity in U.S. City Average, All Urban Consumers [CUSR0000SEHF01]" (2019), available at https://fred.stlouisfed.org/series/CUSR0000SEHF01; U.S. Bureau of Labor Statistics, "Consumer Price Index: Water and Sewer and Trash Collection Services in U.S. City Average, All Urban Consumers [CUSR0000SEHG]" (2019), available at https://fred.stlouisfed.org/series/CUSR0000SEHG.

The pro-cyclical pattern of utility prices approved by regulators exacerbates recessions. A utility rate increase resembles a tax increase, decreasing discretionary income and spending by consumers when unemployment is high. While the rate increase supports utility profits and thus benefits utility shareholders, comparatively wealthy shareholders have a much lower propensity to consume out of an additional dollar than the typical utility consumer. Higher utility prices in recessions therefore decrease spending and raise unemployment.

A better regulatory framework from a macroeconomic perspective would hold utility prices down and keep returns below 5 percent during recessions, raising consumer discretionary incomes and spending. To ensure regulated utilities earn an average return of 8 percent to 10 percent over the business cycle, regulators should allow utility returns to rise above 10 percent during booms.[15] This kind of countercyclical utility regulation would shift recession risk from utility consumers to utility investors, who are better equipped to manage the risk. The existing regulatory framework, by contrast, imposes the risk of recession on utility consumers, forcing consumers to reduce their spending during a recession to stabilize utility profits.

Although state public utility commissions directly regulate electricity and other utility prices, the Federal Energy Regulatory Commission enjoys considerable supervisory authority over the process for electricity. FERC "regulates the transmission and wholesale sales of electricity in interstate commerce" and "reviews certain mergers and acquisitions and corporate transactions by electricity companies."[16] If one factor in the commission's review of electricity mergers were the merging companies' demonstrated ability to tolerate temporarily lower profits in recessions, then utility regulation could cease exacerbating recessions. An even more ambitious regulatory reform that used lower utility prices as a stimulus during recessions would have even greater countercyclical effects.

Government insurance rates as countercyclical regulatory policy tools

Utility regulation is not the only area of regulation that produces pro-cyclical prices. Government insurance programs often yield the same result. Government insurance programs maintain reserve funds to ensure that future claims will be paid. In recessions, these reserve funds shrink as claims against the funds exceed insurance premiums. In response, the administrators of these funds raise rates. As a result, government insurance fund charges are highest during recessions, reducing discretionary income and spending at precisely the worst time.

One case in point is the Federal Housing Administration's mortgage insurance program. During the Great Recession, unexpectedly high mortgage defaults depleted the FHA's insurance reserves. In response, the FHA raised mortgage insurance rates considerably from 2009 to 2013—when the U.S. housing market was at its weakest. Once the housing market recovered, the FHA dropped mortgage insurance rates to historical norms. (See Figure 2.)

This increase in mortgage insurance rates from 2009–2012 lowered borrowers' discretionary incomes, reducing their spending at the worst possible time. Even worse, higher insurance rates discouraged borrowers from refinancing mortgages to take advantage of lower interest rates during the Great Recession and the extremely slow recovery that followed.

Instead of pro-cyclical insurance rates, the Federal Housing Agency and other government insurance programs that show similar patterns, such as unemployment insurance and deposit insurance rates set by the Federal Deposit Insurance Corporation, should strive for business cycle neutral premiums. During ordinary times, insurance premiums that exceed claims buoy insurance reserves. Program administrators and regulators need to resist the temptation to lower rates during these times. The reserves are needed

The pro-cyclical pattern of U.S. mortgage insurance rates

Federal Housing Administration's mortgage insurance premiums rose in the aftermath of the Great Recession but fell when the U.S. economy recovered, 2001–2015

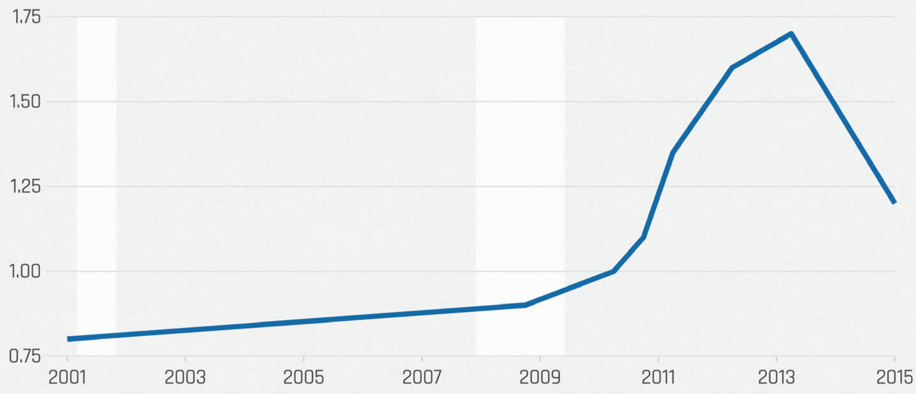

FIGURE 2

...the FHA raised mortgage insurance rates considerably from 2009 to 2013—when the U.S. housing market was at its weakest.

*Note: This figure presents annualized FHA mortgage insurance premiums for 30-year mortgages, with a loan-to-value ratio greater than 95 percent and base mortgage of less than $625,000, and with premiums annualized by allocating 20 percent of origination fees to the first 5 years of payments and adding annual fees.

Source: U.S. Department of Housing and Urban Development, "Mortgagee letters 00-38, 08-22, 10-02, 11-10, 12-04, 13-05 and 15-01" (2015).

for the next recession. When the next recession strikes and claims against government insurance funds rise, then program administrators should allow the insurance reserve funds to be depleted without raising rates. Keeping insurance rates low in the next recession increases discretionary incomes for the consumers of government insurance programs, raising spending and lowering unemployment.

Coordinating countercyclical regulatory policy within overall macroeconomic policy

Predicting how a regulatory regime affects the business cycle demands expertise. So does determining when the economy needs stimulus. Every regulator and administrator acting across many different sectors of the U.S. economy cannot be expected to have that needed expertise. As a result, effective countercyclical regulatory policy requires a coordinating office staffed by a mix of experts in macroeconomics and regulation. A White House office, the Office of Management and Budget's Office of Information and Regulatory Affairs, and one White House council, the National Economic Council, could be where that expertise could reside.

The Office of Information and Regulatory Affairs currently coordinates and supervises the implementation of microeconomic tools such as cost-benefit analysis in federal regulation. The National Economic Council currently provides overall macroeconomic policy advice to the president. A new office to coordinate countercyclical regulatory policy could be located within or alongside either of these offices. The next administration could create this office either by modifying the Executive Order creating the National Economic Council[17] or by modifying the Executive Order instructing the Office of Information and Regulatory Affairs to focus on cost-benefit analysis.[18] The countercyclical regulatory policy office would have two roles.

First, this new office would work with other agencies to determine how each regulatory regime affects the business cycle. This process would identify programs that offer the potential for meaningful stimulus during a recession if applied in an appropriate countercyclical fashion. It would also identify regimes that were unintentionally pro-cyclical and ripe for reform.

Second, the new office, working in conjunction with macroeconomic experts throughout government, would evaluate macroeconomic conditions and the ability of discretionary fiscal and monetary policies to respond to the business cycle, and instruct regulators to implement pre-identified countercyclical regulatory programs accordingly. By creating an office to coordinate the making of macroeconomic policy across the federal government's many agencies, the next administration would build countercyclical policy into the regulatory framework, rather than making macroeconomic policy on an ad hoc basis.

The wide variety of policy proposals described here, ranging from bank capital requirements to utility regulation, demonstrates countercyclical regulatory policy's potential. Every federal regulatory program affects the business cycle. The proposals here are merely representative examples. Countercyclical regulatory policy offers an infinite variety of macroeconomic policy options that are not subject to the constraints of monetary and fiscal policy. By paying attention to these effects and managing them, policymakers can stimulate the economy in the next recession.

*—**Yair Listokin** is the Shibley Family Fund Professor of Law at Yale Law School.*

Endnotes

1 In a recent interview, for example, Mark Zandi, chief economist at Moody's Analytics asserted that "The U.S. economy has some very particular tools to deal with recessions, but … the usual monetary and fiscal medicine may not be as effective this time around." See Cardiff Garcia and Danielle Kurtzleben, "Are We Ready For A Recession?," NPR, January 9, 2019, available at https://www.npr.org/sections/money/2019/01/09/683696538/are-we-ready-for-a-recession.

2 For a discussion of the constraints imposed on monetary policy by the effective lower bound on interest rates, see Ben S. Bernanke, "How Big a Problem Is the Zero Lower Bound on Interest Rates?" (Washington: The Brookings Institution, 2017), available at https://www.brookings.edu/

blog/ben-bernanke/2017/04/12/how-big-a-problem-is-the-zero-lower-bound-on-interest-rates/.

3 Indeed, much of *Law and Macroeconomics: Legal Remedies to Recessions* is devoted to unconventional fiscal stimulus options. For a list of creative fiscal stimulus options, see Heather Boushey, Ryan Nunn, and Jay Shambaugh, eds., *Recession Ready: Fiscal Policies to Stabilize the American Economy* (Washington: The Hamilton Project and Washington Center for Equitable Growth, 2019), available at https://www.hamiltonproject.org/papers/recession_ready_fiscal_policies_to_stabilize_the_american_economy.

4 Eileen Appelbaum, "Panelists: Stimulus was Too Small, More Action Needed to Jumpstart Economy" (Washington: Center for Economic and Policy Research, 2010), available at http://cepr.net/blogs/cepr-blog/panelists-stimulus-was-too-small-more-action-needed-to-jumpstart-economy.

5 Yair Listokin, *Law and Macroeconomics: Legal Remedies to Recessions* (Cambridge, MA: Harvard University Press, 2019).

6 The Basel III accords envision regulators raising bank capital requirements "when authorities judge credit growth is resulting in an unacceptable build up of systematic risk." See Basel Committee on Banking Supervision Reforms – Basel III, "Summary Table," (n.d.), available at https://www.bis.org/bcbs/basel3/b3summarytable.pdf.

7 For example, then-Fed Governor Daniel Tarullo, a leader of the Fed's financial regulatory efforts, asserted in 2014 that "time-varying measures will play a more limited role" in the Fed's financial regulatory regime than many other considerations. See Daniel K. Tarullo, "Macroprudential Regulation," speech given at the Yale Law School Conference on Challenges in Global Financial Services, New Haven, CT, September 20, 2013, available at https://www.federalreserve.gov/newsevents/speech/tarullo20130920a.htm.

8 "Renewable Energy Program," available at https://www.boem.gov/Renewable-Energy/ (last accessed October 1, 2019).

9 See, for example, 30 C.F.R. § 585.105(a), instructing the Bureau to reject applications that cause "undue harm or damage to natural resources," granting the Bureau discretion in determining the meaning of "undue harm." See "What Are My Responsibilities Under This Part?," *Code of Federal Regulations*, title 30 (Government Printing Office, 2018), available at https://www.govinfo.gov/content/pkg/CFR-2018-title30-vol2/pdf/CFR-2018-title30-vol2-sec585-105.pdf.

10 If regulation were equivalent to a Pigouvian tax, then deregulation should be the norm in recessions just as Pigovian taxes should be lowered in recessions and raised in booms. See Garth Heutel, "How Should Environmental Policy Respond to Business Cycles? Optimal Policy under Persistent Productivity Shocks," *Review of Economic Dynamics, Elsevier for the Society for Economic Dynamics* 15 (2) (2012): pp. 244–264. Spending mandates, however, resemble a joint tax and spending program. If some of the money that is spent complying with the mandate would otherwise have been saved, then the mandate increases spending and potentially lowers unemployment.

11 See 24 CFR § 982.401—"Housing Quality Standards."

12 Seth Blumsack, "The Mechanics of Rate of Return Regulation," Energy Markets, Policy, and Regulation, n.d., available at https://www.e-education.psu.edu/eme801/node/531.

13 Shlomit Azgad-Tromer and Eric L. Talley, "The Utility of Finance" (New York: The Center for Law and Economic Studies, 2017), available at http://dx.doi.org/10.2139/ssrn.2994314.

14 Retail natural gas prices also spiked during the Great Recession. Because natural gas prices are largely determined by the price of their primary input (natural gas), they are not emphasized here. Natural gas prices also influence the price of electricity, but the relationship is much more attenuated.

15 To compensate utility investors for bearing recession risk, average profits in the industry would have to rise slightly.

16 "What FERC Does," available at https://www.ferc.gov/about/ferc-does.asp (last accessed October 1, 2019).

17 Executive Order 12835, *Code of Federal Regulations* (1993).

18 Executive Order 12866, *Code of Federal Regulations* (1993).

INEQUALITY & MOBILITY

Growing U.S. income inequality is leaving many workers and their families behind and undermining overall economic growth. Moreover, as the rungs of the economic ladder grow further apart, the ability of individuals to climb that ladder also suffer. In short, the mythology of the United States as a country where a rising tide lifts all boats and where getting by does not depend on the financial resources of one's parents is crumbling rapidly in the face of current economic realities.

Of course, this myth-busting comes as no surprise to women and people of color, so many of whom have experienced these tough economic realities for some time. Across the U.S. economy, disenfranchised groups fare significantly worse on key economic indicators than reported averages. Because researchers sometimes have limited data on these subgroups and because policymakers' perceptions of solutions continue to be shaped by the notion that upward intergenerational mobility is a matter of personal effort rather than the result of a constellation of factors outside their control, policy has not been adequately responsive.

Equitable Growth's work on inequality and mobility aims to support research that disaggregates data and takes a systemic, rather than individualistic, approach to understanding how the economy is performing for all U.S. workers and their families, especially those from marginalized communities.

The essays in this section demonstrate that too often, economic and noneconomic outcomes are still dictated by parental resources, race, and privilege. The essayists argue that more needs to be done to bring all groups into the economy on equal footing. They are bold proposals that move the policy conversation beyond an emphasis on individual characteristics, such as skills and training, to policies that acknowledge the many structural barriers in the U.S. economy to meaningful equitable growth.

*—**Austin Clemens** and **Liz Hipple**, Washington Center for Equitable Growth*

RACE & MOBILITY

Race and the lack of intergenerational economic mobility in the United States

By Bradley Hardy, American University, and
Trevon Logan, The Ohio State University

Overview

Intergenerational economic mobility—the likelihood that children achieve a higher standard of living than the household in which they were reared—varies considerably throughout the United States. In addition to the geographic variability of mobility, there also are significant racial and gender differences in mobility. Mobility, in short, is a complex nexus of individual, community, state, and national policies and circumstances.

Geographic and racial differences in economic mobility are particularly important from a policy perspective for three reasons. First, racial differences in mobility can exacerbate racial differences in other areas such as in housing, education, and health. Second, inequalities in opportunity are antithetical to our nation's creed of equal opportunity for all. And third, structural differences in mobility limit the potential for overall U.S. economic growth.

Our essay first examines the historic links between intergenerational economic mobility and race and income inequality—trends heavily influenced by changing patterns in geographic mobility—and how these trends are tied to explicit policy decisions in the past that persist today in terms of housing, education, and health inequality among low- and middle-income black Americans. We then examine the known policy remedies for persistently low intergenerational economic mobility among African Americans and how these policies could be put into action and paid for. We recommend a mix of policies to promote more equitable housing and educational opportunities alongside moves to boost income security and wealth accumulation.

Key Takeaways

THE EVIDENCE

- U.S. intergenerational economic mobility—the likelihood that children achieve a higher standard of living than the household in which they were reared—varies considerably by race and ethnicity.
- There are significant racial and gender differences in mobility that exacerbate racial differences in other areas such as housing, education, and health.

THE SOLUTIONS

- Policy remedies for persistently low intergenerational economic mobility include more equitable housing and educational opportunities, better income security and wealth accumulation, and investments to improve school quality, lower crime, and encourage private-sector amenities to improve infrastructure in the poorest neighborhoods.

What we know about race and mobility in the United States

Past research on mobility revealed a strong relationship between parental economic circumstances and childrens' socioeconomic outcomes in adulthood. Still, this research generally relied upon smaller population samples, with limited ability to discern geographic patterns in that data. More recent research has used administrative tax records to link parents and children, allowing us to explore intergenerational economic mobility with greater precision than ever before.

Scholars have long known that race is related to both intra- and intergenerational economic mobility—within a single generation and between multiple generations. Major research volumes have documented large black-white gaps in employment and incarceration, particularly among black males.[1] Today, newer evidence demonstrates that the lack of black intergenerational income mobility is driven in large part by the extremely poor socioeconomic outcomes of black children, according to research by economist Raj Chetty and his colleagues at Harvard University. (See Figure 1.)

Areas with large black population shares are also areas where black individuals experience particularly low levels of economic mobility, with black children born into below-median-income families tending to remain below

The poor state of intergenerational mobility for black children

Mean income rank for black children growing up in a U.S. household at the 25th income percentile between 1978–1983 at the commuting zone level

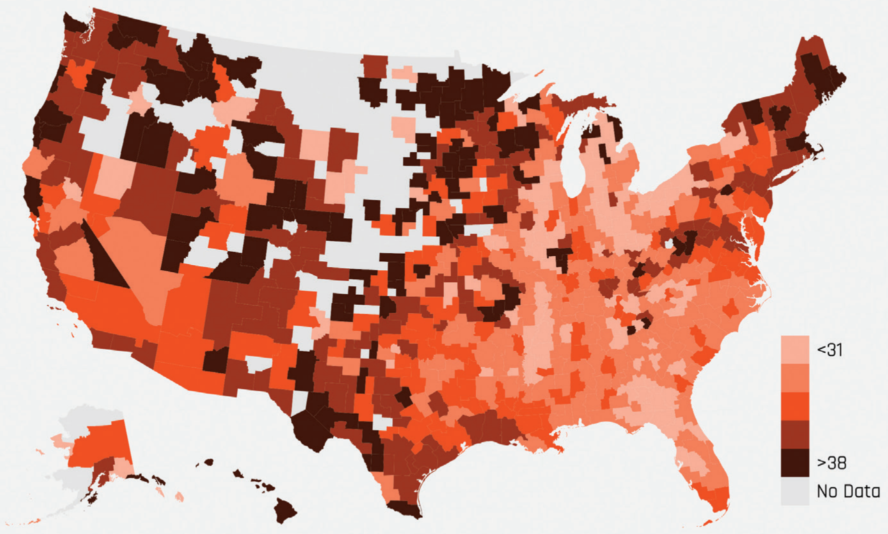

FIGURE 1

...newer evidence demonstrates that the lack of black intergenerational income mobility is driven in large part by the extremely poor socioeconomic outcomes of black children...

Source: Raj Chetty and others, "Race and Economic Opportunity in the United States: An Intergenerational Perspective." Working Paper No. 24441 (National Bureau of Economic Research, 2018).

the median income.[2] For every 10 percentage point increase in the share of the black population in an area, the expected mean income rank of children drops by 0.7 percentage points. These differences exacerbate racial inequality in economic mobility.

In nearly all areas of the country, the same mean income rank for black children from Figure 1 relative to white children is negative, suggesting that black children growing up in the 25th income percentile reach much lower rungs on the income ladder relative to white children growing up at the same income level in the same commuting zone. In other words, the racial differences in mobility amplify the geographic differences. (See Figure 2).

Research has documented several correlates of the large intergenerational mobility gap by race, each of which is important for policy. The presence of fathers is correlated with a lower black-white gap, as are marriage rates.[3] And segregation, poverty, and education are all related to larger black-white gaps in mobility.[4] Each of these underlying correlates is itself influenced by a number of existing policies, suggesting that changes in these policies could also change the trajectory of racial gaps in mobility.

But first, it's important to understand that historic geographic mobility patterns overlay these economic inequality markers. Black mobility in earlier generations lagged white mobility in every area of the United States.[5]

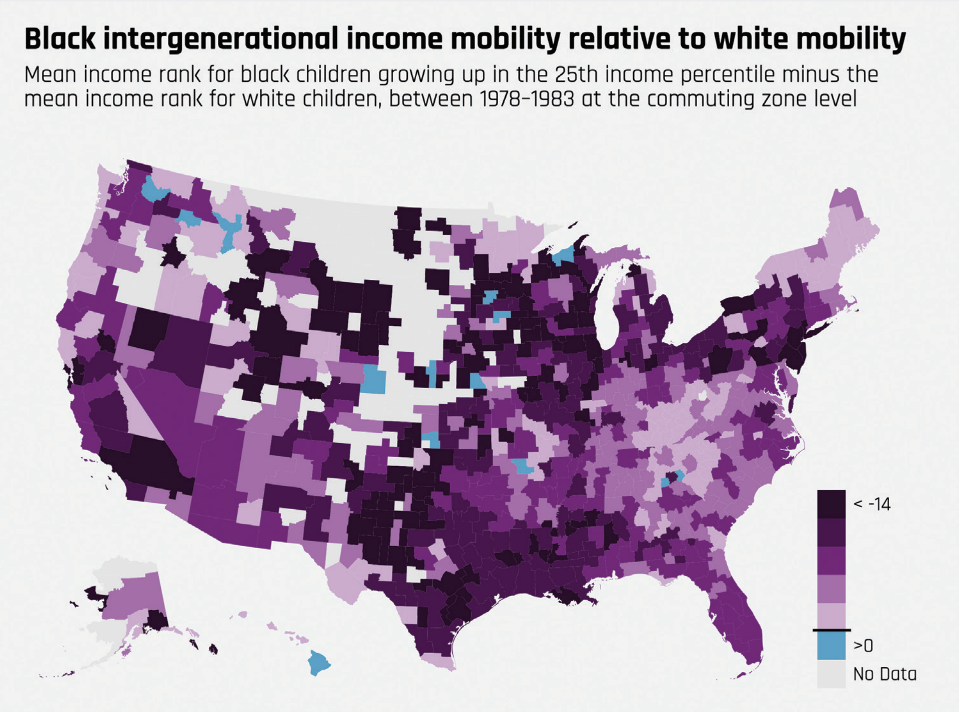

FIGURE 2

...black children growing up in the 25th income percentile reach much lower rungs on the income ladder relative to white children growing up at the same income level in the same commuting zone.

Source: Raj Chetty and others, "Race and Economic Opportunity in the United States: An Intergenerational Perspective." Working Paper No. 24441 (National Bureau of Economic Research, 2018).

The regions where the gap was largest, however, were quite different than they are today. In earlier generations, the South was the epicenter of racial inequality, while today, the South and the Northeast and Midwest are fairly indistinguishable with respect to racial inequality.

The process through which areas that once were more racially equitable but today are not is a complicated story of policy-driven choices that affected intergenerational mobility across the country. Recent research highlights that factors such as school segregation, disinvestment from public goods, and divergent levels of investment in education since the 1950s have combined to create a nexus of low mobility for blacks in general and for black men in particular.[6]

These correlates of intergenerational mobility reinforce what the policymaking community has long known about poverty, wealth formation, and public policy.[7] Areas with higher levels of segregation have a range of features that contribute negatively to economic development, including lower investment in public goods, worse health outcomes, and longer commute times. Areas that had more entrenched redlining—federal policies that enforced segregation in homeownership—have larger racial gaps, not just in homeownership but also in wealth and earnings.

Indeed, recent research links the racial legacies of segregation, lynchings, and Confederate monuments in specific locations to present-day black-white wage gaps, suggesting that continuing racial animus may play a role in contemporary U.S. labor market outcomes.[8] Similarly, geographic variation in publicly funded schools, social services, and access to enriching child development programs follows a racial demographic pattern. These factors within cities at the neighborhood-level combine with family-level circumstances to create more economic insecurity. When taken together, many children face an array of adverse neighborhood, school, and family-level factors that are harmful for development and potentially impede upward social and economic mobility.[9]

The evidence that policy interventions can improve mobility

The crisis of intergenerational poverty and low socioeconomic outcomes among black Americans must be properly contextualized. Many black Americans have succeeded in the face of substantial adversity and labor market discrimination—and in spite of limited access to wealth, networks, connections, and educational opportunities. Still, exceptionalism in the face of adversity is not a sufficient policy prescription.

Fortunately, we know quite a bit about how to raise socioeconomic outcomes. As noted above, policies that improve upon the overall quality of neighborhoods—including schooling, safety, and housing quality—have been shown to raise the eventual adult socioeconomic outcomes of children.[10] Second, a relatively contemporary body of evidence confirms the positive impacts of higher school expenditures on fighting poverty and improving economic opportunities.[11] And large-scale expansion of safety net programs such as supplemental nutrition assistance and financial assistance for needy families lowered poverty and improved socioeconomic outcomes.[12]

In addition, reforms within the U.S. higher education and workforce training systems have, in specific instances and regions, provided career training and subsequent employment opportunities via a commitment between employers, educational institutions, and student trainees. Such efforts, if scaled up to meet the needs of low- and middle-income African Americans today, could help to overcome the relatively lower levels of social capital, the labor market bias, and the discrimination that many black Americans face.[13]

For many families, wealth operates as a primary mechanism that unlocks access to the nation's best neighborhoods, along with the full range of amenities that this entails. Wealth also provides a buffer in the event of adverse and unanticipated negative economic shocks, which are more likely to occur among black families. Wealth gaps have very clear implications for upward mobility, including educational attainment and occupation status.[14] Wealth promotes enriching opportunities, while also cushioning against a range of events that can derail households, including health shocks, relationship changes, and job loss.

Black Americans largely lack high levels of wealth to unlock opportunity. Most also operate without even emergency levels of savings or access to credit needed to withstand unanticipated shocks. Accordingly, policy solutions that provide greater liquidity and wealth to black Americans have the potential to greatly improve intergenerational economic mobility.

Translating the evidence into policy

The importance of neighborhoods cannot be understated. Many Americans across the political spectrum remain resistant to racial and economic integration, which means the prospect of a large-scale economic integration program shifting low- and middle-income income black families into relatively affluent neighborhoods seems unlikely. But a "second-best" set of solutions still could attack the root causes of racial differences in intergenerational economic mobility.

First and foremost, enforcement of anti-discrimination lending policies, aggressive affordable housing policies, and more equitable education finance policies would work to improve access to affordable, safe, quality housing. Efforts at the state and local level could provide support for land trusts, which preserve affordable housing for low- and moderate-income residents by removing housing land from the marketplace—typically facilitated via purchases and land donations from philanthropic and nonprofit organizations[15]—and longer-term agreements between local governments and housing developers to maintain home affordability.

Policymakers also could reconsider the efficacy of public housing, including whether and how such housing can be improved and maintained and whether mixed-income arrangements resulting in a net-loss of low-income housing should provide cautionary lessons moving forward. Because housing across most of the country is taking an increasingly high share of income among even middle-class families, efforts to address affordable housing via neighborhood improvements could have spillover benefits for many middle-class families, irrespective of race.

Additional educational expenditures also have been shown to improve student outcomes and so should be taken seriously. Such expenditures should also expand social and employment services available within primary and secondary educational settings.[16] In this way, policymakers could better direct resources toward families and aggressively target the link between income and educational achievement.

Promoting wealth accumulation and greater access to credit for low-income black families also would promote opportunity, while cushioning against adverse events. One innovative policy option is the issuance of Baby Bonds.[17] These proposed new bonds would give children an asset account predicated on the wealth of their parents. In adulthood, the child would have access to those resources to engage in wealth-enhancing activities such as postsecondary schooling, purchasing a home, or financing entrepreneurial activity.[18] By design, Baby Bonds close a significant portion of the wealth gap between black and white households.

Another set of options include reforms to the Temporary Assistance for Needy Families program to expand expenditures on cash benefits.[19] This reform would enable low-income families of any race to have greater access to needed liquidity.[20] Such interventions are most effective if targeted toward economically disadvantaged and racially segregated neighborhoods, including rural areas.[21]

Finding the revenue for these reforms

The suggestions put forth above do not come without a cost, though we believe the societal benefits of intervening outweigh the costs of inaction. Thus, another needed “prescription” includes increased tax revenue at the federal and state level to help break the transmission of poverty across generations.[22] As hard as this may seem, the politics required to make these investments seems more likely than large-scale racial integration and the transition of low-income black Americans into more affluent and safer neighborhoods with higher-quality schools.

Indeed, the tax system is perhaps the main vehicle to promote redistribution, to reduce black-white income and wealth gaps. While many tax policies provide important benefits to black households, the tax system also provides an array of deductions and benefits that favor wealth over income, potentially worsening racial economic inequality.[23]

Why policymakers should intervene to improve intergenerational mobility

There is a moral argument for intervening on behalf of low-income black Americans, many of whom remain mired in intergenerational poverty, alongside an efficiency rationale for the broader U.S. population. The data from Harvard's Chetty and his co-authors can be interpreted many ways. One view is that middle-class families, including many white families, are paying for disinvestment in poor, predominantly black neighborhoods.[24] How so? Many of America's cities have clear defining lines, within which lie reliable police protection and low crime, a rich array of private amenities, and higher-quality public and private school choices. The disinvestment in poor, predominantly minority-inhabited neighborhoods therefore bids up the value of "preferred" locations that are in limited supply.

The upshot: Investments that improve school quality, lower crime, and encourage private-sector amenities will have positive spillovers by creating a wider set of quality housing alternatives. Most American families have not experienced substantial wage growth over the past several decades. Lowering housing costs—and therefore reducing the amount each family must spend on housing costs every month—will ease pressures on take-home pay. Of course, such investments will make it all the more important to maintain spaces for low-income families as such places become more desirable.

What's key, though, is that improvements to the overall neighborhood infrastructure in the poorest neighborhoods around our country—which are disproportionately black and minority inhabited—would improve the well-being of poor Americans of all races and provide affordable housing and schooling alternatives for middle-class families of all races. More robust intergenerational mobility in the future, for black Americans in particular, would be the end result.

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Endnotes

1 See, for example, scholarly volumes focused on labor market conditions of black Americans and black men. Richard B. Freeman and Harry J. Holzer, eds. *The Black Youth Employment Crisis* (New York: University of Chicago Press, 1986); Ronald B. Mincy, *Black Males Left Behind* (New York: Rowan and Littlefield, 2006).

2 In counties with a majority black population, a black child born to parents in the 25th income

percentile only achieves a mean income rank of 32, barely any movement up the income ladder, while for white children from the same counties achieve a mean income rank of 43.

3 Raj Chetty and others, "Race and Economic Opportunity in the United States: An Intergenerational Perspective." Working Paper No. 24441 (National Bureau of Economic Research, 2018).

4 Ibid.

5 David Card, Ciprian Domnisoru, and Lowell Taylor, "The Intergenerational Transmission of Human Capital: Evidence from the Golden Age of Upward Mobility." Working Paper No. 25000 (National Bureau of Economic Research, 2018).

6 Ellora Derenencourt, "Can You Move to Opportunity? Evidence from the Great Migration." Working Paper (Harvard University, 2019).

7 Bradley Hardy, Trevon D. Logan, and John Parman, "The Historical Role of Race and Policy for Regional Inequality." In Jay Shambaugh and Ryan Nunn, eds., *Placed Based Policies for Shared Economic Growth* (Washington: The Brookings Institution, 2018).

8 Jhacova Williams, "Historical Lynchings and the Contemporary Voting Behavior of Blacks." Working Paper (Clemson University, 2019); Jhacova Williams, "Confederate Streets and Black-White Labor Market Differentials." Working Paper (Clemson University, 2019); Rodney J. Andrews and others, "Location Matters: Historical Racial Segregation and Intergenerational Mobility," *Economics Letters* 158 (2017): 67–72.

9 Bradley L. Hardy, Heather D. Hill, and Jennie Romich, "Strengthening Social Programs to Promote Economic Stability during Childhood," forthcoming (Washington: SRCD, 2019).

10 Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz, "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment," *American Economic Review* 106 (4) (2016): 855–902.

11 C. Kirabo Jackson, Ricker C. Johnson, and Claudia Persico, "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms," *Quarterly Journal of Economics* 131 (1) (2016): 157–218.

12 Hilary Hoynes, Diane Whitmore Schanzenbach, and Douglas Almond, "Long-Run Impacts of Childhood Access to the Safety Net," *American Economic Review* 106 (4) (2016): 903–934.

13 For a discussion of such partnerships and how these may buffer against low levels of information and social capital among many college students, see Harry J. Holzer and Sandy Baum, *Making College Work: Pathways to Success for Disadvantaged Students* (Washington: Brookings Institution Press, 2017).

14 Fabian T. Pfeffer, "Status Attainment and Wealth in the United States and Germany." In Thomas Smeeding, R. Erikson, and M. Jantti, eds., *Persistence, Privilege, and Parenting: The Comparative Study of Intergenerational Mobility* (New York: Russell Sage Foundation, 2011).

15 M. Choi, S. Van Zandt, and D. Matarrita-Cascante, "Can community land trusts slow gentrification?," *Journal of Urban Affairs* 40 (3) (2018): 394–411.

16 Helen Ladd, "Education and Poverty: Confronting the Evidence," *Journal of Policy Analysis and Management* 31 (2) (2012): 203–227.

17 W.Darity Jr. and D. Hamilton, "Bold policies for economic justice," *The Review of Black Political Economy* 39 (1) (2012): 79–85.

18 Darrick Hamilton, "Race, Wealth, and Intergenerational Poverty," The American Prospect, August 14, 2009, available at https://prospect.org/article/race-wealth-and-intergenerational-poverty.

19 Marianne Bitler and Hilary Hoynes, "The More Things Change, the More They Stay the Same? The Safety Net and Poverty in the Great Recession," *Journal of Labor Economics* 34 (s1) (2016): S403–S444.

20 Board of Governors of the Federal Reserve, "Report on the Economic Well-Being of U.S. Households in 2018 - May 2019" (2019); I. Floyd, "Despite Recent TANF Benefit Boosts, Black Families Left Behind" (Washington: Center on Budget and Policy Priorities, 2018); B.L. Hardy, R. Samudra, and J.A. Davis, "Cash Assistance in America: The Role of Race, Politics, and Poverty," *The Review of Black Political Economy* (2019).

21 James P. Ziliak, "Restoring Economic Opportunity for 'The People Left Behind': Employment Strategies for Rural America" (Washington: Aspen Institute, 2019).

22 For a discussion of the role of tax policy and the need for higher revenues to reinvest in America's children, see William G. Gale, *Fiscal Therapy: Curing America's Debt Addiction and Investing in the Future* (New York: Oxford University Press, 2019).

23 Chye-Ching Huang and Roderick Taylor, "How the Federal Tax Code Can Better Advance Racial Equity" (Washington: Center on Budget and Policy Priorities, 2019).

24 P. Bayer and others, "Ethnic and Racial Price Differentials in the Housing Market," *Journal of Urban Economics* (102) (2017): 91–105.

CRIMINAL JUSTICE

Overcoming social exclusion: Addressing race and criminal justice policy in the United States

By Robynn Cox, University of Southern California Suzanne Dworak-Peck School of Social Work

Overview

The United States incarcerates more people than any other country in the world, at a rate of 860 per 100,000 U.S. residents age 18 or older.[1] The majority of the growth in the nation's prison population can be attributed to changes in public policies.[2] By the mid to late 1970s, American society became more punitive, and the shift in demand for more retributive policies led to an exponential increase in the incarceration rate.

Specifically, many states moved from indeterminate sentencing systems to determinate ones. Determinate sentencing systems set fixed or narrow ranges for statutory terms outlined for each crime, which replaced the sentencing discretion of judges, where the exact sentence is unknown but typically has a wider range, and discretionary parole boards. Determinate sentencing led to more draconian sentencing policies such as mandatory minimums (state statutes requiring individuals to be imprisoned for a definite amount of time), truth-in-sentencing laws (which limit the possibility of early release by requiring those imprisoned to serve a significant proportion of their prison sentence), and three-strikes laws (which result in more severe prison punishments after a third criminal offense).

These policies resulted in more individuals being incarcerated for less serious offenses, as well as individuals being incarcerated for longer periods of time. While incarceration is the most visible representation of the misaligned U.S. criminal justice system, less discussed is the number of individuals who have a criminal record in general, and a felony conviction in particular, within the United States. According to the 2014 Bureau of Justice

Statistics Survey of State Criminal History Information Systems, there are more than 100 million recorded criminal records in the United States.[3] University of Georgia sociologist Sarah K.S. Shannon and her co-authors estimate that by 2010, there were 18 million Americans with a felony conviction compared to a little more than 7 million who have been incarcerated.[4]

While it is generally accepted that changes in public policy are responsible for the expansion of the modern U.S. penal system over the past five decades, what is less clear is how ostensibly colorblind policies led to the concentrated incarceration we see today within minority communities and especially African American communities. Harvard University historian and African American studies professor Elizabeth Hinton persuasively argues that the infrastructure necessary for the growth in incarceration began during an era of liberal reform amid the Civil Rights period with the passage of the 1965 Law Enforcement Assistance Act, which marshalled in an era of law enforcement and a focus on fighting racial and economic inequality through the vehicle of law enforcement instead of social programming.[5]

Largely in response to the civil unrest that stemmed from urban protests against police brutality, targeted crime-control policies led to increased supervision of black urban communities, especially black youth, which ultimately led to mass incarceration. Racialized perceptions of crime and poverty led the federal government to use a punitive approach to poverty alleviation and racial economic justice.[6] Indeed, an often overlooked topic within the mass incarceration discussion is the national crime-control policies that provided the funding and incentives that guided state governments to adopt more punitive laws. As Hinton asserts:

> *The federal government's long mobilization of the War on Crime promoted a particular type of social control, one that signals that the targeted arrest of racially marginalized Americans and the subsequent creation of new industries to support this regime of control are among the central characteristics of domestic policy in the late twentieth century.*[7]

This last point should not be lost, as many localities in the nation unsuccessfully used prison construction as economic growth engines.[8]

The purpose of this essay is twofold. The first is to argue for a shift in focus away from dealing with economic inequality through the lens of the criminal justice system—which is ill-equipped to address the root causes of poverty and racial inequality, and may actually increase social costs in the long run.

The second is to argue for a widespread audit of current federal crime-control policies and funding, not only to understand whether their social benefits outweigh their social costs, but also to determine and eradicate the policies that are leading to greater racial disparities within the criminal justice system.

The essay begins with a brief discussion of race and crime, then moves on to discuss the relationship between federal crime-control policies and racial disparities in the criminal justice system. I then conclude with some policy recommendations, among them concerted federal efforts to understand and document the historic and still-prevalent role of racial bias in our criminal justice system, and the education of the American public on the persistence and consequences of these biases.

Key Takeaways

THE EVIDENCE

- The United States incarcerates more people than any other country in the world, with the majority of the growth in the prison population attributable to more punitive criminal justice policies enacted in the 1970s.

- The exponential growth in incarceration during this era was the result of policies that ultimately focused on fighting racial and economic inequality through the criminal justice system instead of social programming.

THE SOLUTIONS

- U.S. policymaking must shift away from dealing with economic inequality through the lens of the criminal justice system and move toward addressing the root causes of racial inequality and poverty. One first step would be to conduct an audit of current federal crime-control policies and funding to eradicate policies that lead to greater racial disparities within the criminal justice system.

Understanding our past: Race and the criminal justice system in the United States

Toward the end of his life, Dr. Martin Luther King, Jr. began fighting for economic justice because he understood that up to that point, American society had paid very little to enact civil rights legislation, and there could be no true social justice and inclusion of African Americans without economic justice.[9] King also seemed to realize that an important component in the fight for equity, justice, and social inclusion was for white people to "reeducate themselves out of their racial ignorance."[10]

Specifically, he noted that black people were putting in a mass effort to overcome the oppression that had hindered their progress over the years. Yet white people, King pointed out, were not as determined to overcome their racial obliviousness, arguing that considerable investments were required to close the racial gap, to accommodate black neighbors, and to enforce bona fide school integration—all of which were still terrifying for many white Americans.

More than 50 years later, there has been no meaningful racial education and only limited inclusion of black people within the social and economic fabric of the United States. Schools are just as racially segregated, if not more, than they were 25–30 years ago.[11] Neighborhoods and communities across the country are still broadly divided along racial lines.[12] Moreover, the racial wealth gap has persisted over time and is about the same level it was in 1962.[13]

Along the way, the United States has achieved the highest incarceration rate in the world, with its prisons disproportionately filled with black descendants of their enslaved ancestors: African American men born in 2001 have roughly a 1 in 3 chance of being imprisoned (roughly 5.5 times their white counterparts), while an African American woman born in 2001 has a 1 in 18 chance of being imprisoned (roughly 6 times their white counterparts).[14] (See Figure 1.)

Likelihood of first imprisonment of black men and women jumped after the introduction of punitive criminal laws

Lifetime likelihood of first imprisonment for individuals born between 1974-2001 by gender and race

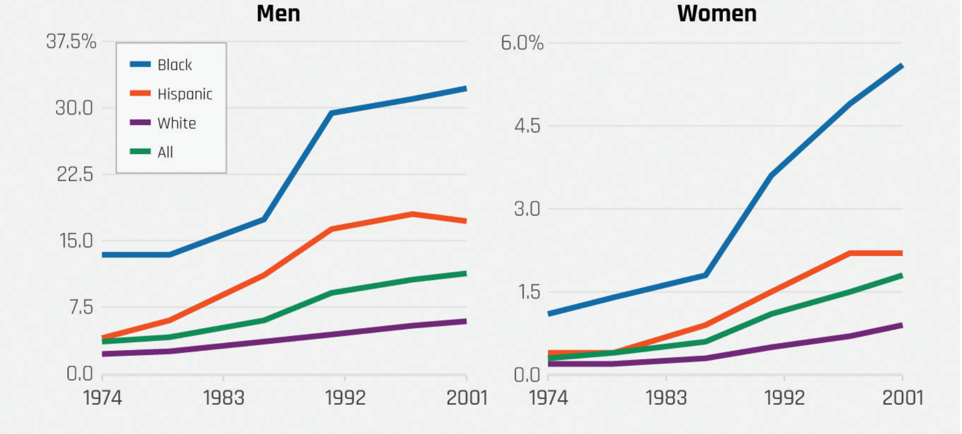

FIGURE 1

...African American men born in 2001 have roughly a 1 in 3 chance of being imprisoned, while an African American woman born in 2001 has a 1 in 18 chance of being imprisoned...

Source: T.P Bonczar, *Prevalence of Imprisonment in the US Population, 1974-2001* (pp. 81-83). Washington, DC (2003): US Department of Justice, Office of Justice Programs, available at https://www.bjs.gov/content/pub/pdf/piuspo1.pdf.

Consider the disproportionality in state and federal prison admissions rates from 1926 to 1993 by race. It should be noted that even in 1926, African American state and federal prison admission rates were more than twice the admission rates of white people, and this continued to increase over time. Yet admission rates began to increase at a much steeper rate for black Americans than for white Americans beginning in the mid-1970s through 1993, such that black admission rates were 7.6 times the white rate by 1993. Imprisonment rates by race from 1988 to 2010 show a similarly large disparity between black people and white people. (See Figure 2.)

Admissions and imprisonment rates for blacks are vastly higher than for whites in the United States

The prison admissions and imprisonment rates of blacks and whites per 100,000 of their populations in the United States, 1926–2010

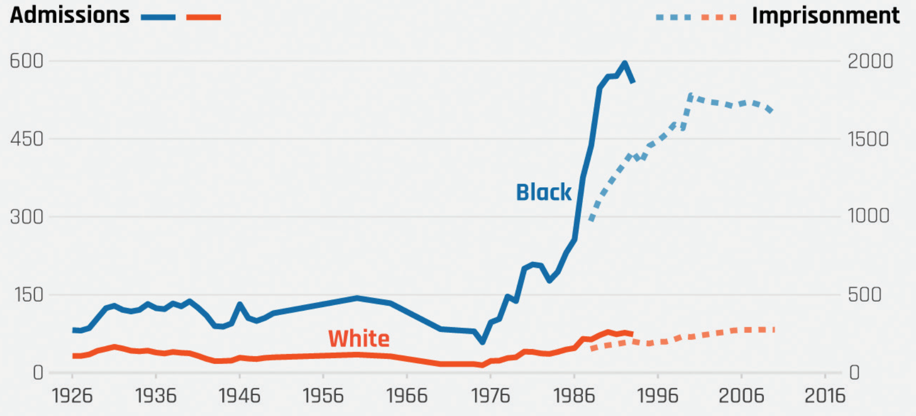

FIGURE 2

...admissions rates began to increase at a much steeper rate for blacks than for whites beginning in the mid 1970s through 1993...

Source: Author's calculations from Campbell Gibson and Kay Jung, "Historical Census statistics on population totals by race, 1790 to 1990, and by Hispanic origin, 1970 to 1990, for the United States, regions, divisions, and states," Working Paper No. 56, Population Division, U.S. Census Bureau (2002), available at https://census.gov/content/dam/Census/library/working-papers/2002/demo/POP-twps0056.pdf; National Prisoners Statistics, U.S. Census Bureau, available at https://www.census.gov/econ/overview/go3000.html; Bureau of Justice Statistics, U.S. Department of Justice, available at https://www.bjs.gov/; Brown, J.M., Gilliard, D. K., Snell, T. L., Stephan, J. J., and Wilson, D. J. 1996. *Correctional Populations in the United States*, 1994. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. http://www.bjs.gov/content/pub/pdf/cpius94.pdf; Jeremy Travis, Bruce Western, and Steve Redburn, Editors, The Growth of Incarceration in the United States: Exploring Causes and Consequences, The National Academies Press (2014), available at https://www.nap.edu/catalog/18613/the-growth-of-incarceration-in-the-united-states-exploring-causes; U.S. Census Bureau (n.d.) Population Estimates 1990-1999 National File. Duke University Libraries, available at https://library.duke.edu/data/sources/popest; U.S. Census Bureau (n.d.) Population Estimates 2000-2010 National File. Duke University Libraries, available at https://library.duke.edu/data/sources/popest.

Political science research suggests a duality in the way that society chooses to punish based on who is punished. Professors Jon Hurwitz at the University of Pittsburgh and Mark Peffley at the University of Kentucky find that when white people are asked about how to address violent crime in general, and violent "inner city" crime in particular, respondents are more likely to prefer to build prisons to combat violent "inner city" crime—and this is true particularly among white people who hold negative stereotypes about black people and who view the criminal justice system as racially fair.[15] In this context, "inner city" is used as a codeword for black.

Mainstream society's view of black people as a degenerate race of inferior intellect, prone to criminal behavior, and incapable of governing themselves is a long-held belief that predates mass incarceration or even the unrest during the civil rights era.[16] These highly racialized views and perspectives played an important role in the intellectual history of the United States in the 19th and early 20th centuries. American Polygeny, or the belief that human races stem from different species, was one of the primary theories to gain recognition in the international science arena at that time.[17] This scientific movement developed right before the American Civil War, during a time of uncertainty when the country was fervent about establishing racial inequalities.[18]

Indeed, the legacy of these racist beliefs spurred the intellectual and political foundation that time and time again led to social investment in policies that reinforced racial inequality and social control, such as black codes and convict leasing. It also laid the groundwork for the Jim Crow laws that took root at the end of Reconstruction in 1877 to limit the full participation of African Americans in the U.S. labor market, voting, residential preferences, and education. These regulations, along with the civil unrest protesting police brutality and other marginalizing institutions in black communities, paved the way in the 20th century for the integration of crime control and equal opportunity programs.[19]

Specifically, it was during President Lyndon Johnson's "Great Society" in the 1960s that anti-poverty programs became intertwined with anti-crime programs, thereby setting the foundation for the mass incarceration policies of the past several decades. In fact, President Johnson's Law Enforcement Assistance Act ended 200 years of domestic law-enforcement policy by instituting federal authority over local policing procedures.[20]

Federal crime-control policies and racial disparities in the criminal justice system

This section of the essay reviews some of the unintended consequences of these major crime-control policies—such as the Edward Byrne Memorial State and Local Law Enforcement Assistance Program, or Byrne Program, which provided federal funding for state and local drug law enforcement efforts—to show how colorblind policies could lead to racially biased results. Conceivably, financial incentives from intergovernmental grant programs and civil asset forfeiture laws, together with U.S. Supreme Court decisions awarding police extraordinary power to stop and search residents with minimal to no probable cause, contributed to the disproportionate policing and imprisonment of African Americans.[21]

A 1993 report by the congressional General Accounting Office (now the Government Accountability Office) found that federal grants provided under the Byrne Program were "the primary source of federal financial assistance for state and local drug law enforcement efforts."[22] These types of grants could lead to changes in policing and prosecution—if, for example, they enhanced collaboration between police and prosecutors—for drug and violent crimes.[23]

In fact, one of the key policing innovations stemming from the Byrne Program was multijurisdictional drug task forces. But some of these multi-jurisdictional task forces—such as the South Central Narcotics Task Force in Texas, which, at one point, arrested 15 percent of the young black men in the city of Hearne in one drug raid—have become infamous for their selective enforcement of African Americans.[24]

The case of Hearne, Texas is especially egregious: The South Central Narcotics Task Force conducted raids in the black community each year for 15 years under the direction of District Attorney John Paschall with the intent to "round up the n*****s."[25] Even though white and Hispanic people in the community were participating in drug activity at the same rates, there was a deliberate focus on the black community, according to an American Civil Liberties Union legal complaint.[26] In fact, the same ACLU legal complaint specifically states that Paschall was open about his desire to rid Hearne of its black population using incarceration.

I and my co-author, Jamein Cunningham at the University of Memphis' Department of Economics, investigate the effect of the Byrne Program on crime and black and white arrests.[27] We find this program significantly increased the number of drug sales arrests for white and black people, although the marginal effect on drug sales arrests for African Americans is much larger, suggesting that this program may have exacerbated already-present racial disparities in arrests. Although the Byrne Program also targeted violent crime, there is little evidence of significant changes for violent crime arrests.

While our analysis cannot specifically pinpoint the mechanism through which police increased arrests for drug sales by black people, such as by selective enforcement due to racial animus or implicit bias, sociologists Katherine Beckett, Kris Nyrop, and Lori Pfingst at the University of Washington find evidence of selective enforcement of African Americans in Seattle. Their research finds that selective enforcement was due to organizational practices established by policies driven by implicit racial bias and not the more common reasons provided for differences in arrests, such as differences in the structure of drug markets between drugs used and sold by black and white people or greater community complaints by black people.[28] University of Chicago economist Derek Neal and Cornell University management professor Armin Rick also find that due to historical differences in arrest rates, mass incarceration policies disproportionately affect African American communities.[29]

Similarly, Emily Weisburst at UCLA's Luskin School of Public Affairs, using data from Texas, finds that federal grant funds for school police from the Community Oriented Policing Services' Cops in Schools program raises middle school discipline rates by 6 percent per year, and this increase is mostly driven by low-level infractions.[30] Moreover, black students experience the greatest increase in their discipline rates. She estimates that a student who attends a school district that received one 3-year grant is 2.5 percent less likely to graduate high school and has a 4 percent reduced chance of enrolling in college.

While these crime-control policies were seemingly colorblind, they were certainly not race neutral in their effect.

Effective criminal justice policy

The United States' history of racial bias and animus is so engrained in the soul of the country that failure to acknowledge and atone for its presence in the intellectual, political, and cultural fabric of our society allows for its continued reproduction.[31] What's more, the failure to recognize the intricate connection of racial bias to systems of social control, such as the criminal justice system, leads to challenges to the implementation of race-neutral public policy and causes additional social costs to society. Specifically, ignoring racism as an important policy variable leaves federal, state, and local policies vulnerable to be misused as a tool to oppress and disenfranchise historically oppressed groups.

The failure to recognize the role of race and racial bias as a key policy variable through which the United States arrived at the state of mass incarceration, as well as the role that race plays in criminal justice system outcomes in general, will only reproduce historically racially biased social structures, racial disparities in the criminal justice system, and social exclusion, regardless of any reforms we choose to implement.[32] The impact of these racial disparities on earnings is telling.[33] But the collateral consequences of mass incarceration policies are far reaching and have been devastating to the black community. These consequences include greater health disparities, the destruction of the black family, greater obstacles to employment and human capital investment, and the forfeiture of citizenship status and political exclusion through felon disenfranchisement laws.[34]

Recent research on the consequences of racial bias in U.S. incarceration rates makes manifest many of these connections. University of California, Berkeley public policy professors Rucker Johnson and Steven Raphael observe that male incarceration explains the bulk of the difference in HIV/AIDS rates between black and white women.[35] And I and my co-author Sally Wallace, an economist at Georgia State University's Andrew Young School of Policy Studies, find that the financial shock of an incarceration raises the likelihood that households with children will become food insecure.[36] In fact, it is estimated that families with an incarcerated loved one incur almost $14,000 in debt, paying for court-related costs and fines, and that 1 in 3 families go into debt to maintain contact with an incarcerated family member.[37]

Action at the federal level is now required to undo the harm caused by racially biased mass incarceration policies. To begin addressing these concerns, the federal government should first seek to re-educate the public about the history of race in the United States in order to break flawed perceptions in the association between race and crime. The first step in this strategy would be reconciliation and atonement, which may include reparations for past and current oppressive policies enacted against historically marginalized groups in general and African Americans in particular.

As part of this strategy, the government should allocate funding to state and local governments for initiatives that will educate the public on the history of race in the United States and how this history affects social outcomes and our beliefs about others. This should be incorporated throughout Kindergarten through grade 12 public school curriculums in all subjects.

Moreover, the federal government should encourage and promote policies that work against the dehumanizing effect of racial biases by providing incentives for the development of programs that produce empathy toward others.[38] As part of this strategy, these policies should address racial biases in the criminal justice system and their root causes, such as racial biases that persist in news media reports of criminals and victims. Research finds that the news media portray false accounts about the racial distribution of criminals, victims, and arbitrators of justice, and that these characterizations perpetuate false racial stereotypes about crime.[39] To the extent that these racial stereotypes impede the execution of unbiased criminal justice policy, racial biases in the media should be addressed.[40]

The federal government also should conduct an audit of federal crime-control programs and policies (such as plea bargaining) to understand their impact on historically marginalized groups, encourage state and local governments to do the same, and then defund programs that inadvertently lead to greater net social harm, that increase racial disparities, or that have a disproportionate burden on historically marginalized communities. Such a benefit-cost analysis should be undertaken to determine how these policies not only influence crime but also their external costs (or benefits) to society. Policymakers can no longer condone partial equilibrium analyses that only consider the direct crime-fighting benefits of a program without also considering all of its direct and indirect costs to society, which includes determining the extent to which a policy is race neutral and its effect on marginalized groups.

These sets of recommendations would require unbiased data collection by the states and local governments of quality criminal justice data in order to understand why there are persistent racial disparities in the criminal justice system, including documentation not only for policing but also for prosecution, since prosecutors also are important gatekeepers to the criminal justice system.[41] This effort also would require better data collection on arrests, convictions, and incarcerations in national datasets, such as the U.S. Census, in order to improve population estimates of the impact of incarceration on individuals, families, and communities.

Theoretically, crime-control policies include programs that promote economic justice and the elimination of racial disparities. Yet investments in economic opportunities should be done on the front end through social services organizations, not on the back end through the criminal justice sector, which may only serve to increase the contact of young minorities with the criminal justice system. In other words, federal and state governments should stop using the criminal justice system to address economic inequities. This would require decreasing the correctional population, both juvenile and adult, which could be done, for example, by placing a moratorium on incarceration for non-violent offenses and redirecting the cost savings to social programs. The federal government could provide monetary incentives to states that reduce their correctional population. These social programs should not be administered by law enforcement agencies. Examples of these programs are early childhood education, subsidized childcare programs, summer programs for youth, improving K–12 school quality, and more equitable healthcare—all targeted toward the most marginalized groups in society.

Finally, the federal government should tie federal funding for criminal justice programs to states' eradication of felon disenfranchisement laws. Although African Americans' right to vote became protected by law with the Voting Rights Act of 1965, the racial disparities in felony convictions suggest that they disproportionately bear the burden of felon disenfranchisement laws, and through these laws, many have effectively lost their right to vote.[42] Most states prohibit individuals in prison or on probation or parole from voting, and although numerous states have developed protocols for restoring voting privileges to ex-offenders, these procedures are so burdensome that many of them do not seek to restore their rights.[43]

Conclusion

Failure to address racial biases in our society risks democracy for all Americans. Failure to address the systematic racial biases in state, local, and federal policies in general, and the criminal justice system in particular, will only lead to the perpetuation of racial inequality and the overrepresentation of marginalized groups within sectors of social exclusion, especially the criminal justice system. While there is undoubtedly a behavioral aspect to crime, too much focus on the individual will not address the root causes of crime in our society or the structural barriers that have led to the social exclusion of historically marginalized individuals and communities.

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Endnotes

1 Danielle Kaeble and Mary Cowhig, "Correctional populations in the United States" (Washington: U.S. Department of Justice, 2016), available at https://www.bjs.gov/content/pub/pdf/cpus16.pdf.

2 Steven Raphael and Michael Stoll, *Why are so many Americans in prison?* (New York: Russell Sage Foundation, 2013), available at https://www.russellsage.org/publications/why-are-so-many-americans-prison.

3 This number does not account for individuals who show up in the system more than one time.

4 Sarah K.S. Shannon and others, "The Growth, Scope, and Spatial Distribution of People With Felony Records in the United States, 1948–2019," *Demography* 54 (1) (2017): 795–1818, available at http://users.soc.umn.edu/~uggen/Shannon_Uggen_DEM_2017.pdf.

5 Elizabeth Hinton, *From the War on Poverty to the War on Crime* (Cambridge, MA: Harvard University Press, 2016), available at https://www.hup.harvard.edu/catalog.php?isbn=9780674979826.

6 Robynn J. Cox, "Where do we go from here: Mass incarceration and the struggle for civil rights" (Washington: Economic Policy Institute, 2015), available at https://www.epi.org/publication/where-do-we-go-from-here-mass-incarceration-and-the-struggle-for-civil-rights/; Hinton, *From the War on Poverty to the War on Crime*.

7 Ibid., p. 334.

8 For a discussion, see Cox, "Where do we go from here: Mass incarceration and the struggle for civil rights."

9 "There are no expenses, and no taxes are required, for negroes to share lunch counters, libraries, parks, hotels, and other facilities with whites." Martin Luther King Jr., *Where do we go from here: Chaos or community?* (1968), p. 197.

10 Ibid, p.43.

11 Sean F. Reardon and Ann Owens, "60 Years after Brown: Trends and Consequences of School Desegregation," *Annual Review of Sociology* (2014), available at https://cepa.stanford.edu/content/60-years-after-brown-trends-and-consequences-school-segregation.

12 Bradley B. Hardy, Trevon D. Logan, and John Parman, "The Historical Role of Race and Policy for Regional Inequality" (Washington: The Hamilton Project, 2018), pp. 43–69, available at https://www.hamiltonproject.org/papers/the_historical_role_of_race_and_policy_for_regional_inequality.

13 Dionissi Aliprantis and Daniel R. Carroll, "What is Behind the Persistence of the Racial Wealth Gap," (Cleveland, OH: Federal Reserve Bank of Cleveland, 2019), available at https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2019-economic-commentaries/ec-201903-what-is-behind-the-persistence-of-the-racial-wealth-gap.aspx.

14 T.P Bonczar, "Prevalence of Imprisonment in the US Population, 1974-2001" (Washington: U.S. Department of Justice, 2003), pp. 81–83, available at https://www.bjs.gov/content/pub/pdf/piusp01.pdf.

15 Jon Hurwitz and Mark Peffley, "Playing the Race Card in the Post-Willie Horton Era: The Impact of Racialized Code Words on Support for Punitive Crime Policy," *Public Opinion Quarterly* 69 (1) (2005): 99–112, available at https://academic.oup.com/poq/article-abstract/69/1/99/1911587?redirectedFrom=fulltext.

16 Stephen Steinberg, "The liberal retreat from race during the post-civil rights era." In W. Lubiano, ed., *The house that race built: Original essays* (New York: Random House, 1998), pp. 13–48, available at https://trove.nla.gov.au/work/32723585?q&versionId=39927489; Angela Y. Davis, "Black Americans and the punishment industry." In W. Lubiano, ed., The house that race built: *Original essays*, pp. 264–279, available at https://trove.nla.gov.au/work/32723585?q&versionId=39927489; Steven Jay Gould, *The mismeasure of man*. (New York: WW Norton & Company, 1996).

17 Gould, *The mismeasure of man*.

18 Terrence D. Keel, "Religion, polygenism and the early science of human origins," *History of the Human Sciences* 26 (2) (2013): 3–32, available at https://doi.org/10.1177/0952695113482916.

19 Elizabeth Hinton, "A War within Our Own Boundaries: Lyndon Johnson's Great Society and the Rise of the Carceral State," *The Journal of American History* 102 (1) (2015): 100–112; Hinton, *From the War on Poverty to the War on Crime*.

20 Ibid.

21 Jefferson E. Holcomb and others, "Civil asset forfeiture laws and equitable sharing activity by the police," *Criminology & Public Policy* 17 (1) (2018): 101–127, available at https://doi.org/10.1111/1745-9133.12341; Kathleen R Sandy, "The discrimination inherent in America's drug war: Hidden racism revealed by examining the hysteria over crack," *The Alabama Law Review* 54 (2003): 665–694; Bruce L. Benson and David W. Rasmussen, "Predatory public finance and the origins of the war on drugs 1984–1989," *The Independent Review* 1 (2) (1996): 163–18; J.H. Tieger, "Police discretion and discriminatory enforcement," *Duke Law Journal* (4) (1971): 717–743; K. Russell, "Driving while black: Corollary phenomena and collateral consequences," *Boston College Law Review* 40 (1998): 717.

22 U.S. Government Accountability Office, "War on Drugs: Federal Assistance to State and Local Drug Enforcement," (1993), p. 2.

23 T. Dunworth, P. Haynes, and A.J. Saiger, "National assessment of the Byrne formula grant program" (Washington: U.S. Department of Justice, 1997), vol. 1.

24 Tim Carman and Steve McVicker, "Drug Money," Houston Press, September 6, 2001, available at https://www.houstonpress.com/news/drug-money-6560746.

25 Kelly v. Paschall, Texas Civ. 02-A-02-CA-702 JN (ACLU, 2003), available at http://www.aclu.org/FilesPDFs/2nd%20amended%20complaint%20in%20kelly%20v%20paschall.pdf.

26 Dunworth, Haynes, and Saiger, "National assessment of the Byrne formula grant program."

27 Robynn Cox and Sally Wallace, "Identifying the link between food security and incarceration," *Southern Economic Journal* 82 (4) (2016): 1062–1077, available at https://doi.org/10.1002/soej.12080.

28 Katherine Beckett, Kris Nyrop, and Lori Pfingst, "Race, drugs, and policing: Understanding disparities in drug delivery arrests," *Criminology* 44 (1) (2006): 105–137. Nyrop currently is a consultant for the Public Defenders Association; Pfingst is chief of programs and policy in the Community Services Division of Washington state's Department of Social and Health Services.

29 Derek Neal and Armin Rick, "The Prison Boom and the Lack of Black Progress After Smith and Welch." Working Paper No. w20283 (National Bureau of Economic Research, 2014). They do not discuss the reasons for the racial bias in arrest rates, and instead take them as a given.

30 Emily K. Weisburst, "Patrolling Public Schools: The Impact of Funding for School Police on Student Discipline and Long-term Education Outcomes," *Journal of Policy Analysis and Management* 38 (2) (2019): 338–365;

31 Michelle Alexander, *The new Jim Crow: Mass incarceration in the age of colorblindness* (New York: The New Press, 2010); Cox, "Where do we go from here: Mass incarceration and the struggle for civil rights"; Hinton, *From the War on Poverty to the War on Crime*.

32 As Angela Davis wrote: "When the structural character of racism is ignored in discussions about crime and the rising population of incarcerated people, the racial imbalance in jails and prisons is treated as a contingency, at best as a product of the 'culture of poverty,' and at worst as proof of an assumed black monopoly on criminality. The high proportion of black people in the criminal justice system is thus normalized and neither the state nor the general public is required to talk about and act on the meaning of that racial imbalance." See Davis, "Black Americans and the punishment industry," p.265.

33 B. Western and B. Pettit, "Black-white wage inequality, employment rates, and incarceration," *American Journal of Sociology* 111 (2) (2005): 553–578, available at http://dx.doi.org/10.1086/432780; Neal and Rick, "The Prison Boom and the Lack of Black Progress After Smith and Welch"; Byron L. Sykes and Michelle Maroto, "A Wealth of Inequalities:

Mass Incarceration, Employment, and Racial Disparities in U.S. Household Wealth," *The Russell Sage Foundation Journal of Social Sciences* 2 (6) (2016) 129–152, available at https://www.rsfjournal.org/content/2/6/129.abstract.

34 Western and Pettit, "Black-white wage inequality, employment rates, and incarceration"; H.J. Holzer, P. Offner, and E. Sorensen, "Declining employment among young black less-educated men: The role of incarceration and child support," *Journal of Policy Analysis and Management* 24 (2) (2005): 329–250, available at https://doi.org/10.1002/pam.20092; H. Holzer, S. Raphael, and M. Stoll, "Perceived criminality, criminal background checks, and the racial hiring practices of employers," *Journal of Law and Economics* 49 (2006): 451–480, available at https://doi.org/10.1086/501089; H.J. Holzer, S. Raphael, and M.A. Stoll, "How Willing are Employers to Hire Ex-Offenders?" Focus 23 (2) (2004): 40–43; B. Western and B. Pettit, "Incarceration and racial inequality in men's employment," *Industrial and Labor Relations Review* 54 (1) (2000): 3–16, available at https://doi.org/10.1177/001979390005400101; K.K. Charles and M.C. Luoh, "Male incarceration, the marriage market, and female outcomes," *The Review of Economics and Statistics* 92 (3) (2010): 614–627, available at https://doi.org/10.1162/REST_a_00022; D. Pager, B. Western, and N. Suggie, "Sequencing disadvantage: Barriers to employment facing young black and white men with criminal records," *The ANNALS of the American Academy of Political and Social Science* 623 (2009): 195–213, available at https://doi.org/10.1177/0002716208330793; L.M. Lopoo and B. Western, "Incarceration and the formation and stability of marital unions," *Journal of Marriage and Family* 67 (3) (2005): 721–734, available at https://doi.org/10.1111/j.1741-3737.2005.00165.x; B. Western and C. Wildeman, "Punishment, inequality, and the future of mass incarceration," *University of Kansas Law Review* 57 (2008): 851, available at https://doi.org/10.17161/1808.20098; C. Uggen, J. Manza, and M. Thompson, "Citizenship, democracy, and the civic reintegration of criminal offenders," *The ANNALS of the American Academy of Political and Social Sciences* 605 (2006): 281–310, available at https://doi.org/10.1177/0002716206286898; H. Lee and C. Wildeman, "Things fall apart: Health consequences of mass imprisonment for African American women," *The Review of Black Political Economy* (2011): 1–14, available at https://doi.org/10.1007/s12114-011-9112-4; R.J. Cox, "The impact of mass incarceration on the lives of African American women," *The Review of Black Political Economy* 39 (2) (2012): 203–212, available at https://doi.org/10.1007/s12114-011-9114-2;Cox and Wallace, "Identifying the link between food security and incarceration."

35 R.C. Johnson and S. Raphael, "The effects of male incarceration dynamics on acquired immune deficiency syndrome infection rates among African American women and men," *Journal of Law and Economics* 52 (2) (2009): 251–293, available at https://doi.org/10.1086/597102.

36 Cox and Wallace, "Identifying the link between food security and incarceration."

37 S. deVuono-Powell and others, "Who Pays? The True Cost of Incarceration on Families" (Oakland, CA: Ella Baker Center, 2015).

38 Robynn Cox, "Applying the Theory of Social Good to Mass Incarceration and Civil Rights," *Research on Social Work Practice*, September 26, 2019, available at https://journals.sagepub.com/doi/10.1177/1049731519872838.

39 F.D. Gilliam Jr and others, "Crime in black and white: The violent, scary world of local news," *Harvard International Journal of Press/Politics* 1 (3) (1996): 6–23.

40 F.D. Gilliam Jr. and S. Iyengar, "Prime suspects: The influence of local television news on the viewing public," *American Journal of Political Science* (2000): 560–573.

41 M.M. Rehavi and S.B. Starr, "Racial disparity in federal criminal sentences," *Journal of Political Economy* 122 (6) (2014): 1320–1354.

42 So extensive is the incarceration and felony conviction crisis that it is estimated that had it not been for felon disenfranchisement laws, former Vice President and Democratic Party presidential candidate Al Gore would have won Florida by, at the minimum, approximately 31,000 votes and thus the presidency in the 2000 presidential election. See C. Uggen and J. Manza, "Democratic contraction? Political consequences of felon disenfranchisement in the United States," *American Sociological Review* (2002): 777–803; P. Karlan, "Forum." In G.C. Loury, ed., *Race, Incarceration, and American Values* (Cambridge, MA: The MIT Press, 2008), pp. 41–56; Uggen, Manza, and Thompson, "Citizenship, democracy, and the civic reintegration of criminal offenders." More than just its impact on presidential elections, disproportionate felony convictions within the black and other excluded communities could also lead to a lack of political representation for these groups, which may make it more likely that unfavorable laws affecting these marginalized groups are passed.

43 The Sentencing Project, "Felony disenfranchisement laws in the United States" (2013), available at http://www.sentencingproject.org/detail/publication.cfm?publication_id=15.

NATIVE AMERICAN INCARCERATION

Prisoner re-entry in Native American communities offers lessons of resilience and nationwide policy solutions

By Blythe George, University of California, Berkeley

Overview

Half of all tribal reservations in the United States have unemployment rates higher than 50 percent, and nearly all have poverty rates of more than 40 percent, with their incarceration patterns 44 percent higher than national averages.[1] Scores of men and women have been removed from their communities by the criminal justice system, and the adverse effects of prisoner re-entry have been immediate in tribal communities.

Despite dealing with these consequences of significant and overlapping economic and social inequalities for generations, tribal reservations and the individuals who call these areas home are examples of living resilience. Their resilience manifests in the ability to overcome great adversity to teach their children the traditions passed down to them from their elders, honor their obligations to their families and communities, and steward their local environments.

As a Yurok sociologist, I offer the experience of my own tribal reservation, the Yurok Indian Reservation in northwestern California, and the experience of Indian Country at large as an opportunity to devise and extrapolate effective strategies for prisoner re-entry in communities across the country. Tribal Americans are the first inhabitants of our country, and their ability to persist despite centuries of economic and social inequality is evidence of their tenacity and resilience. Better understanding the process of resilience in these communities affected by mass incarceration, substance use, and poverty could unlock similar strategies for use in areas with comparable obstacles, such as other rural parts of the country, low-income neighborhoods and other communities.

Learning how tribal members thrive on remote reservations despite their scant resources and high substance abuse rates can shed light on how to intervene in the opioid crisis that is devastating so many rural, underresourced communities around the country. Going further, understanding prisoner re-entry from a rural perspective will help adapt existing community reintegration policies to better meet the needs of those living far from public transportation, formal employment, public housing, and other key supports for helping offenders get back on their feet post-incarceration.[2] Finally, finding a way to revitalize stagnant reservation economies could shed light on how to do so in other communities affected by industrial decline.

In these ways, Indian Country has much to teach the rest of the United States when it comes to successfully intervening in cycles of adversity. Yet sizable public investments and increased legislative support must first be secured to maximize these lessons. Toward those ends, I introduce three noteworthy solutions for policymakers to support: the importance of investing in rural data infrastructure; reshaping the criminal justice system to re-emphasize rehabilitation over punishment in the form of therapeutic jurisprudence; and expanding the mental health and dual diagnoses services that are available in rural areas.

Key Takeaways

THE EVIDENCE

- Significant economic and social inequalities faced by generations of Native Americans are examples of living resilience among communities affected by mass incarceration, substance abuse, and poverty.

- These traditions of resilience are manifest in Native American families and communities, and understanding this process of resilience could unlock similar strategies for use by other populations in other parts of the country.

THE SOLUTIONS

- Native American communities need enhanced infrastructure and increased investment to expand efforts to heal the wounds left by generations of trauma and oppression, including resources for rural data collection, dual diagnosis mental health facilities, and expanded jurisdictions of tribal courts.

Data infrastructure

Data infrastructure matters because there can be no policy intervention without first establishing the baseline and scope of a problem. One such example includes the epidemic of missing and murdered indigenous women and girls across the country. Documentaries such as *this river* and *Finding Dawn* and popular films such as *Wind River* speak to the grave miscarriages of justice that take place far too often on tribal lands, where indigenous women are up to 10 times more likely to be victims of a violent assault than their nonindigenous counterparts.

Scholar-activists such as Annita Lucchesi, director of the Sovereign Bodies Institute and creator of the database on missing and murdered indigenous women and girls, and the Urban Indian Health Institute have each made great inroads to document the scope and breadth of this tragic phenomenon.[3] In spite of their contributions, such data-collecting efforts are far too often stymied by national and local law enforcement agencies that refuse to work in good faith with tribal bodies to share data on their citizens. The Freedom of Information Act exists for a reason, but Freedom of Information Act requests add unnecessary and even damaging time to the search for missing and murdered indigenous women and girls, and risk further victimizing those who are missing and murdered, as well as their families, by preventing tribes from accessing essential records on their behalf.

Without proper data on their missing and murdered citizens, tribal nations are greatly limited in their capacity to intervene in the violence and adversity that claims the lives of their mothers, daughters, aunties, and sisters well before their time. It is the responsibility of both policymakers and the criminal justice system to honor the sovereignty of tribal nations as partners in seeking justice in Indian Country through full and transparent cooperation, from the reporting of a crime through its investigation and prosecution.

Even more so, resources and funding must be allocated to tribes and their neighboring county jurisdictions to design, implement, and expand their data-collection infrastructure. Piloting these strategies in tribal communities could shape efforts to build similar mechanisms in rural areas across the country, areas that are notoriously underresourced with regards to data collection.[4]

Criminal justice

Just as we build the tools necessary to track the victims of violent crime in tribal communities, we must also design our policy interventions to meet the needs of tribal offenders. These individuals have indeed committed crimes, but more often than not, they also have been victims of violence and trauma themselves. For Native men in particular, one must take into account that they suffer trauma at far disproportionate levels compared to other groups, but we have yet to recognize this in theory or policy.[5]

American Indian and Alaskan Native, or AI/AN, men experience more disparities than any other group, including increased risk of chronic health conditions, accidental death, and homicide. Their suicide rate outpaces that of any other group from adolescence to middle age.[6] Only 50 percent of American Indians graduate high school, with less than one in three American Indian men graduating in areas with large native populations, such as the Dakotas.[7] American Indian men are overrepresented in the criminal justice system, and Yurok men in particular are 11 times more likely to go to jail than the average American.[8]

Despite such a long list of adversities, "AI/AN men persist," says education psychologist Leah Rouse, associate professor and Eleta Quinney Scholar at the University of Wisconsin, Milwaukee's School of Education, and their resilience cannot be understated.[9] Tribal men overcome their traumas to honor their obligations to their families and communities. My work with tribal fathers with criminal records speaks to the deep involvement and intense meaning that they derive from their roles as providers and teachers. In spite of their pro-work orientations, they are limited in their capacity to find work by their criminal histories and struggles with substance abuse, and these constraints are further exacerbated by the slack labor market in which they find themselves.[10]

For former offenders, finding work is first a process of getting sober. Even if they abstained from substances for the duration of their sentence, up to 90 percent of repeat offenders struggle with chronic substance use.[11] Those courts that best support their efforts to get "clean and sober" employ a therapeutic jurisprudence model through holistic case management that centers on framing those under supervision as assets rather than liabilities.[12]

California is leading the way with such efforts in the form of joint jurisdiction courts. The Yurok Tribe is partnering with the surrounding counties of Humboldt and Del Norte to create courtrooms where tribal judges work with county judges to support offenders through re-entry by offering Wellness Courts to support recovery, accept in-kind child support in the form of traditional food gathering and subsistence hunting, and offer culturally adapted batterer's intervention programming. Those jurisdictions that have partnered with tribal bodies to shepherd their members through the criminal justice system are thriving.[13]

Even still, we need more county jurisdictions that are willing to pioneer these efforts alongside increased funding to help them do so. Long term, federal policymakers could directly expand tribal court oversight through executive orders and bills that emulate the Indian Child Welfare Act and the Violence Against Women Act by placing jurisdiction over injustices committed against tribal peoples directly into the hands of these sovereign nations. Such vital legislation has previously protected thousands of Americans and greatly enhanced the ability of tribal courts to safeguard and support their citizens.

By spearheading the expansion of tribal jurisdictions, policymakers can support these courts to pioneer effective criminal justice reform ripe for replication. In this way, those communities that also are plagued by mass incarceration will benefit from the strategies formulated by tribal courts as they facilitate the process of successful prisoner re-entry.

Mental health and dual diagnoses services

A key component of supporting "returners" as they navigate life post-incarceration is addressing their needs in a holistic manner that affirms them as a whole person. Many offenders must meet their mental health needs before they can find work and support their families, and that often means seeking drug rehabilitation treatment. My research shows that legacies of adversity cluster on reservations, such that those who live there are much more likely to be exposed to adverse experiences across the course of their lives. Such trauma can have lifelong implications and, when combined with substance use, can dramatically reduce the ability of an individual to function in mainstream society, let alone gain and maintain formal employment.[14]

If policymakers and civic leaders are to intervene in cycles of trauma and addiction that span generations, then they must greatly augment the existing mental healthcare system in this country. Rural areas have few mental health resources and would particularly benefit from an increased investment in dual diagnoses treatment centers that have the capacity to support individuals with co-occurring disorders such as post-traumatic stress disorder, depression, and drug and/or alcohol dependence.[15]

Beyond the significant human toll, these conditions deprive the nation's workforce of billions of dollars in lost productivity each year.[16] Integrated mental and substance abuse care facilities that have the capacity to treat co-occurring mental health conditions and addiction comprise only a fraction of available treatment options in this country, and policymakers must budget accordingly for the expansion of such services in rural and urban areas alike.[17] Mental heath is a right, not a privilege. It is high time policymakers enshrined this ethos through effective legislation and investment.

Native American communities as sources of resilience

Indigenous peoples are the original inhabitants of every landscape in the United States and the vitality of their communities are a direct reflection of the health of the nation at large. Described as the "miner's canary," tribal reservations and their off-reservation networks are a pulse point from which to observe the historical and present-day legacies of oppression and violence in the United States.[18]

There are harsh conditions that shape life on many reservations. These are a direct reflection of the historical trauma that accompanies life on tribal lands. Eduardo Duran and his co-authors of "Healing the American Indian Soul Wound," coin the term soul wound to refer to the traumas that cannot heal in one generation and persist through to the next.[19] Such trauma is cumulative and concentrated in communities marked by cumulative adversity.[20]

The soul wound also is known more recently as intergenerational trauma, historical trauma, and post-traumatic stress disorder—all academic names for a phenomenon that has been acknowledged for centuries in Native communities.[21] Even for those who did not perish from physical contact with Europeans and their diseases beginning in the 15th century or the genocide and slavery that followed, the trauma of these events and others, such as the forced removal of Indian children to residential boarding schools and the termination of tribal sovereignty in the 1950s, all accumulate over time, leaving the survivors with guilt and unresolved mourning.[22]

Losses of such magnitude are expressed at the epigenetic level, whereby extreme stress can change the structure of human DNA such that the trauma experienced by past generations is transmitted down to their descendants.[23] Such DNA testing confirms what tribal communities have long known to be true—the higher rates of alcoholism, suicide, and other chronic health conditions such as diabetes and heart disease that plague Native American families represent the residue of past traumas manifesting in present-day symptoms.[24] Thankfully, because "the explanations of the soul wound are centuries old," so too are its solutions.[25]

Without trauma, there can be no resilience. Resilience is not a trait, but rather a dynamic process that speaks to the ability to adapt to adversity and "bounce back" from stress and trauma.[26] In Native communities, the need for resilience has surfaced time and time again, as "perfectly normal people respond to an abnormal history," writes Martin Brokenleg, a Rosebud Sioux and a professor of Native American Studies and chair of the Department of Sociology and Social Work at Augustana College.[27] In this way, indigenous peoples have much to teach us about the process of resilience. By investing in the strategies of resilience derived from tribal communities, policymakers can emulate these mechanisms for successful intervention in similarly disadvantaged communities.

Conclusion

Ultimately, while we as indigenous peoples live in communities that deal with high crime, epidemic substance use, and a host of other negative outcomes on a daily basis, we are still here, and our very existence is a reflection of our resilience over time. We are the epitome of survival, and we draw on our deep knowledge base as this country's original caretakers to thrive despite many obstacles otherwise.

Even with our resilience, however, we are in desperate need of enhanced infrastructure and increased investment to expand our efforts to heal the wounds left by generations of trauma and oppression. The rural areas that many of us call home are the least prepared to meet our needs despite a sincere desire to do so, yet this could easily be ameliorated through legislative and monetary investments. We have the answers and the ways of knowing that we need to heal ourselves, but we need the funding and the infrastructure necessary to do so.

Specifically, by increasing the resources available for rural data collection and dual diagnosis mental health facilities, as well as expanding the jurisdictions of tribal courts to better allow them to directly meet the needs of their citizens, policymakers stand to greatly augment their own resources for intervening in comparable adversities in communities around the country. Investing in our vitality as indigenous peoples is the first step to identifying those strategies of resilience needed to restore the health of communities shaped by inequality. 'Wokhlew' ("thank you" in Yurok) for your consideration.

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Endnotes

1 Randall K.Q. Akee and Jonathan B. Taylor, *Social and Economic Change on American Indian Reservations: A Databook of the US Censuses and the American Community Survey 1990–2010* (Sarasota, FL: The Taylor Policy Group, Inc., 2014); Eric Henson, *The State of the Native Nations: Conditions Under U.S. Policies of Self-Determination* (New York: The Harvard Project on American Indian Economic Development, 2008).

2 Christy Visher and Jeremy Travis, "Transitions From Prison To Community: Understanding Individual Pathways," *Annual Review of Sociology* 29 (2003): 89–113; Christy Visher and others, "Baltimore Prisoners' Experiences Returning Home" (Washington: Urban Institute Justice Policy Center, 2004); Demelza Baer and others, "Understanding the Challenges of Prisoner Reentry: Research Findings from the Urban Institute's Prisoner Reentry Portfolio" (Washington: Urban Institute Justice Policy Center, 2006); David Harding and others, "Making Ends Meet after Prison: How Former Prisoners Use Employment, Social Support, Public Benefits, and Crime to Meet their Basic Material Needs." Working Paper Series #11–25 (National Poverty Center, 2011).

3 Annita Lucchesi and Abigail Echo-Hawk, "Missing and Murdered Indigenous Women & Girls: A Snapshot Of Data From 71 Urban Cities In The United States" (Seattle, WA: Urban Indian Health Institute, 2019).

4 Ralph Weisheit and L. Edward Wells, "Rural Crime and Justice: Implications for Theory and Research," *Crime and Delinquency* 42 (3) (1996): 379–397.

5 Leah Rouse, "American Indians, Alaska Natives, and the Psychology of Men & Masculinity." In *APA Handbook of Men & Masculinities* (Washington: American Psychological Association, 2015), pp. 319–337; Eduardo Duran and others, "Healing the American Indian Soul Wound." In *International Handbook of Multigenerational Legacies of Trauma* (Berlin: Plenum Press, 1998), pp. 341–354.

6 Rouse, "American Indians, Alaska Natives, and the Psychology of Men & Masculinity."

7 Susan C. Faircloth and John W. Tippeconnic III, "The Dropout/Graduation Rate Crisis Among American Indian and Alaska Native Students: Failure to Respond Places the Future of Native Peoples at Risk" (Los Angeles: The Civil Rights Project at UCLA, 2010).

8 Stephanie Beran, "Native Americans in Prison: The Struggle for Religious Freedom," *Nebraska Anthropologist* (2005): 46–55.

9 Rouse, "American Indians, Alaska Natives, and the Psychology of Men & Masculinity," p. 334.

10 Matthew S. Carroll and others, "A Response to "Forty Years of Spotted Owls? A Longitudinal Analysis of Logging Industry Job Losses," *Sociological Perspectives* 42 (2) (1999): 325–33; Tim Slack and Leif Jensen, "Employment Adequacy in Extractive Industries: An Analysis of Underemployment, 1974–1998," Society & Natural Resources 17 (2) (2004): 129–46; Humboldt County Office of Economic Development, "Humboldt Timber Industry: Down But Not Out," (2007); Jeffrey Stier, "Technological Adaptation to Resource Scarcity in the U.S. Lumber Industry," *Western Journal of Agricultural Economics* 5 (2) (1980): 165–75.

11 Shadd Maruna, *Making Good: How Ex-Convicts Reform and Rebuild their Lives* (Washington: American Psychological Association, 2001).

12 Bruce Winick and David B. Wexler, "The Use of Therapeutic Jurisprudence in Law School Clinical Education: Transforming the Criminal Law Clinic," *Clinical Law Review* (13) (2006): 605–632.

13 Henry Gass, "Native Justice: How Tribal Values Shape Judge Abby's Court," *The Christian Science Monitor*, March 27, 2019; Geoffrey Riley, John Baxter, and April Ehrlich, "Yurok Tribal Court Featured In PBS Documentary," Jefferson Public Radio, October 4, 2017.

14 Robert F. Anda and others, "The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence Of Evidence From Neurobiology and Epidemiology," *European Archives of Psychiatry and Clinical Neuroscience* 256 (2006): 174–186; Vincent J. Felitti and others, "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study," *American Journal of Preventative Medicine* 14 (4) (1998): 245–258; Jon D. Kassel, ed., *Substance Use and Emotion* (Washington: American Psychological Association, 2010).

15 Linda Burton and others, "Inequality, Family Processes, and Health in the "New" Rural America," *American Behavioral Scientist* 57 (8) (2013): 1128–51.

16 Debra Lerner and others, "Unemployment, Job Retention, and Productivity Loss Among Employees With Depression," *Psychiatric Services* 55 (12) (2004): 1371–78; Jean-Pierre Lépine and Mike Briley, "The Increasing Burden Of Depression," *Neuropsychiatric Disease and Treatment* 7 (1) (2011): 3–7.

17 Mark P. McGovern and others, “Dual diagnosis capability in mental health and addiction treatment services: an assessment of programs across multiple state systems,” *Administration and Policy in Mental Health* 41 (2) (2014): 205–14.

18 C. Matthew Snipp, “Sociological Perspectives on American Indians,” *Annual Review of Sociology* 18 (1992): 351–71; Felix Cohen, “The Erosion of Indian Rights, 1950 – 1953: A Case Study in Bureaucracy,” *Yale Law Journal* (1953).

19 Duran and others, “Healing the American Indian Soul Wound.”

20 Robert Sampson, “Urban Sustainability In An Age Of Enduring Inequalities: Advancing Theory And Ecometrics,” *PNAS Early Edition, Proceedings of the National Academy of Science* (2017),:1–6.

21 Duran and others, “Healing the American Indian Soul Wound”; Martin Brokenleg, “Transforming Cultural Trauma into Resilience,” *Reclaiming Children & Youth* 21 (3) (2012) 9–13.

22 Colin G. Calloway, *First Peoples: A Documentary Survey of American Indian History*, 4th ed. (Boston: Bedford/St. Martin’s, 2011); Benjamin Madley, *An American Genocide: The United States and the California Indian Catastrophe* (New Haven, CT: Yale University Press, 2016); K. Tsianina Lomawaima, “Educating Native Americans.” In James Banks and Cherry Banks, eds., *Handbook of Research on Multicultural Education* (San Francisco: Jossey-Bass, 2004), pp. 441–490; Kenneth R. Philp, *Termination Revisited: American Indians on the Trail to Self-Determination, 1933–1953* (Lincoln: University of Nebraska Press, 1999); Charles F. Wilkinson and Eric R. Biggs, “The Evolution of the Termination Policy,” *American Indian Law Review* 139 (1977); Herbert Hendin and Ann Haas, “Suicide and Guilt as Manifestations of PTSD in Vietnam War Veterans,” *The American Journal of Psychiatry* 148 (1991): 586–91; Edward S. Kubany, “A Cognitive Model of Guilt Typology in Combat-Related PTSD,” *Journal of Traumatic Stress* 7 (1994): 3–19; Boris Drozdek Wilson and Silvana Turkovic, “Posttraumatic Shame and Guilt,” *Trauma, Violence, & Abuse* 7 (2006): 122–141.

23 Mary Annette Pember, “Trauma May Be Woven Into DNA of Native Americans,” *Indian Country Today*, October 3, 2017.

24 Duran and others, “Healing the American Indian Soul Wound”; Brokenleg, “Transforming Cultural Trauma into Resilience.”

25 Duran and others, “Healing the American Indian Soul Wound,” p. 351.

26 Brokenleg, “Transforming Cultural Trauma into Resilience.”

27 Brokenleg, “Transforming Cultural Trauma into Resilience,” p. 10.

REPARATIONS

The logistics of a reparations program in the United States

By Dania V. Francis, University of Massachusetts Boston

Overview

The idea of reparations for African Americans is receiving renewed attention, driven in part by the willingness of an unprecedented number of prominent policymakers and presidential candidates to entertain the idea of opening a serious discussion on the topic. Past and current research demonstrates the deep, abiding suffering and harm inflicted on African Americans due to the practice and legacy of slavery and post-Civil War laws and regulations that prevented so many of the enslaved and most of their descendants from reaping all but meager benefits from the sustained growth of the U.S. economy since colonial times.

My essay presents a brief history of the various reparations movements in the United States following the end of the Civil War and the Reconstruction era in the South through to today, a discussion of the logistics of carrying out a reparations program, and research-based recommendations for policymakers. Investigating the size of reparations and how they would be disbursed will first require a commission to be set up to decide appropriate levels of reparations, and policymakers will then need to implement the best financial vehicles for disbursement of the funds. I also recommend ways for policymakers to ensure that ongoing racial discrimination can be accounted for and resolved.

Key Takeaways

THE EVIDENCE

- The legacy of slavery, post-Civil War state-sanctioned discrimination and ongoing institutional discrimination prevented the enslaved and their descendants from benefiting from the growth of the U.S. economy.

THE SOLUTIONS

- A commission needs to determine the scope and eligibility for a reparations program and the financial vehicles for disbursement in order to make whole those who were wronged, to close racial wealth gaps, and to address ongoing discrimination.
- This commission also needs to examine current structural discrimination and propose institutional reforms to guard against the need for future redress.

A brief history

Near the close of the Civil War, on January 16, 1865, General William T. Sherman signed Special Field Orders No. 15, which temporarily allotted each formerly enslaved family living along the Atlantic coasts of South Carolina, Georgia, and Florida no more than 40 acres of land on which to settle and make a living. President Andrew Johnson later reversed these orders and returned the land to white southerners.[1] Many descendants of formerly enslaved persons point to these "40 acres and a mule" as an unfulfilled promise by the U.S. government and a basis for the earliest calls for reparations for slavery.

Since that time, there have been multiple judicial, legislative, and grassroots efforts advocating for reparations for African Americans for their enslavement and the discriminatory consequences reaped by their descendants. In the judicial arena, there have been multiple lawsuits filed in the United States and the United Kingdom against financiers, insurers, and shipping companies that profited from slavery. In 2002, lawyer and human rights activist Deadria Farmer-Peallmann coordinated lawsuits against the U.S. insurer Aetna Inc., then-independent (and now Bank of America Corp.-owned) FleetBoston Financial, and other corporations for their role in the slave trade of the 17th and 18th centuries. The cases were ultimately dismissed for lack of standing, exceeding the statute of limitations, and for being deemed a political matter outside the scope of the judiciary.[2]

Legislatively, Rep. John Conyers (D-MI) introduced H.R. 40—a bill to establish a Commission to Study Reparation Proposals for African Americans—in every Congress from 1989 until his resignation in 2017. The bill never made it out of committee. In 2019, Rep. Sheila Jackson Lee (D-TX) reintroduced the bill, and prominent 2020 Democratic presidential candidates have endorsed it.[3] Increased support for the current bill may be due, in part, to an increase in recent support for reparations on online social media platforms such as Facebook and Twitter.

Importantly, these grassroots efforts promoting reparations for African Americans build upon earlier waves of activism. At the turn of the 20th century, Callie House, a poor washerwoman who was born into slavery, lobbied Congress to provide old age pensions for the formerly enslaved who were no longer physically able to work to support themselves.[4] Her efforts were stymied by the full force of the U.S. government. More recently, organizations such as the Universal Association of Ethiopian Women founded by Queen Mother Moore in the 1950s[5] and the National Coalition of Blacks for Reparations in America, founded in the late 1980s,[6] have advocated for reparations for decades. These organizations kept alive the idea of the efficacy of reparations.

Much more recently, author and columnist Ta-Nehisi Coates' influential article "The Case for Reparations," published in *The Atlantic* in 2014, revived popular interest in reparations. His widely read analysis helped broaden the discussion of the basis for reparations to include the Jim Crow era of state-sanctioned discrimination in the wake of the Civil War up until the Civil Rights era of the 1960s, the discriminatory federal, state, and local laws, policies, and ordinances prevalent during the New Deal and post-World War II eras, and ongoing institutional racism in employment, education, and the criminal justice system.[7]

The logistics of carrying out a reparations program

By definition, reparations involve the making of amends to those who have been wronged, whether through money or by other means. Key logistical questions that arise when conceptualizing reparations for African Americans include:

- Who should be eligible to receive reparations?
- How much money should be allocated to fund a reparations program, and how should it be financed?
- What form should reparations take? Should there be a cash payment, investment in social programs, trust funds for education, homeownership or business investing, or some combination of these ideas?

I answer each of these questions in turn.

Who should be eligible?

As previously mentioned, prior attempts to sue for reparations were rejected in part due to a lack of standing—a legal term indicating whether the people suing for damages can demonstrate that they are the people who have actually suffered damages. Although a reparations plan developed in the legislative branch would not initially be subject to the judicial concept of standing, the plan could be challenged in the courts on the grounds of constitutionality, and standing may be one dimension that could be legally scrutinized. In order to withstand that scrutiny, a reparations plan should accrue to those who have been wronged and/or their descendants. Eligibility then would depend on the reason for redress.

Reparations for slavery should accrue to the descendants of those who were formerly enslaved in the United States. Descendants of enslaved persons from other nations, such as Jamaica, Haiti, and Brazil who are currently living in the United States should not be eligible and should instead seek reparations against the nations primarily responsible for enslavement in those nations and regions. U.S. policymakers will have to determine whether current U.S. citizenship is a requirement for receiving reparations.[8]

Reparations for state-sanctioned discrimination during the Jim Crow, New Deal, and post-WWII eras should accrue to any African Americans who were living in the United States during those time periods or their descendants, regardless of whether their ancestors were enslaved in the United States. Black immigrants from the West Indies and Africa also faced state-sanctioned discrimination in this country during this period even if they were voluntary immigrants to the United States.[9]

How much?

Research teams are currently working on refining reparations estimates, but estimates that have been calculated in the past (mostly in the 1990s and early 2000s) range from $500 billion to $6 trillion.[10] Dividing this amount evenly among the roughly 40 million people identified as black or African American in the 2010 Census yield estimates of $12,500 to $150,000 per person. The wide range arises from differences both in calculation methods and in the underlying rationale for reparations (slavery, Jim Crow, or ongoing discrimination).

Prominent reparations researcher and Equitable Growth Research Advisory Board member William A. Darity, Jr. at Duke University took the value of 40 acres of land in 1865 (the aforementioned unfulfilled promise made to formerly enslaved families at the end of the Civil War), multiplied that value by 4 million formerly enslaved persons, and calculated the present value compounded yearly at 6 percent interest to arrive at $1.3 trillion in 2008 dollars.[11] University of Illinois Urbana-Champaign economist Larry Neal calculated the difference between the wage that an enslaved person would have received if paid for work and the amount spent by enslavers on food and shelter for the enslaved from 1620 to 1840 and compounded that value yearly at 5 percent to arrive at $4 trillion.[12]

Estimates that include discrimination during the Jim Crow, New Deal, and post-WWII eras are necessarily larger. Using U.S. Census of Agriculture data on black ownership of agricultural land from 1910 to 1997, a group of researchers estimated losses to the countless black farmers who fell victim to violent dispossession of their land prior to the Civil Rights reforms of the 1960s, as well as those who lost land due to discriminatory federal farm credit policies and the discriminatory implementation of federal, state, and local agricultural policies, before, during, and after the Civil Rights era. By their most conservative estimate, the dispossession of black agricultural land resulted in the loss of hundreds of billions of dollars of black wealth.[13]

To adjudicate the amount of reparations based on a timeline of amends that need to be redressed, a commission impaneled by Congress to study the question of reparations should be tasked with evaluating the strengths and weaknesses of all available estimates and calculation methods to arrive at separate values for reparations for slavery, reparations for the era of state sanctioned discrimination, and reparations for ongoing institutional discrimination.

What form?

A reparations program can take many forms, including:

- Cash payments
- Investment in social programs
- Trust funds
- An official apology
- Institutional reform
- Public education about slavery and racial discrimination

Rep. James Clyburn (D-SC), a Civil Rights-era veteran, argues against reparations taking the form of cash payments on the grounds that it would be logistically difficult to carry out. Instead, he and many other policymakers support investing in impoverished communities as a form of reparations.[14] Critics of reparations programs that focus on broad-based social programs, however, argue that they cannot be considered reparations if they do not specifically and solely target African Americans.

Some people in our society may be opposed to cash reparations payments under the misguided assumption that African Americans cannot be trusted to spend cash payments in ways that will benefit them economically.[15] While this assumption is unsubstantiated and potentially rooted in racial bias and paternalism, researchers have demonstrated that policymakers should be cautious about cash payments for another reason—it is possible that cash reparations payments could further impoverish black Americans relative to nonblack Americans if there are no available vehicles for African Americans to invest that money back into black communities.[16]

Given that black Americans own less than 10 percent of all small businesses in the United States[17] and hold less than 15 percent of their wealth in business investments,[18] cash reparations payments in the current environment could possibly find their way back into the pockets of nonblack Americans, both through consumption spending and through investments held in mainstream financial institutions, potentially further widening the racial wealth divide.

This possible drawback, however, does not have to be an argument against cash reparations payments, but rather an acknowledgement that any cash reparations payments should be coupled with the development of an investment infrastructure that could provide opportunities for recipients to invest in black communities and black-owned businesses and to create black-owned financial institutions.

Ultimately, the form a reparations program should take depends on the underlying goals. If the goal is to address the wealth gap created by discriminatory government actions such as redlining—the practice of overt housing discrimination in the post-WWII era—and Jim Crow discriminatory laws and regulations, then cash payments or trust funds for investments in housing, education, or businesses may be the most appropriate form. If the goal is to repair or make whole those who were disadvantaged by the legacy of slavery and discrimination, then an official apology, a program of public education about slavery and discrimination, and investment in social programs targeted at reducing racial disparities may be the most effective forms. If the goal is to address ongoing discrimination against African Americans, institutional reform may be in order.

Policymakers tasked with determining the appropriate form for a reparations program should consider the underlying goals of the program to assess the most appropriate form.

Addressing ongoing discrimination

Even if policymakers do not incorporate the damages from ongoing discrimination into the calculation of reparations for African Americans, no reparations program will be complete without somehow addressing the existence of that ongoing discrimination in the U.S. economy today. As long as institutional discrimination persists, there will be continued grounds for future reparations claims.

As an example, reporters for the *New Food Economy* recently identified ongoing discrimination at the U.S. Department of Agriculture against black farmers that has contributed to unjust foreclosures. Among other findings, they report that under the administration of President George W. Bush, the department sat on civil rights complaints that alleged lending discrimination until the statute of limitations on those complaints ran out. Then, officials in the Obama administration did not seek extensions from Congress on the statute of limitations, instead actively foreclosing on black farmers who had pending lending discrimination complaints.[19]

Even if the descendants of black farmers were made whole for the loss of black agricultural land during the Jim Crow era, future generations would have claims for reparations based on the documented ongoing discrimination by the USDA. To guard against this particular instance of discrimination, Congress should enact legislation that prevents any arm of government that is accused of discrimination from failing to act on the discrimination complaints until the statute of limitations runs out.

There are certainly other instances of government agencies using loopholes to get around civil rights protections meant to guard against ongoing discrimination. Any reparations program should also establish a commission to examine structural discrimination within federal, state, and local government and propose institutional reforms that reinforce civil rights protections to guard against the need for future redress.

Conclusion

In conceptualizing a reparations program for African Americans, the road-map for policymakers to follow is fairly straightforward. They should:

1. Establish the basis for which reparations are owed—slavery, the period of state-sanctioned discrimination, and/or ongoing institutional discrimination
2. Determine the goal of a reparations program—to make whole those who were wronged, to close racial wealth gaps, and/or to address ongoing discrimination
3. Create a commission to estimate the value to be set aside for a reparations program
4. Decide the appropriate form a reparations payment should take
5. Incorporate a plan to address ongoing discrimination

In this way, centuries spent by African Americans not sharing in the full fruits of phenomenal U.S. economic growth over the course of the past 400 years can be addressed, so that they can more fully contribute to and accrue the full benefits of living in the world's wealthiest nation in history.

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Endnotes

1 Steven F. Miller, "Order by the Commander of the Military Division of the Mississippi" (College Park, MD: Freedman and Southern Society Project, 2019), available at http://www.freedmen.umd.edu/sf015.htm.

2 "In re African-American Slave Descendants Litigation (2004)." In Michael T. Martin and Marilyn Yaquinto, eds., *Redress for Historical Injustices in the United States* (Durham, NC: Duke University Press, 2007), pp. 668–72.

3 *Commission to Study and Develop Reparation Proposals for African-Americans* Act, H.R. 40, 116th Cong. (2019), available at https://www.congress.gov/bill/116th-congress/house-bill/40/text.

4 Mary Frances Berry, *My Face is Black is True: Callie House and the Struggle for Ex-Slave Reparations* (New York: Vintage, 2009). For her efforts, Callie House was dubiously imprisoned for fraud by the U.S. Postal Service, which claimed that her organization—the National Ex-Slave Mutual Relief, Bounty, and Pension Association—was collecting dues from black people knowing they would never receive the government payments for which she was lobbying.

5 Martha Biondi, "The Rise of the Reparations Movement." In Michael T. Martin and Marilyn Yaquinto, eds., *Redress for Historical Injustices in the United States* (Durham, NC: Duke University Press, 2007), pp. 255–57.

6 "About N'COBRA," available at https://www.ncobraonline.org/ (last accessed September 23, 2019).

7 Ta-Nehisi Coates, "The Case for Reparations," *The Atlantic* 313 (5) (2014): 54–71. Though made prominent by Coates, scholars such as William A. Darity, Jr. have long called for including Jim Crow and state sanctioned discrimination as grounds for reparations for African Americans. See, for example, William Darity, Jr. "Forty Acres and a Mule in the 21st Century," *Social Science Quarterly* 89 (3) (2008): 656–64. For more on discriminatory New Deal and post-WWII era policies, see Ira Katznelson, *When Affirmative Action Was White: The Untold History of Racial Inequality in Twentieth-Century America* (New York: W. W. Norton & Company, 2005); James Loewen, *Sundown Towns: A Hidden Dimension of American Racism* (New York: The New Press, 2018); Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (New York: Liveright Publishing, 2017).

8 Reparations for ongoing discrimination should accrue to any black Americans who have either self-identified or been identified as black on an official document some time prior to the passage of reparations legislation. The ability to identify and prove ancestry may be difficult for some African Americans and can vary by socioeconomic status. To avoid socioeconomic bias in who qualifies for reparations payments, the U.S. Congress should appropriate money to assist African Americans in consulting with genealogists in uncovering their ancestries.

9 Japanese Peruvians, after initially being excluded from the Civil Rights Act of 1988 that paid $20,000 in reparations to Japanese Americans, sued for and won reparations payments of $5,000 from the U.S. government for their forced internment during World War II. They were initially excluded because they were not U.S. citizens, even though they were rounded up and interned in the same U.S. camps. See ACLU of Southern California, "Japanese Latin American Imprisoned by US during WWII Win Bittersweet Victory from Department of Justice," Press release, June 12, 1998, available at https://www.aclusocal.org/en/news/japanese-latin-americans-imprisoned-us-during-wwii-win-bittersweet-victory-department-justice.

10 To put these numbers in perspective, the White House FY2020 federal budget proposal includes a cost of $1.1 trillion for Social Security costs alone. The total budget is about $4.7 trillion. See The White House, "A Budget for a Better America: Promises Kept. America First" (U.S. Government Publishing Office, 2019), p.109, available at https://www.whitehouse.gov/wp-content/uploads/2019/03/budget-fy2020.pdf.

11 Darity, "Forty Acres and a Mule in the 21st Century," p. 662.

12 Larry Neal, "A Calculation and Comparison of the Current Benefits of Slavery and the Analysis of Who Benefits." In Richard F. America, ed., *The Wealth of Races: The Present Value of Benefits from Past Injustices* (Westport, CT: Greenwood Press, 1990), pp. 91–106.

13 Lizzie Presser, "Their Family Bought Land One Generation After Slavery. The Reels Brothers Spent Eight Years in Jail for Refusing to Leave It," ProPublica, July 15, 2019, available at https://features.propublica.org/black-land-loss/heirs-property-rights-why-black-families-lose-land-south/.

14 Mike Lillis and Scott Wong, "Reparations Bill Wins New Momentum in Congress," The Hill, April 4, 2019, available at https://thehill.com/homenews/house/437286-reparations-bill-wins-new-momentum-in-house.

15 Research demonstrates that savings rates for African Americans are no lower than white Americans when income differences are accounted for. See William Darity Jr. and others, "What We Get Wrong About Closing the Racial Wealth Gap." Technical Report (Samuel DuBois Cook Center on Social Equity, 2018); Maury Gittleman and Edward N. Wolff, "Racial Differences in Patterns of Wealth Accumulation," *Journal of Human Resources* 39 (1) (2004): 193–227.

16 William A. Darity, Jr., Bidisha Lahiri, and Dania V. Frank "Reparations for African-Americans as a Transfer Problem: A Cautionary Tale," *Review of Development Economics* 14 (2) (2010): 248–61.

17 U.S. Census Bureau, "Statistics for All U.S. Firms by Industry, Gender, Ethnicity, and Race for the U.S., States, Metro Areas, Counties, and Places: 2012" (U.S. Department of Commerce, 2012).

18 Joyce A. Klein, "Bridging the Divide: How Business Ownership Can Help Close the Racial Wealth Gap." Technical Report (FIELD at the Aspen Institute, 2017).

19 Nathan Rosenberg and Bryce Wilson Stucki, "How USDA Distorted Data to Conceal Decades of Discrimination Against Black Farmers," The New Food Economy, June 26, 2019, available at https://newfoodeconomy.org/usda-black-farmers-discrimination-tom-vilsack-reparations-civil-rights/.

STUDENT DEBT

Promote economic and racial justice: Eliminate student loan debt and establish a right to higher education across the United States

By Darrick Hamilton, The Ohio State University, and Naomi Zewde, City University of New York

Overview

The amount of student loan debt in the United States has ballooned over the past decade—more than tripling from less than $500 billion to more than $1.5 trillion since 2006. What's more, the repayment burden is substantial—approximately $400 per month on average.[1] Yet students have little choice but to pursue a college education. Where college was once seen as a ladder to upward social mobility, students increasingly need a college education simply to remain where they are socioeconomically.

Higher education is, for many, a necessary step to earning a living wage, but black students face a particularly cumbersome burden to finance a degree. This essay explicates the disproportionately high burden of student debt carried by blacks in the United States, though all racially marginalized groups in the United States face particular financial burdens when pursuing higher education and repaying the necessary debts. (See sidebar on pages 200–201.) Due in part to their families' financial position, black students generally take on more debt than white students and, even at higher levels of socioeconomic status, are less protected by parental wealth.[2] Then, after entering the labor market, young black adults face a harder time paying off their student loans in a labor market characterized by racial discrimination, as demonstrated by the experiences of prior cohorts of graduates.[3] (See Figure 1.)

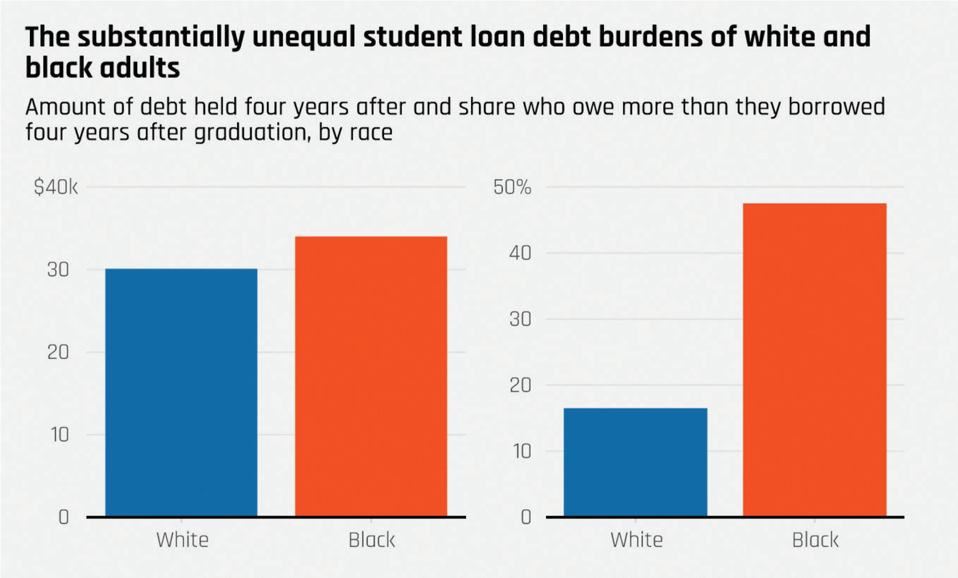

FIGURE 1

...after entering the labor market, young black adults face a harder time paying off their student loans...

Source: U.S. Department of Education. National Postsecondary Student Aid Study, 2016 [NPSAS: 16]. Judith-Scott Clayton and Jung Li, “Black-white disparity in student loan debt more than triples after graduation,” The Brookings Institution, 2019, available at https://www.brookings.edu/research/black-white-disparity-in-student-loan-debt-more-than-triples-after-graduation/.

Upon exiting college, young adults are shaped by their indebtedness, including the need to secure paid employment with urgency in an endeavor not necessarily aligned with their career aspirations. New graduates with debt burdens enter the labor market more quickly and are more likely to work in unrelated fields after graduation.[4] These borrowers have lower job satisfaction and overall life satisfaction, and lower psychological well-being well into adulthood.[5] Student loan borrowers are less likely to get married, purchase a home, or start a business.[6]

While these negative economic and psychological consequences of student debt are distorting employment choices and depressing opportunities to pursue creativity across all borrowers, black students are hit the hardest. Evidence suggests that student debt impedes family formation specifically among the most vulnerable borrowers: black borrowers and those who have not completed their degree.[7] Student loan debt is associated with poorer mental health and is even significantly associated with poorer sleep patterns among black borrowers, in particular compared to white borrowers.[8]

In this essay, we briefly present a range of proposals for relieving the burden of student loan debt and use our analysis to urge the full cancellation of all undergraduate and graduate, federal and private, student loan balances. We come to this policy recommendation after examining how less ambitious proposals fail to fully fix the unsustainable status quo of increasing indebtedness as a strategy for financing rising costs of higher education in the United States. Only the full cancellation of all student debt fully protects black students, their families, and those of other racially marginalized and vulnerable groups from the burden of student loans while establishing higher education as a universal right and offering restitution to all those who have had to rely on debt finance to pursue upward mobility through the education system.

Key Takeaways

THE EVIDENCE

- The amount of U.S. student loan debt ballooned over the past decade, and the repayment burden is substantial. As a result of long history of racial economic disparity, black students face particularly difficult challenges financing their degrees and carry a disproportionately high student debt burden.

- Upon graduation, young black adults face a harder time paying off their student loans with labor markets characterized by racial discrimination and with an urgent need to secure paid employment to pay off this debt regardless of whether these jobs align with their career aspirations.

THE SOLUTIONS

- The full cancellation of all undergraduate and graduate, federal and private, student loan balances would fully protect black students and their families from the burden of student loans while establishing higher education as a universal right.

A history of student loan cancellation in the United States

The concept of loan cancellation is not new. The George W. Bush administration brought us the public service loan forgiveness program in 2007.[13] This program was intended to erase student debt for teachers, other public servants, and anyone working in a not-for-profit organization after working in their chosen field for 10 years while paying down their debt. Additionally, these borrowers must consolidate their loans and enroll in a particular type of repayment plan.

These stipulations were complicated enough that the program failed to provide relief to the vast majority of these select borrowers, even those verifiably working for nonprofit organizations or the government. Over the program's cumulative history, more than 132,000 borrowers submitted employer-verified applications but only 641 have gotten relief, or approximately 0.5 percent.[14] The other 99.5 percent were rejected primarily on technical grounds. President Barack Obama introduced a similar program, but expanded it beyond employees of public and nonprofit institutions. Under the Obama administration's program, borrowers pay between 10 percent and 20 percent of discretionary income, as defined by the U.S. Department of Education, for 20–25 years, and then have the remaining balance canceled. Upon program completion, any canceled debts are taxed as income (though surely none of it has "come in," from the perspective of struggling borrowers).

Because the program has not yet been in place long enough for borrowers to complete 20 years of payments, the rate of award is uncertain. Yet as of 2018, approximately one-quarter of borrowers are enrolled, with many disenrolled by the annual re-certification requirements.[15] And policymakers are paying attention: Following efforts to gut the program by the Trump administration beginning in 2017, 23 senators in October 2019 called upon the federal Consumer Finance Protection Bureau to investigate the loan service company employed by the federal government due to its exceedingly high rates of refusals to forgive loans.[16] Clearly these types of programs can be administrative minefields for borrowers, and it is unclear if they will or can provide any real relief to borrowers.

Weighing the merits of full or partial student debt cancellation

The merits of full or partial student debt cancellation at first glance largely rest on the degree to which the cancellation helps borrowers in need of debt relief. Those plans that call for partial student debt cancellation focus to different degrees on whether some higher-income borrowers or those who have borrowed to attend graduate school would benefit inordinantly from having their debt cancelled, compared to those who borrowed in pursuit of an undergraduate or technical degree or those who are otherwise clearly burdened by their student loan repayments. Cost estimates based on the plans' assessement of these borrowers' needs run the gamut, from an estimated $1.5 trillion for a full cancellation to between approximately $2 billion and $200 billion for a partial cancellation, between $5,000 and $60,000 per borrower.[17]

In our estimation, however, the merits of full cancellation far outweigh those presented in plans for partial cancellation. Full cancellation not only would address the array of financial inequities in current student borrowing programs—inequities that are particularly egregious for black borrowers—but also eliminate the many and complex rules and regulations borrowers

SNAPSHOT

Student debt burden of Latinx and Native Americans

Black Americans carry a disproportionately high burden of student loan debts in the United States, and other racially marginalized groups in the United States face particular financial burdens when pursuing higher education and repaying the necessary debts. Latinx students are underrepresented at 4-year institutions and have lower rates of college completion than their white peers, all of which complicates their ability to repay loans upon graduating.[9] Moreover, 75 percent of Latinx students are first generation and are making the decades-long financial commitment of student loan debt largely on their own at the age of 18.[10]

Among Native American students, tribal colleges and universities began opting out of the system of student loans due to high rates of default among their largely rural and

Continued on next page

are now required to meet for debt cancellation. Full cancellation would require a larger budgetary allocation, but doing so would directly address the rise of economic inequality in the United States, particulary for black Americans, while laying the groundwork for more sustainable and broad-based economic growth.

Partial student loan cancellation

When considering partial debt cancellation proposals, it is noteworthy that, on average, black college graduates still owe $53,000 in student debt 4 years after graduation.[18] (See Figure 1 on page 198.) Plans that propose to cancel less than this amount would ensure that the average black family would owe a lot less, yet many would still be left holding substantial sums of student debt. According to our calculation using the 2016 Survey of Consumer Finances, a plan that cancelled $50,000 of student loans for every borrower would still leave 1 million black-headed households holding $18,000 or more in student debt.

In contrast, the average white graduate carries about $28,000 in debt 4 years after graduation. This suggests that a capped debt forgiveness plan would completely wipe out many more white graduates' debts, as a proportion of the population, than black graduates.[19]

Moreover, cancellation plans that provide debt cancellation after a set number of years are insufficient. Most of these plans still require certification of one's household income level, profession, or other characteristics, and thus leave in place the same institutional and administrative barriers currently preventing graduates from realizing the cancellation promised in the Public Service Loan Forgiveness Act. As we can see in that law's failures to provide meaningful debt relief, even well-intentioned attempts to target forgiveness to the "most" needy populations can cause nearly insurmountable hurdles for those needy groups when a program is not administered generously and fairly.

Full student loan cancellation

Full cancellation of student debt would entirely eradicate all current student loan balances immediately. Everyone would be eligible and all debts would be relieved, with no rules for borrowers to decipher and then prove their eligibility under, thus removing the potential for similar bureaucratic barriers to those that so thoroughly hinder our current policy today.

Full cancellation would unquestionably include the debt balances carried by parents through the Parent Loans for Undergraduate Students program,

impoverished student body.[11] As of 2016, 29 out of 32 tribal colleges and universities no longer accept student loan money. These schools embed lessons within a Native framework of wisdom and respect, for example, by assigning students to conduct a green audit of area businesses, which may not emphasize the kind of employment and salaries necessary to repay loans in our current economy.[12]

As a result, these institutions are required to provide quality higher-education services with far fewer resources than their peer institutions whose students graduate with debts. These nuances further underscore the difficulty of crafting a less-than-universal policy that still universally addresses Americans' needs.

which also exhibits a racially disparate distribution.[20] The full cancellation would serve to even further advance the lives of millions of black debtors and graduates and, yes, would include a fraction of wealthy whites.

Full student loan cancellation is the best policy

Many student debt advocates express skepticism about full cancellation, arguing it would be racially regressive because it would not benefit people of color so much as help white borrowers. The argument rests on three misguided assumptions. The first assumption is that a higher level of debt probably indicates a graduate or professional degree. Secondly, white students are more privileged, the thinking goes, and are presumably more likely to go to graduate school after graduation, leading to their higher debt values. Finally, the argument concludes, it must mean that a full cancellation of debt would really just help white borrowers and their families, thus widening the racial wealth gap.

A similar critique could apply to partial student debt relief, under an assumption that black students are generally less burdened by student loans than their white counterparts seeking higher levels of education. Together, these critiques exaggerate the consequences of full debt cancellation. The first problem with the argument is that carrying large amounts of student debt does not necessarily indicate a graduate degree, especially considering that the *average* black student who graduates from college has $53,000 in debt 4 years after graduation. Many have simply attended universities with inadequate public funding, including those in the Historically Black College and University system, which awards a disproportionate share of black college degrees and is more tuition-dependent than its counterparts.[21]

Next, black students, in fact, enroll in graduate degree programs at high rates. While this might run counter to conventional expectations, black college graduates are overrepresented in graduate education relative to their share of the population overall, according to the National Center for Education Statistics.[22] Furthermore, as of 2012, 47 percent of black college graduates were enrolled in a graduate school degree program within 4 years of completing their bachelor's degrees, which is higher than that of white recent graduates (38 percent).[23]

Indeed, this and the common finding in the social science literature that blacks from similar socioeconomic backgrounds as whites actually acquire more years of schooling runs counter the bootstrap narrative that situates inadaquate investment in education on the part of blacks as the primary explanation for racial disparity.[24]

Finally, there's the concern that full cancellation might favor white debtors in a way that increases the racial wealth gap. The evidence here is, at best, mixed. But a compelling recent study finds the opposite—that a full cancellation of student debt would reduce racial wealth disparities between black students and their white counterparts.[25] Black students tend to take on more debt at every level of higher education, and are more likely than white students to drop out of university because of financial concerns in large part because of comparatively lower household-finance levels for black families in the first place. So, at each level of higher education, undergraduate and graduate, removing student debt proportionately benefits historically disadvantaged black students more.

The real problem, however, with making the argument that full cancellation of student debt widens the racial wealth gap is that it confuses the urgent problem of rising and unjust student debt burdens with the urgent problem of racially unequal access to capital. Relieving student debt is not the policy tool for eliminating the racial wealth gap, which has a great deal more to do with a lack of assets among black families than an abundance of debt on their part. Black families headed by a college graduate have less wealth than white families headed by a high school dropout.[26] This wealth gap is not driven by student debt. That inequity stems from the insufficient assets within communities of color, regardless of education.

Hence, independent of student debt, young students of color start out in a less favorable economic position than their white peers. White families have had generations to amass and pass down wealth in a way that families of color have not. Neither a full nor a limited cancellation changes those roots of the racial disparity in assets.

This is not to say there is no connection between student debt and the racial wealth gap. Families with outsized financial advantages can "buy" crucial additional advantages for their children, such as the ability to obtain a college degree without accruing costly educational debts. Lack of wealth (primarily inherited wealth) prevents many black families from ever exercising this advantage.

Nonetheless, the alarming rise of student indebtedness, which, in the context of stagnating real wages (after accounting for inflation) and growing income and wealth inequality, point to alarming economic vulnerabilities that need to be addressed. The bad news is that this immediate yet also intergenerational problem may be getting worse. A recent report illustrates that lost income gains among millennials in the aftermath of the Great Recession of 2007–2009, alongside record levels of student debt accumulations, has left the homeownership rate for young adult millennials lower than every other generation at a similar age dating back about 100 years—to the Greatest Generation, who entered young adulthood right after the Great Depression and World War II.[27] What's more, the racial disparity in homeownership for young millennials is as large as it has ever been.[28]

Conclusion

Black Americans are highly motivated to pursue higher education, but the reality is that as a group, they are financially stymied. Fewer black students begin college, even fewer graduate, and those who do graduate carry much more debt than their white counterparts. While student debt is conventionally thought of as "good debt," the returns on investment that it generates are widely disparate by race within the prevailing socioeconomic framework that still subjects blacks and other subaltern groups to inferior housing and education, targets them disproportionally with predatory financial products, and continues discriminatory labor market practices.

These enduring levels of historical and ongoing discrimination patterns in the U.S. economy and society are why we enthusiastically applaud proposals that remove the economic burden of student loan debt for all students and their families. Additionally, providing tuition-free education at public colleges and universities to all Americans would eliminate the social and psychological stigma associated with the system of financial aid and eliminate the need for future generations to carry burdensome debts. We urge lawmakers to support proposals that implement restorative economic justice by cancelling the burden of all existing student debt. In essence, we can do the right thing and establish higher education as a universal economic right.

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Endnotes

1 Federal Reserve Board of Governors, "Report on the Economic Well-Being of U.S. Households in 2016 - May 2017" (n.d.), available at https://www.federalreserve.gov/publications/2017-economic-well-being-of-us-households-in-2016-education-debt-loans.htm.

2 Center for Responsible Lending and others, "Borrowers of Color & the Student Debt Crisis" (2019), available at https://www.responsiblelending.org/sites/default/files/nodes/files/research-publication/crl-quicksand-student-debt-crisis-jul2019.pdf.

3 Fenaba R. Addo, Jason N. Houl, and Daniel Simon, "Young, Black, and (Still) in the Red: Parental Wealth, Race, and Student Loan Debt," *Race and Social Problems* 8 (1) (2016): 64–76, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6049093/pdf/nihms980016.pdf.

4 Justin Weidner, "Does Student Debt Reduce Earnings?" (Princeton University, 2016), available at https://scholar.princeton.edu/sites/default/files/jweidner/files/Weidner_JMP.pdf.

5 Mi Luo and Simon Mongey, "Assets and Job Choice: Student Debt, Wages and Amenities." Working Paper No. 25801 (National Bureau of Economic Research, 2019), available at http://www.nber.org/papers/w25801; Jinhee Kim and Swarm Chatterjee, "Student Loans, Health, and Life Satisfaction of US Households: Evidence from a Panel Study," *Journal of Family and Economic* Issues 40 (1) (2019): 36–50, available at https://ideas.repec.org/a/kap/jfamec/v40y2019i1d10.1007_s10834-018-9594-3.html.

6 Alvaro A. Mezza and others, "On the Effect of Student Loans on Access to Homeownership" (Washington: Board of Governors of the Federal Reserve System, 2016), p. 50, available at http://dx.doi.org/10.17016/FEDS.2016.010; Brent W. Ambrose, Larry Cordell, and Shuwei Ma, "The Impact of Student Loan Debt on Small Business Formation" Working Paper (Federal Reserve Board of Philadelphia, 2015), available at https://papers.ssrn.com/abstract=2633951; Dora Gicheva, "Student loans or marriage? A look at the highly educated," *Economics of Education Review* 53 (2016): 207–16, available at https://ideas.repec.org/a/eee/ecoedu/v53y2016icp207-216.html.

7 Jason N. Houle and Cody Warner, "Into the Red and Back to the Nest? Student Debt, College Completion, and Returning to the Parental Home among Young Adults," *Sociology of Education* 90 (1) (2017): 89–108, available at https://journals.sagepub.com/doi/abs/10.1177/0038040716685873.

8 Katrina M. Walsemann, Jennifer A. Ailshire, and Gilbert C. Gee, "Student loans and racial disparities in self-reported sleep duration: evidence from a nationally representative sample of US young adults," *Journal of Epidemiology and Community Health* 70 (1) (2016):42–8, available at https://www.researchgate.net/publication/280777111_Student_loans_and_racial_disparities_in_self-reported_sleep_duration_Evidence_from_a_nationally_representative_sample_of_US_young_adults.

9 Julia Barnard and others, "It Made the Sacrifices Worth It: The Latino Experience in Higher Education" (Washington: UnidosUS, 2018), available at http://publications.unidosus.org/handle/123456789/1850.

10 Ibid.

11 Molly Hensley-Clancy, "Native American Colleges Have Abandoned The Student Loan System," BuzzFeed News, October 10, 2016, available at https://www.buzzfeednews.com/article/mollyhensleyclancy/tribal-colleges-exit-the-student-loan-system; Deborah His Horse is Thunder, "Breaking Through Tribal Colleges and Universities" (American Indian Higher Education Consortium, 2012), available from: http://www.aihec.org/our-stories/docs/reports/BreakingThrough.pdf.

12 Deborah His Horse is Thunder, "Student Success at Tribal Colleges and Universities" (American Indian Higher Education Consortium, 2015), available at http://www.aihec.org/our-stories/docs/reports/StudentSuccess.pdf.

13 "Public Service Loan Forgiveness (PSLF)," available at https://www.nelnet.com/pslf (last accessed November 21, 2019).

14 Zach Friedman, "99% Of Borrowers Rejected Again For Student Loan Forgiveness," *Forbes*, May 1, 2019, available at https://www.forbes.com/sites/zackfriedman/2019/05/01/99-of-borrowers-rejected-again-for-student-loan-forgiveness/#36dcc098b16b.

15 Katherine Lucas Mckay and Diane Kingsbury, "Student Loan Cancellation: Assessing Strategies to Boost Financial Security and Economic Growth" (Washington: Aspen Institute, 2019), p. 23, available at https://assets.aspeninstitute.org/content/uploads/2019/04/EPIC_Student_Loan_Cancellation.pdf.

16 National Public Radio, "23 Senators Demand Investigation Into Mismanagement Of Student Loan Program," October 29, 2019, available at

https://www.npr.org/2019/10/29/774395247/23-senators-demand-investigation-into-mismanagement-of-student-loan-program.

17 Ben Miller and others, "Addressing the $1.5 Trillion in Federal Student Loan Debt" (Washington: Center for American Progess, 2019), available at https://www.americanprogress.org/issues/education-postsecondary/reports/2019/06/12/470893/addressing-1-5-trillion-federal-student-loan-debt/.

18 Judith Scott Clayton and Jung Li, "Black-white disparity in student loan debt more than triples after graduation" (Washington: The Brookings Institution, 2019), available at https://www.brookings.edu/research/black-white-disparity-in-student-loan-debt-more-than-triples-after-graduation/.

19 Ibid.

20 Rachel Fishman, "The Wealth Gap PLUS Debt: How Federal Loans Exacerbate Inequality for Black Families" (Washington: New America, 2018), available at https://www.newamerica.org/education-policy/reports/wealth-gap-plus-debt/.

21 Krystal L. Williams and BreAnna L. Davis, "Public and Private Investments and Divestments in Historically Black Colleges and Universities" (Washington: American Council on Education, 2019), available at https://www.acenet.edu/Documents/Public-and-Private-Investments-and-Divestments-in-HBCUs.pdf.

22 "Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, sex, attendance status, and race/ethnicity or nonresident alien status of student: Selected years, 1976 through 2017," available at https://nces.ed.gov/programs/digest/d18/tables/dt18_306.10.asp (last accessed November 21, 2019).

23 Clayton and Li, "Black-white disparity in student loan debt more than triples after graduation."

24 Darrick Hamilton and others, "Umbrellas don't make it rain: Why studying and working hard isn't enough for Black Americans" (The New School, 2015), available at http://www.insightcced.org/wp-content/uploads/2015/08/Umbrellas_Dont_Make_It_Rain_Final.pdf.

25 Marshall Steinbaum, "Student Debt and Racial Wealth Inequality" (New York: Jain Family Institute, 2019), available at https://phenomenalworld.org/content/2-higher-education-finance/1-student-debt-racial-wealth-inequality/student_debt_and_racial_wealth_inequality_final_7-19-19.pdf.

26 Hamilton and others, "Umbrellas don't make it rain: Why studying and working hard isn't enough for Black Americans."

27 Derrick Hamilton and Christopher Famighetti, "State of the Union: Housing" (Columbus, OH: Kirwin Institute, 2019), available at http://kirwaninstitute.osu.edu/wp-content/uploads/2019/06/Pathways_SOTU_2019_Housing-copy.pdf.

28 Derrick Hamilton and Christopher Famighetti, "The Great Recession, education, race, and homeownership" (Washington: Economic Policy Institute, 2019), available at https://www.epi.org/blog/the-great-recession-education-race-and-homeownership/.

CLIMATE CHANGE

A plan for equitable climate policy in the United States

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Overview

One year ago, the town of Paradise, California burned to the ground, killing 85 people. Before the fire, it was a poor community with a median annual income of less than $50,000, below the national average.[1] In Paradise, climate change combined with economic disadvantage to create a deadly situation.

Unfortunately, this kind of scenario will be increasingly common as the climate crisis accelerates. Across the western United States, wildfires fueled by climate change are putting rural communities at risk. Scientists estimate that climate change has increased wildfire risk by 500 percent, compared to historic risk levels in the 20th century. In addition, twice as much land area in the western United States burned between 1984 and 2015 than would have without climate change.[2]

Climate change also is making heatwaves hotter, hurricanes stronger, and droughts longer.[3] Humankind has already warmed the planet by 1 degree Celsius (1.8 degrees Fahrenheit), or about halfway to the 2 degrees Celsius level that world leaders agreed to limit warming under the Paris Agreement on climate change. Meanwhile, the crisis is claiming American lives—in California wildfires, New Orleans and Houston flooding, and in heatwaves and storm surges across the country—with many more in danger as climate change accelerates.

This crisis will increasingly and dramatically exacerbate economic inequality in the United States. Low- and middle-income Americans have minimal safety net protections from the impact of climate change. These communities are more vulnerable to health-related risks, don't have the financial resources to recover from climate disasters, and are more vulnerable to climate-related hazards in the first instance. And U.S. workers and communities who may face economic costs from the energy transition to a more clean economy don't have guaranteed access to healthcare, pensions, and the necessary assistance to maintain their dignity and quality of life.

Already, insurers are declining coverage for housing against growing climate risks such as flooding and wildfires. Without equitable climate policies in place, low-income Americans will have to face a double threat. They will be more likely to die in heatwaves, struggle to recover from hurricanes and wildfires, and, without health insurance, face greater burdens from diseases pushing into new ranges as the planet warms. At the same time, they will struggle the most to pay for the costs associated with preventing even worse climate change impacts.

In this essay, we make the case that equitable climate policy is both good economic policy and good politics. We then present specific policy proposals to support the decarbonization of the U.S. economy by 2050, in line with what climate scientists tell us is necessary to limit warming. We follow with a number of economic and social policies that need to be part of equitable climate policy, such as:

- Community Benefits Agreements for clean energy projects that ensure communities and firms share the profits from wind and solar farms
- Subsidies for clean transportation targeted at low-income Americans
- Retirement with dignity or retraining for fossil fuel industry workers into good-paying clean energy jobs

These and other energy transition investments presented in this essay can be structured to support equitable growth in the United States.

Key Takeaways

THE EVIDENCE

- Climate change is claiming American lives due to wildfires, flooding, heatwaves, and storm surges across the country, with many more in danger should the crisis continue to escalate.

- This crisis will dramatically exacerbate economic inequality because low- and middle-income Americans have minimal safety net protections from the impact of climate change, are more vulnerable to health-related risks, don't have the financial resources to recover from climate disasters, are more vulnerable to climate-related hazards in the first place, and will struggle the most to navigate the costs associated with climate change policies.

THE SOLUTIONS

- To avert a climate and economic disaster, the United States must completely decarbonize by 2050. Doing so will require a number of economic and social policies that ensure communities and firms share the profits from the production of clean energy, provide equitable access to clean transportation, and enable retraining for fossil-fuel industry workers into good-paying clean energy jobs.

Equitable climate policy is good economic policy and good politics

Unmitigated climate change will hit low- and middle-income Americans the hardest, but climate solutions also could exacerbate economic inequality. The reason is straightforward: Low- and middle-income Americans depend on cheap energy, transport, food, and consumer goods powered or produced using fossil fuels. Many of these goods are relatively inexpensive because their prices do not include the damages caused by carbon pollution. Putting a price on carbon will raise household energy costs, even while one out of every three Americans is already struggling to pay their electricity bills.[4]

Rural residents across the country in particular must deal with higher prices for fossil fuel-related goods and services—costs that would climb still higher when a price is put on carbon pollution. This is why climate policy that does not take economic inequality into consideration could further squeeze U.S. families that are already struggling with wage stagnation.

To overcome this challenge, we need an approach to climate policy that centers on economic inequality. This is the promise of policy proposals such as the Green New Deal—a wide variety of ideas that integrate social and economic reforms into climate policymaking. According to Green New Deal advocates, climate reforms must address economic inequalities in order to create a just and sustainable future. In this section of the essay, we focus on two key components in this approach: passing a federal clean electricity standard, and investments in clean energy research and development.

But first, let us explain why equitable climate policy also is good economic policy and good politics. No matter what climate reforms are proposed, opponents of those reforms in the fossil fuel industries will frame them as harmful to low- and middle-income Americans. Yet smart climate policy can be designed to offset adverse effects on low- and moderate-income U.S. households. In our research, we show that combining climate reforms with economic and social policy expands public support—even among Republicans.[5] This suggests that linking climate and social policy is likely to generate greater public support.

In the past, putting a price on carbon has been the centerpiece of climate reforms. While policymakers may still want to pursue this policy, it is essential to understand that this action alone would be insufficient. Further, any carbon price must also be designed to raise living standards for low- and middle-income households.

One option is to redistribute revenues collected by the government after putting a price on carbon directly back to the public in a progressive way. While we recognize the potential political value of that approach, we also note that any form of taxation—progressive or not—can face political roadblocks. So, it is essential that equitable climate policy makes clear that any transfer payments to U.S. households made with carbon revenues are highly visible to the recipients and clearly associated with carbon taxation in the minds of recipients.

A federal clean electricity standard

Over the past three decades, many states have passed clean energy requirements, even as the federal government has lagged behind. A majority of states now have a Renewable Portfolio Standard in place that requires a certain amount of clean electricity by a given year. Yet other states are falling behind. The United States needs a federal clean electricity standard to meet the climate crisis head on.

A nationwide clean electricity standard can ensure that contributions to climate solutions are not only equitable overall but also offer equitable protection from the local air pollution and other harms that accompany carbon-intensive power plants. This federal standard also would allow the transportation and building sectors to decarbonize much more easily, as those sectors become electrified and begin running off of clean power.

Coal-fired power plants, for instance, are disproportionately sited in communities of color, particularly in urban areas, forcing these communities to bear the negative health externalities of local air pollution.[6] More generally, research shows that communities of color bear a disproportionate "pollution burden," with more than 50 percent greater exposure to pollution relative to their consumption.[7] Only a federally coordinated clean energy standard can ensure that no community or region of the country gets left behind by the transition to cleaner energy.

Investments into clean energy research and development

Compared to historic levels, federal investment in energy research and development is extremely low.[8] The costs of many energy technologies have fallen over the past decade. Yet it will not be enough to simply deploy existing technologies. There are several areas where the solutions required to fully decarbonize our economy by 2050 are not yet available. That's why sustained federal investment in research and development is essential.

One key case in point: Investments are needed in energy storage technologies, including grid-scale batteries in order to store wind and solar energy during the times of the year when energy from these sources is scarce. Climate research and development also needs to target reducing carbon pollution from industrial processes, including steel production, cement, and chemicals processing.

As climate science models overwhelmingly show, negative-emissions technologies are also necessary to ensure a stable climate.[9] These carbon dioxide removal methods, such as direct air capture technologies or bioenergy production using carbon capture and sequestration technologies, are required to remove historic carbon pollution from the atmosphere and bring carbon concentrations down to safe levels.

Particular attention should be paid to investments in direct air capture technologies, which are at the threshold of commercial viability. For those unfamiliar with these technologies, they involve capturing carbon from the air and either sequestering it underground or using it to create a synthetic fuel, for example to power airplanes. These technologies do not require burning any fossil fuels and are therefore distinct from carbon capture and sequestration technologies.

Funding climate technologies equitably

Many economists believe that putting a federal price on carbon is necessary to price out fossil fuels and provide the revenues necessary for the next transformation of the U.S. energy system. We have reservations about this policy instrument because the political economy of carbon pricing is challenging. Carbon taxes focus policymaking debates on the short-term costs of actions, while masking the substantial economic and ecological benefits of climate reforms. And because carbon pricing can perpetuate economic inequalities, it allows climate policy opponents to present themselves as representing the interests of low-income communities even though, in reality, these communities are being endangered by those same polluting interests.

We believe that equitable climate policymaking instead requires massive investments in communities across the country, and that these investments should be funded from existing revenue sources. Other national and economic security threats are routinely prioritized in U.S. budgetary negotiations and are not restricted to particular earmarked sources. So too should efforts to manage the existential threat of climate change.

The clean energy transition will involve an enormous amount of investment and result in equally massive profits. How can policymakers ensure that some of these benefits are captured by communities, including low- and middle-income communities and communities of color? In addition to carbon pricing, there are a number of policy tools available to ensure equity during the energy transition, among them:

- Community Benefits Agreements
- Subsidies for electric vehicles
- Public transit funding
- Funding for clean energy adoption in underserved communities
- Policies to retire coal plants and increase equity
- Payments and retraining for workers in fossil fuel-intensive industries
- Repeal fossil fuel subsidies

Let's briefly consider each of these recommendations in turn.

Community Benefits Agreements

Community Benefits Agreements are contracts between large energy developers and communities hosting an energy project. These agreements require that the community receive a share of the project's benefits. In the few offshore wind developments in the United States, for example, these agreements are in place.[10] Policymakers could provide extra incentives for projects that receive government subsidies or tax benefits to negotiate Community Benefits Agreements. These agreements also could require minimum wage standards, unionization or other equitable labor market arrangements.

These terms and conditions would likely increase acceptance of wind energy farms in nearby communities. As our research shows, about 1 in 10 wind energy plants currently faces local resistance, and that number is growing over time.[11] Offshore wind energy has faced strong opposition, which is particularly problematic given how high quality this energy source would prove if developed. Deploying renewable energy very fast will require communities to see the benefits of hosting projects.

Subsidies for electric vehicles

To date, wealthier Americans have used most of the tax incentives available when purchasing an electric vehicle.[12] While these early, wealthy adopters have brought down the cost of these technologies, it is now time for electric-vehicle policies to be more accessible to all Americans. Subsidies for electric vehicles should be at the point of sale, so that they do not require middle- and low-income buyers to carry large costs until they can claim tax credits at the end of the year. Vehicle rebates could be based on means testing or be restricted to cars whose base price falls below a preset cap. The latter approach could help target lower-end car models that lower-income Americans are more likely to afford.

Efforts to increase the cost of carbon pollution would also make the purchase of electric vehicles even more attractive, price-wise, as fossil fuel-powered vehicles become more costly to drive due to carbon taxes. Targeted investments also are necessary to build electric vehicle charging infrastructure across the country and especially in low-income and rural communities. It is critical that lower-income Americans not get left behind, paying the true costs of fossil fuels, while other Americans have the resources to transition their transportation options.

Public transit funding

Equitable climate policy needs to ensure that electrified public transportation systems are built in urban areas and that the development of affordable housing near clean transit lines is part of that development. This means policymakers need to rethink patterns of urban development to ensure that affordable housing is available in places that do not force low-income families to intensify their dependence on long, fossil-fuel-dependent commutes.

The federal government has a role to play in guaranteeing this supply of environmentally friendly affordable housing. The government should directly build and renovate affordable housing to ensure low-income Americans and renters are not left behind by the energy transition.

Funding for clean energy adoption in underserved communities

Research suggests that clean energy adoption has been unequal along racial lines, even after accounting for differences in wealth.[13] Policymakers need to ensure that substantial clean energy investments are made in underserved communities. When funding for low-carbon technology projects is limited, for example, policy should prioritize projects in disadvantaged communities. Renewable energy tax credits should couple a basic credit, perhaps 20 percent, for most solar projects, with an additional tax credit of 10 percent for projects that benefit poor and low-income communities.

Overall, this kind of tax credit would deploy carbon tax revenues to leverage private-sector investment within low-income communities. Further, this policy could be designed to ensure benefits reach both homeowners and renters. If clean energy adoption projects are built in low-income housing, then the tax credit could require 50 percent of the benefits go to renters and 50 percent to the project developer and/or the building owner.

Policies to retire coal plants and increase equity

Existing federal laws and inexpensive natural gas, a fossil fuel, are causing the closure of costly and highly polluting coal-fired energy plants, yet almost one-third of the U.S. power grid is still fueled by this dirty energy source.[14] For both health and climate reasons, policymakers must shut down all remaining coal plants as fast as possible.

Many of these coal plants are owned by or contracted through rural electric cooperatives, which are nonprofit utilities founded after the New Deal that operate in some states. As of 2017, 65 percent of rural electric cooperatives' electricity mix came from fossil fuels, particularly coal. To speed up the retirement of these utilities' dirty assets, debt relief for rural electric cooperatives may be necessary.[15] The federal government could provide funding to write down these debts or restructure loans, for example through the existing Rural Utilities Service.

Another approach to retire coal plants more quickly is through the securitization of the debt held by coal-fired plants. In 2019, Colorado passed a new law that enables utilities to restructure loans on their coal plants. Using government bonds, the utility can lower its cost of capital. In return for these favorable terms, the utility retires its coal plants early.

In the Colorado case, part of the revenue the government collects through the bonds will flow into a fund to support workers and communities near these plants. Given the impact on health from coal plants, closing them has clear benefits for nearby communities, particularly communities of color.[16] Of course, shutting down coal plants is also essential to addressing the climate crisis.

Payments and retraining for workers in fossil fuel-intensive industries

There needs to be compensation for workers in fossil fuel-intensive industries so that they can retire with dignity or receive training for new, good-paying jobs in their communities. One of the challenges to the clean energy transition is that communities and workers in parts of our country depend on historic, polluting industries for their livelihoods. Coal miners and other fossil fuel workers must be offered real alternative economic opportunities with a living wage.

Weak compensation programs that either force workers into retirement with minimal social safety nets or funnel them into entry-level service industries will compound economic inequities and undermine political support for the energy transition. Instead, we need robust retraining for good-paying clean energy sector jobs. If necessary, these should be subsidized by government-led clean energy deployment.

Further, many U.S. unions maintain strong ties to carbon-intensive industries, such as auto manufacturing or heavy industry. By contrast, many jobs in the clean energy sector—from clean energy deployment to electric vehicle manufacturing—remain nonunionized. In part, this reflects secular decline in union participation across new U.S. economic sectors. To ensure political support for the energy transition among labor communities coping with decarbonization, government funding for clean energy projects should prioritize unionized workers.

Repeal fossil fuel subsidies

For more than a century now, the federal government has provided valuable tax breaks to the oil and gas industry. Even conservative estimates value this funding at around $20 billion every year.[17] U.S. taxpayers should not be paying companies to destabilize the climate. Congress should reform the tax code to eliminate fossil fuel subsidies, including the Intangible Drilling Costs Deduction and the Percentage Depletion Deduction.

Carbon tax revenues

Carbon pricing is a tool that still enjoys support among many policymakers, but we have reservations about its political viability. To the degree that a carbon price is included in a package, we emphasize the importance of using revenues to manage the inequities associated with decarbonization. A variety of revenue options are available. They can be invested in clean energy innovation and deployment or be returned back to Americans. If revenues are given back to the public, then they must be highly visible. They should not be implemented through the tax code, but through visible checks or electronic payments. Citizens need to understand that their dividend payments are specifically linked to new climate change reforms.

In addition, policymakers could allocate a portion of carbon-price revenues to municipal or county-level governments to spend on local projects to reduce greenhouse gas emissions, following the example of California's cap-and-trade program. In one project funded by this Transformative Climate Communities program, carbon-pricing revenues have been awarded to the city of Fresno for transit-connected affordable housing, weatherization and renewable energy investments in low-income neighborhoods, and urban greening projects.[18]

The revenues from carbon taxation also could be used to deploy clean-energy and energy-efficiency technologies in low- and middle-income Americans' communities, helping to distribute the benefits of the energy transition more equally. Policies could be enacted to retrofit low-income housing, for example, improving efficiency and indoor health simultaneously. These carbon-tax revenues also could be used to offset energy bills directly in low- and middle-income households. These diverse benefits should be included in any climate reform package so there is no reason why they must be tied to carbon pricing revenues specifically.

Conclusion

Policymakers and the general public must recognize that government funding for low-carbon technologies can be a powerful social policy. Such subsidies are more than a way to reduce the risks of climate change. They also boast the potential to equalize access to new technologies and reduce economic inequality.

For that reason, the federal government must ensure that economically disadvantaged Americans gain the same access to new green technologies as all others and are not left behind in the emerging low-carbon economy. Our federal government must stop abdicating its responsibility to address the climate crisis.

Government intervention has been necessary in every U.S. energy transition since the 19th century. This time, equitable climate policy must fund significant government incentives to deploy low-carbon technologies, especially in disadvantaged communities, and must fund aggressive investments in clean energy research and development so that clean energy becomes cheap and ubiquitous for all U.S. households.

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Endnotes

1 United States Census Bureau, "U.S. Census Bureau QuickFacts: Paradise Town, California" (2017), available at www.census.gov/quickfacts/paradisetowncalifornia.

2 John T. Abatzoglou and A. Park Williams, "Impact of Anthropogenic Climate Change on Wildfire across Western US Forests," *Proceedings of the National Academy of Sciences* 113 (42) (2016): 11770–11775; Simon F. B. Tett and others, "Anthropogenic Forcings and Associated Changes in Fire Risk in Western North America and Australia During 2015/16," *Bulletin of the American Meteorological Society* 99 (1) (2018).

3 Daniel Mitchell and others, "Attributing Human Mortality during Extreme Heat Waves to Anthropogenic Climate Change," Environmental Research Letters 11 (7) (2016): 074006; Mu Xiao and others, "On the Causes of Declining Colorado River Streamflows," *Water Resources Research* 54 (9) (2018): 6739–6756.

4 Chip Berry and others, "One in Three U.S. Households Faces a Challenge in Meeting Energy Needs," Today in Energy blog, September 19, 2018, available at www.eia.gov/todayinenergy/detail.php?id=37072.

5 P. Bergquist, M. Mildenberger, and L.C. Stokes, "Combining Climate, Economic, and Social Policy Builds Political Support for Climate Action in the US." Working Paper (SSRN, 2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3477525.

6 Adrian Wilson, *Coal Blooded: Putting Profits before People* (Baltimore, MD: National Association for the Advancement of Colored People, 2016), available at www.naacp.org/wp-content/uploads/2016/04/CoalBlooded.pdf.

7 Christopher W. Tessum and others, "Inequity in Consumption of Goods and Services Adds to Racial–Ethnic Disparities in Air Pollution Exposure," *Proceedings of the National Academy of Sciences* 116 (13) (2019): 6001–6006.

8 G. F. Nemet and D. M.Kammen, "U.S. energy research and development: Declining investment, increasing need, and the feasibility of expansion," *Energy Policy* 35 (1) (2007): 746–55.

9 Intergovernmental Panel on Climate Change, "Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty" (2018).

10 Sarah C. Klain and others, "Will Communities 'Open-up' to Offshore Wind? Lessons Learned from New England Islands in the United States," *Energy Research & Social Science* 34 (2017): 13–26.

11 C. Miljanich and L.C. Stokes, "Prevalence and Predictors of Wind Energy Protests in the United States." Working Paper (2019).

12 Severin Borenstein and Lucas W. Davis, "The Distributional Effects of US Clean Energy Tax Credits," *Tax Policy and the Economy* 30 (1) (2016): 191–234.

13 Deborah Sunter and others, "Disparities in rooftop photovoltaics deployment in the United States by race and ethnicity," *Nature Sustainability* 2 (2019): 71–76, available at https://www.nature.com/articles/s41893-018-0204-z.

14 "FAQ: What Is U.S. Electricity Generation by Energy Source?," available at www.eia.gov/tools/faqs/faq.php?id=427&t=3 (last accessed December 9, 2019).

15 Joe Smyth, "Rural America Could Power a Renewable Economy - but First We Need to Solve Coal Debt," Clean Cooperative, July 2, 2019, available at www.cleancooperative.com/news/rural-america-could-power-a-renewable-economy-but-first-we-need-to-solve-coal-debt.

16 Wilson, *Coal Blooded: Putting Profits before People*.

17 Environmental and Energy Study Institute, "Fact Sheet: Fossil Fuel Subsidies: A Closer Look at Tax Breaks and Societal Costs" (n.d.), available at https://www.eesi.org/papers/view/fact-sheet-fossil-fuel-subsidies-a-closer-look-at-tax-breaks-and-societal-costs.

18 "Fresno Transformative Climate Communities Collaborative," available at www.transformfresno.com/ (last accessed December 9, 2019).

DISAGGREGATING GROWTH

New measurement for a new economy

By Heather Boushey, Washington Center for Equitable Growth

Overview

Measurement is an important component of good economic governance. In the United States, we rely on the federal government's Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis to provide the data that elected officials and economic policymakers use to steer the U.S. economy and that businesses use to make investment decisions.

Many of our most well-known economic indicators were designed and then first collected more than 70 years ago. The most prominent is the National Income and Product Accounts, from which the Bureau of Economic Analysis calculates Gross Domestic Product. But also important is the Current Population Survey, a national, monthly survey of all U.S. households by the Census Bureau, which gives us estimates of the share of the population employed and household income. Then there's the data provided by employers on employment and earnings to the Bureau of Labor Statistics. Although the U.S. economy has changed significantly over the intervening decades, few new metrics have been added—and none have eclipsed the public salience of these old stalwarts.

Yet our economy has changed markedly in recent decades, which means our existing metrics are not properly accounting for the disruptive influence of economic inequality. New metrics that measure what really matters for American families would focus policymakers on the task of building an equitable economy—one that creates strong, stable, and broad-based growth. Metrics that better capture the well-being of American families would allow everyone to evaluate economic performance and hold elected officials accountable to their promises. As our ideas about what constitutes economic success change, so too must our metrics.

Federal statistics are an absolutely essential component of a policy agenda. To govern in an age of inequality, policymakers need to craft and make use of new metrics that show them and the public how the U.S. economy delivers for all Americans.

Key Takeaways

THE EVIDENCE

- The headline GDP growth metric fails to account for the disruptive influence of economic inequality and is misleading in how the economy works.
- Federal statistics need to reflect the experience of people all across the United States and particularly up and down the income ladder in order to set new economic goals and guideposts to realize the promise of the American Dream.

THE SOLUTIONS

- GDP 2.0 measures growth in different income brackets so that policymakers can evaluate how the economy is performing for everyone—the working class, the middle class, and the affluent—and work to ensure strong, stable, and broad-based economic growth.

How does measurement shape policy?

The metrics that the federal government collects shape the policy options that stakeholders consider and execute. Terms of public debate over economic policy are likewise shaped by the available indicators, and getting the metrics right is imperative. Case-in-point: When the Bureau of Labor Statistics releases data on the prior month's employment indicators, the data can cause gyrations in stocks and other financial markets.

Common and widely available metrics naturally become targets for decision makers—sometimes with suboptimal results when the metrics aren't quite right. An oft-repeated example is *U.S. News & World Report*'s annual Best Colleges rankings. These ratings so dominated the public imagination that colleges became obsessed with improving their ratings. Since the ratings were based on a small set of measurable outcomes—such as graduation rate, class size, and admissions selectivity—colleges quickly found ways to improve their ratings by changing their practices. One college offered financial incentives to freshmen to retake the SAT, raising their incoming class average and their ranking,[1] while others hired their own graduates to boost graduate employment metrics.[2] Multiple colleges gave falsified data to *U.S. News*.[3] The way we measure outcomes can indeed shape outcomes.

The measurements at the center of national policy debates affect both what policies are discussed and what policies are adopted. GDP growth has assumed a central role in many economic policy debates. Policy debates often center on the idea that growth in GDP is an unalloyed good, worth targeting without regard for other considerations, including how those gains are distributed across the American people. The Tax Cuts and Jobs Act of 2017 was sold on exactly these grounds by its biggest proponents.[4]

But in order to understand what greater economic growth means for our economy, we need to see it within its relevant context, which is that in our modern economy, growth now tends to almost exclusively benefit the highest income earners in our society. With that bit of context, it becomes difficult to understand why we should be targeting aggregate growth at all. Surely policymakers should instead look at distributional tables that tell us how people in particular income brackets will be affected by the tax, as Equitable Growth advocates.[5] Trumpeting the 2017 tax law's effects on overall growth only serves to obscure what the distributional tables show—these tax cuts will raise the incomes of the wealthiest Americans and will do little for those at the bottom. (See Figure 1.)

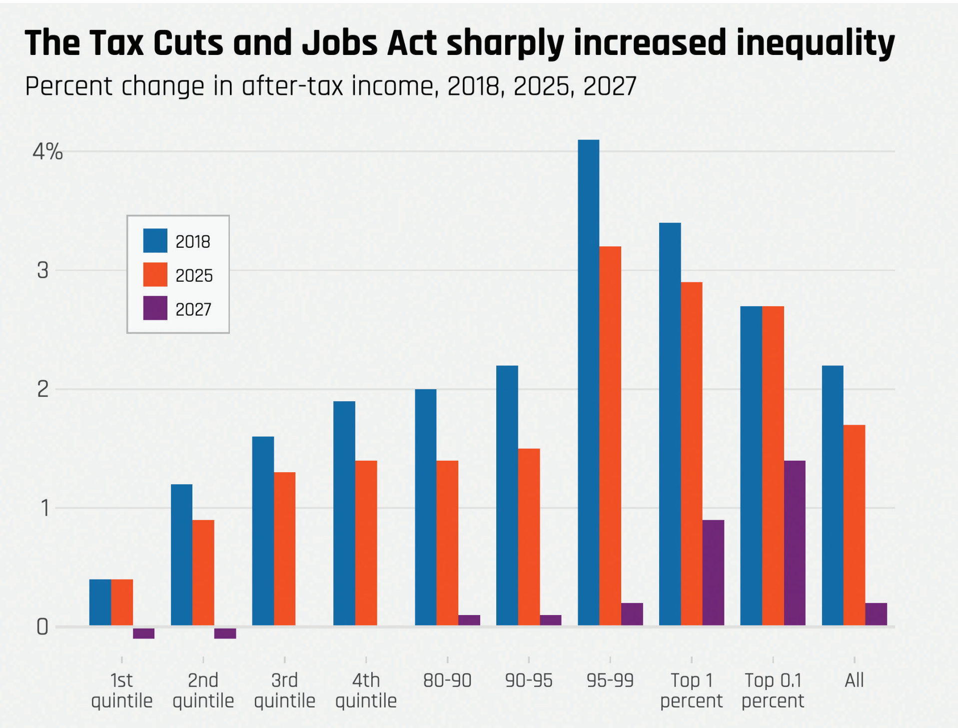

FIGURE 1

...these tax cuts will raise the incomes of the wealthiest Americans and will do little for those at the bottom.

Source: Tax Policy Center [2017].

But popular evaluation of the Tax Cuts and Jobs Act tended to present it as a trade-off between equity and growth. Because GDP growth is a highly visible metric of economic progress, whereas distributional tables are one-off evaluations of potential policy by nonofficial sources, the public policy debate gives undue importance to it.

Federal metrics should reflect the complexity of the U.S. economy

Our economy has changed dramatically, and the metrics we had can no longer serve to help us fix the problems of economic inequality. Policymakers cannot continue to pretend that they can rely only on methods developed by economists from 70 years ago, when our economy today looks so different.

Below, I detail two areas where new metrics would help us chart a bold new course for our economy. The first is an issue that academic economists are still puzzling out—the extent to which inflation is now different for the rich and poor and how this fact affects policy choices. The second is a much more mature area of work: GDP 2.0 is a project to add distributional measures of income to our National Income and Product Accounts. It is the subject of current legislation in Congress and one of the most important steps we can take to combat inequality.

Inequality has upended the measurement of inflation

Xavier Jaravel is an assistant professor of economics at the London School of Economics. His research provides an apt example of how gaps in government measurement may already be having an effect on existing economic policy, largely without anyone noticing.

Jaravel uses price-scanner data from retail stores to show that low- and high-income consumers face different rates of inflation.[6] On average, he finds that households with incomes of $100,000 or higher faced inflation rates 0.65 percentage points lower than households with incomes of $30,000 or less. (See Figure 2.)

This is a recent phenomenon, driven by the rise of inequality in the U.S. economy. Inequality, Jaravel finds, has driven up demand for goods at the high end of the product market. That, in turn, has led firms to innovate more in high-price goods, and this innovation has introduced competitive pressure into these market segments, keeping prices for these products low relative to prices of low-price goods.

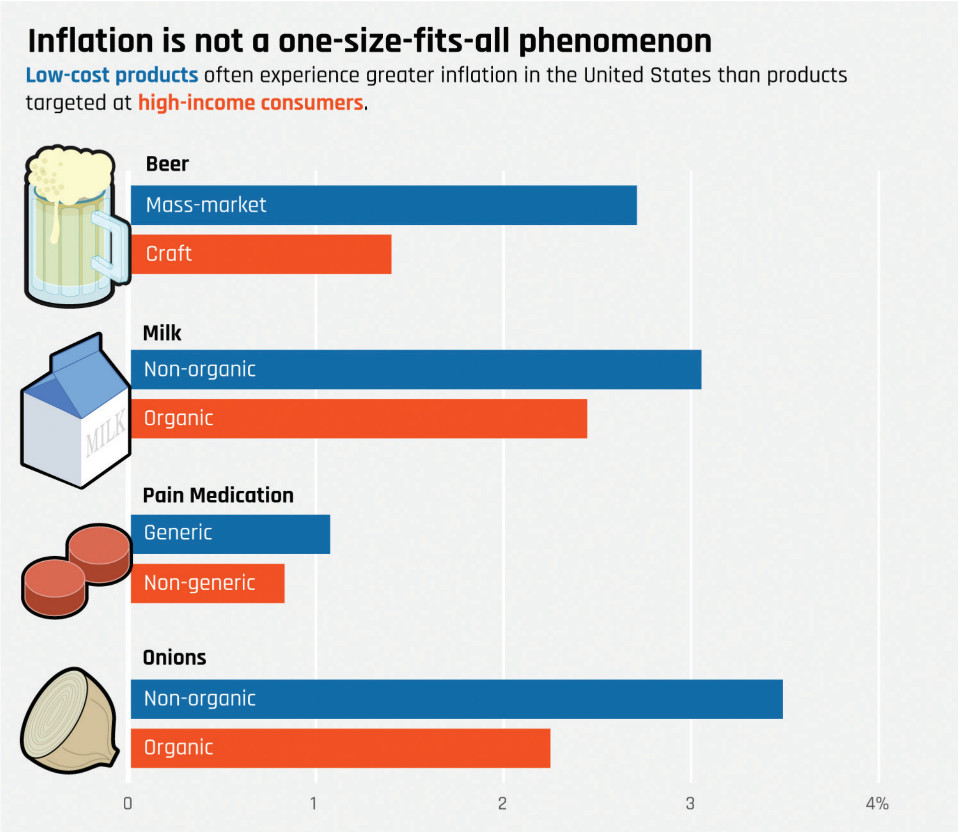

FIGURE 2

…low- and high-income consumers face different rates of inflation.

Source: Xavier Jaravel, "The Unequal Gains from Product Innovations: Evidence from the US Retail Sector", Washington Center for Equitable Growth Working Paper [Washington Center for Equitable Growth, 2017].

An example is the craft beer market. Craft beers are generally more expensive than their mass-market counterparts. But the proliferation of small craft breweries and the resulting competition has kept inflation in the craft brew segment more than a full percentage point lower than inflation in the mass-market beer segment.

This discrepancy in high-cost and low-cost product inflation rates limits the effectiveness of policy decisions. One case in point is the Supplemental Nutrition Assistance Program, which provides food assistance to low-income households that increases over time with the rate of inflation. Jaravel's research shows that the headline rate of inflation is understating price increases for the households that this program is meant to serve, which means that benefits are rising slower than the price increases faced by low-income families.

Between 2004 and 2015, Jaravel's higher inflation rate for low-income households suggests that food prices rose 36 percent, which is almost a third higher than the 25 percent increase in supplemental nutrition assistance benefits based on the headline inflation rate. Families are experiencing a decline in the purchasing power of these benefits, counter to the intent of the policy. This is not the only consequence of unequal inflation rates. Jaravel's findings may have implications for monetary policy, which typically targets the inflation rate. Economists are only just beginning to explore the consequences.

GDP 2.0: Measuring who prospers when the U.S. economy grows

GDP is the one-number economic indicator that news anchors and policymakers alike love to dissect. Reading quarterly Bureau of Economic Analysis reports on GDP growth is a form of divination that, in popular imagination, tells us whether the economic fortunes of the country are trending up or down. Strong GDP growth is considered evidence of good fortune for all Americans under the presumption that "a rising tide lifts all boats."

This presumption is mistaken. GDP growth may once have indicated good fortune for the vast majority of Americans, but over the past several decades, many Americans have been left behind by economic expansion. This reality makes GDP a misleading statistic for the opinion leaders and politicians who rely on it. The consequence is that the diagnoses of the U.S. economy and prescriptions for what ails it are based on the wrong metric.

The good news is that we have the data and the statistical know-how to fix the problem. To reflect the true range of how people experience the economy, we can and should produce statistics that show income growth for Americans in different income brackets. These statistics will allow policymakers to evaluate how the U.S. economy is performing for the working class, the middle class, and the affluent.

GDP 2.0 is a policy proposal that will extend existing GDP reports, adding a distributional component so policymakers and the public know not just how much the economy grew overall, but also how much incomes grew for those at the bottom, middle, and top of the income distribution. Each Bureau of Economic Analysis report on GDP should come with measures of growth for income earners up and down the income ladder, including measures of income growth at the very top of the income distribution—the top 1 percent—where the largest gains of the past several decades have been seen.

Who does growth benefit?

This new way of measuring economic growth is needed because the National Income and Product Accounts, of which GDP is just one part, were devised in the 1930s, the result of a concerted effort by many economists to better quantify economic output at that time but wholly inadequate to the needs of today.

These data were first put together in the 1930s to help policymakers understand the Great Depression. The U.S. Department of Commerce commissioned Simon Kuznets, who, at the time, was an economist at the National Bureau of Economic Research and a professor at the University of Pennsylvania, to develop estimates of aggregate national income for the United States. In 1934, he and his team of researchers in New York and at the Commerce Department presented their findings to the U.S. Senate. The report itself is nearly 300 pages long, offering painstaking detail for every line of information published, drawn from an immense number of independent sources and statistical abstracts across every major industry and government agency responsible for their oversight.[7]

Based on this work, the first U.S. national income statistics were published in 1942. These accounts, specifically developed to help the United States effectively marshal its economic resources to fight in World War II, are what we have used to tabulate GDP ever since. Kuznets would go on to win the third Nobel Memorial Prize in Economic Sciences for this work and his research on economic growth.[8]

Gross Domestic Product was a tool well-adapted to the economic problems of mid-20th century America. It allowed economic policymakers to understand the vast depth of the Depression and highlighted the need for bold action. Similarly, it served as a guide in World War II, providing some indication of how many planes and boats and tanks we might plausibly manufacture if the full resources of the nation were focused on the task.

These are important questions, but now there are other ones that the nation needs answered. In an era where inequality has swelled to levels approaching those last seen nearly a century ago, elected officials need to know who is prospering from economic progress so they can manage the economy for broad-based growth that benefits all Americans. This need is acute now because headline GDP growth has become unmoored from the economic fortunes of many Americans.

Economic growth was equitably distributed in the United States between 1963 and 1979. Americans at all levels of income saw annual growth that was at or above the level of total GDP growth, unless they were among the very richest, who experienced slower growth than the rest, on average. Starting around 1980, this relationship began to change. In the decades since 1980, the vast majority of Americans have seen growth in their own incomes that is below GDP growth. Over this time period only the most affluent Americans have seen their incomes rise faster than the average. This is a sharp shift in the trends from the decades before. (See Figure 3.)

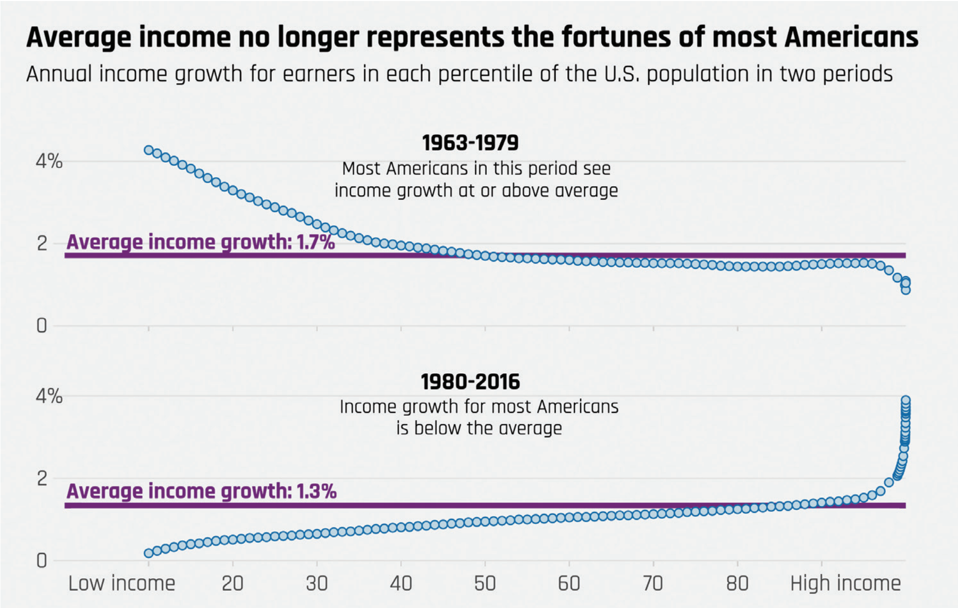

FIGURE 3

In the decades since 1980, the vast majority of Americans have seen growth in their own incomes that is below GDP growth.

Source: Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Method and Estimates for the United States," 133 (2) (2018): Appendix tables II: distributional series, available at http://gabriel-zucman.eu/usdina/.

This divergence between the average and the actual fortunes of families is a problem Kuznets warned about in one of his very first publications on the subject of national accounts. In a section of his report to Congress titled "Uses and Abuses of National Income Measurements," he noted that, "The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income."[9]

This divergence makes GDP increasingly misleading as a guide to public policy: It does little good to target GDP as an outcome if the majority of GDP growth flows to a small group of families, leaving the rest with few gains. Despite this, politicians continue to focus too much on GDP growth, and pundits encourage them. The Trump administration made a campaign issue out of targeting 3 percent growth and sometimes promised to achieve much higher growth, without a simultaneous discussion of who would reap the gains of that growth.[10]

The pattern of growth shown in Figure 3 has serious downstream consequences. To take just one significant example, Harvard University economist Raj Chetty and his colleagues have demonstrated that absolute intergenerational income mobility has declined precipitously in the United States, and that most of this decline is due to rising income inequality.[11]

Chetty finds that children in the United States used to have a 90 percent chance of earning more than their parents did, comparing parents at age 30 to their children at age 30. But by 1980, the chances had dropped to just 50 percent. There are two possible explanations: Mobility could have fallen because of lower overall economic growth in later cohorts, or it could have fallen because of unequal patterns of growth. A counterfactual analysis shows that the latter accounts for two-thirds of the change in absolute mobility.

Adding GDP 2.0 to the statistical toolbox

Academic economists have already provided a working prototype of what GDP 2.0 might look like. Thomas Piketty of the Paris School of Economics, and Emmanuel Saez and Gabriel Zucman, both of the University of California, Berkeley, have published a public dataset they call Distributional National Accounts that uses U.S. tax data to distribute income for 55 years, from 1962 to 2016.[12]

But academic datasets are not a long-term solution for the problem. Government statistics are produced on reliable schedules, using standardized methodologies and the best available data. A distributional measure of growth presented alongside the headline GDP growth number would make the report more meaningful to American families who are not currently well-represented by overall GDP growth. (See Figure 4 on page 228.)

GDP 2.0: Coming soon

These GDP 2.0 statistics would help facilitate the diagnosis of a real and concerning phenomenon in the economy: increases in inequality that could presage weakness in future consumer spending, indicate falling income mobility, or indicate that the economy is not working for every American.

Creating a distributional component in the National Accounts is well underway at the Bureau of Economic Analysis, thanks to interest from the broader economic community and pressure from Congress. In 2019, for the second Congress in a row, Sens. Charles Schumer (D-NY) and Martin Heinrich (D-NM) and Rep. Carolyn Maloney (D-NY) introduced the Measuring Real Income Growth Act in both chambers.[13] The bill, which has garnered 23 cosponsors in the Senate and 22 in the House of Representatives, would direct BEA to produce income growth statistics for Americans in each decile of income to accompany aggregate GDP growth.

This congressional interest has led to a flurry of legislative action. The congressional Joint Economic Committee has held two hearings on the topic, most recently in October 2019.[14] In March 2019, the conference report accompanying the Consolidated Appropriations Act for fiscal year 2019 included a clause instructing the Bureau of Economic Analysis to report income growth within deciles of income starting in 2020.[15] And in December 2019, the conference report accompanying the Consolidated Appropriations Act for fiscal year 2020 provided the agency appropriations bill for the Department of Commerce for FY2020, House appropriators instructed the agency $1 million to pursue the project.[16]

GDP 2.0 would show how the economy performs for all Americans

Per capita annual real National Income growth subdivided by amount of growth earned by each income group, 1963–2016

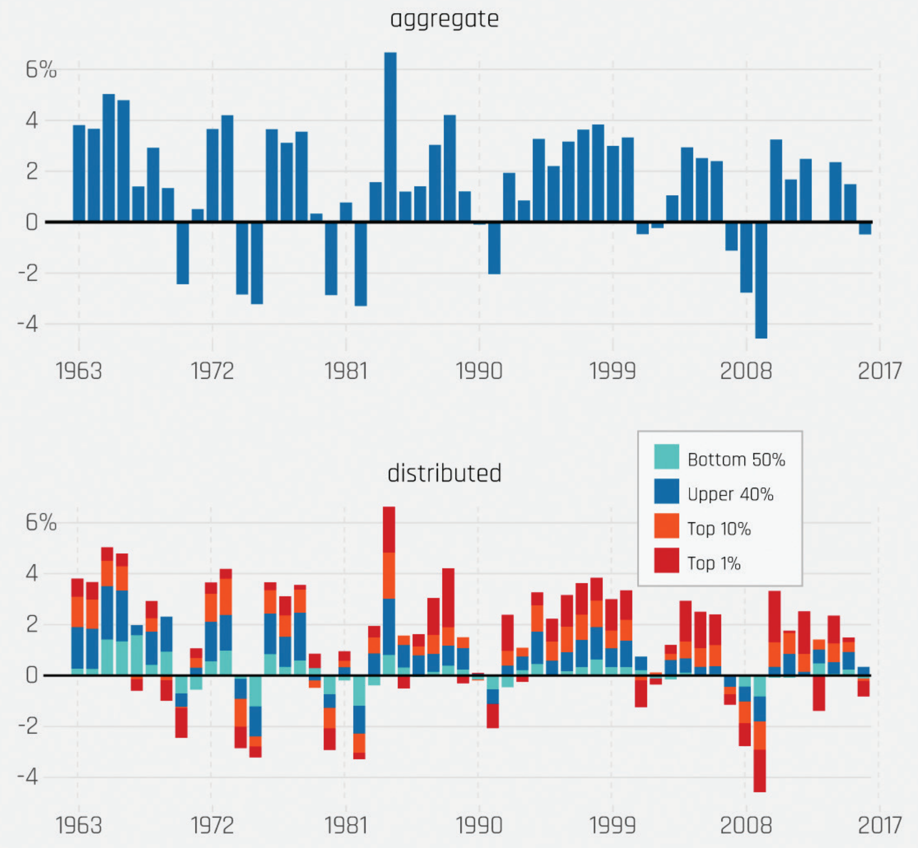

FIGURE 4

A distributional measure of growth presented alongside the headline GDP growth number would make the report more meaningful to American families who are not currently well-represented by overall GDP growth.

Source: Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Method and Estimates for the United States," The Quarterly Journal of Economics 133 (2) (2018): 553-609.

Conclusion: For better policy, measure the right things

The metrics we choose should reflect what we value. As the cases of inflation and GDP show, the headline metrics we use for economic evaluation are either missing important features of the 21st century economy or have become misleading because of changes in how the U.S. economy works. If realizing the promise of the American Dream is important, then GDP 2.0 and similar new measures will serve to align our economic policies with our values. Modernizing our economic statistical infrastructure is a way to set new economic goals and guideposts. Without these guideposts, we cannot achieve strong, stable, and broad-based economic growth.

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Endnotes

1 Sara Rimer, "Baylor Rewards Freshmen Who Retake SAT," *The New York Times*, October 14, 2008, available at https://www.nytimes.com/2008/10/15/education/15baylor.html.

2 Lauren Kent, "Activists push for law school transparency," *The Daily Tar Heel*, October 2, 2014, available at https://www.dailytarheel.com/article/2014/10/many-schools-but-not-unc-fund-jobs-for-graduates.

3 Robert Morse, "Iona College Admits to Inflating Rankings Data for 9 Years," *U.S. News and World Report*, December 1, 2011, available at https://www.usnews.com/education/blogs/college-rankings-blog/2011/12/01/iona-college-admits-to-inflating-rankings-data-for-9-years.

4 Daniella Diaz, "Rayn on tax plan: 'This will increase economic growth,'" CNN, December 20, 2017, available at https://www.cnn.com/2017/12/20/politics/house-speaker-paul-ryan-tax-reaction-morning-shows/index.html.

5 Greg Leiserson, "If U.S. tax reform delivers equitable growth, a distribution table will show it" (Washington: Washington Center for Equitable Growth, 2017), available at https://equitablegrowth.org/if-u-s-tax-reform-delivers-equitable-growth-a-distribution-table-will-show-it/.

6 Xavier Jaravel, "The Unequal Gains from Product Innovations: Evidence from the U.S. Retail Sector," *The Quarterly Journal of Economics* (2019).

7 According to the Bureau of Economic Analysis, the U.S. National Income and Product Statistics "were first presented as part of a complete and consistent accounting system in the July 1947 supplement to the Survey of Current Business." See U.S. Bureau of Economic Analysis and U.S. Department of Commerce, *National Income and Product Accounts of the United States*, 1929–97, vol. 1 (2001), available at https://fraser.stlouisfed.org/title/181/item/5416; Genevieve Podleski, "Dismal Facts: Measuring the Economy Before GDP," Inside FRASER blog, October 3, 2017, available at https://insidefraser.stlouisfed.org/2017/10/measuring-the-economy-before-gdp/.

8 Simon Kuznets, "National Income, 1929–1932," Letter from the Acting Secretary of Commerce transmitting in response to Senate Resolution No. 220, 1934, available at https://fraser.stlouisfed.org/title/971; Diane Coyle, *GDP: A Brief but Affectionate History* (Princeton: Princeton University Press, 2014), available at https://press.princeton.edu/titles/10183.html.

9 Simon Kuznets, "National Income, 1929-32" (Washington: U.S. Government Printing Office, 1934).

10 John W. Schoen, "Trump defies data with 6% GDP growth forecast," CNBC, December 6, 2017, available at https://www.cnbc.com/2017/12/06/trump-defies-data-with-6-percent-gdp-growth-forecast.html.

11 Raj Chetty and others, "The Fading American Dream: Trends in Absolute Income Mobility Since 1940," Science 356 (6336) (2016).

12 Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," *Quarterly Journal of Economics* 133 (2) (2018).

13 *Measuring Real Income Growth Act of 2019*, HR 707. 116 Cong. 1 sess. (2019), available at https://www.congress.gov/bill/116th-congress/house-bill/707; and Measuring Real Income Growth Act of 2019, S.3102. 116 Cong. 1 sess. (2019), available at https://legiscan.com/US/text/SB3102/2019.

14 Joint Economic Committee, "Examining the Rise of American Earnings and Living Standards," available at https://www.jec.senate.gov/public/index.cfm/2018/9/examining-the-rise-of-american-earnings-and-living-standards. See also JEC, "Hearing: Measuring Economic Inequality in the United States," available at https://www.jec.senate.gov/public/index.cfm/2019/10/hearing-measuring-economic-inequality-in-the-united-states.

15 *Consolidated Appropriations Act, 2019*, HJ Res 31. 116 Cong. 1 sess. (2019), available at https://www.congress.gov/bill/116th-congress/house-joint-resolution/31.

16 *Commerce, Justice, Science, Agriculture, Rural Development, Food and Drug Administration, Interior, Environment, Military Construction, Veteran Affairs, Transportation, and Housing and Urban Development Appropriations Act, 2020*, HR 3055. 116 Cong. 1 sess. (2019), available at https://www.congress.gov/bill/116th-congress/house-bill/3055; *Commerce, Justice, Science, and Related Agencies Appropriations Act, 2020*, S 2584. 116 Cong. 1 sess. (2019), available at https://www.congress.gov/bill/116th-congress/senate-bill/2584.

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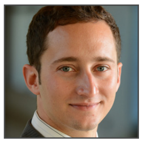

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—***Heather Boushey****, president and CEO of the Washington Center for Equitable Growth*

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