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MEASURING ECONOMIC INEQUALITY IN THE UNITED STATES

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CONTENTS

MEASURING ECONOMIC INEQUALITY IN THE UNITED STATES

WEDNESDAY, OCTOBER 16, 2019

UNITED STATES CONGRESS,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met, pursuant to notice, at 2:45 p.m., in Room 2020, Rayburn House Office Building, the Honorable Carolyn B. Maloney, Vice Chair, presiding.

Representatives present: Maloney, Schweikert, Beyer, Beatty, and Heck.

Senators present: Lee and Heinrich.

Staff present: Melanie Ackerman, Robert Bellafiore, Alan Cole, Harry Gural, Owen Haaga, Amalia Halikias, Sema Hasan, Colleen Healy, Ziyuan Huang, Christina King, Kyle Moore, Michael Pearson, Hope Sheils, Kyle Treasure, Scott Winship, Jim Whitney, and Randy Woods.

OPENING STATEMENT OF HON. CAROLYN B. MALONEY, VICE CHAIR, A U.S. REPRESENTATIVE FROM NEW YORK

Vice Chair Maloney. Thank you so much. I want to thank all my colleagues for being here and all our distinguished panelists. I am Congresswoman Carolyn Maloney.

Last month, the Census Bureau reported that income inequality in the United States by one measure had reached its highest level since they began tracking it more than 50 years ago. For the typical worker, wages have been stagnant for decades, for four decades. On the other hand, those at the top are doing great. The top 1 percent of households in the United States now take home about 20 percent of the total income.

The wealthiest 1 percent own nearly 40 percent of total wealth. Those at the very top, the top one-tenth of 1 percent, have seen their share of wealth double since 1990. That narrow sliver of the population, the top tenth of 1 percent, now own more than the bottom 80 percent of Americans.

One of our witnesses today, Dr. Zucman, has done important work tracking these trends going back a century. His most recent work looks at the role played by our tax system. It is widely believed that our tax system is progressive, that the rich pay a larger percentage of their income in taxes. However, Dr. Zucman's recent work reveals that in 2018, the wealthiest 400 Americans paid a lower total tax rate than any other income group. Sadly, this is not an accident. It is deliberate public policy.

In 2017, the Republican Congress and President Trump slashed taxes on the rich, borrowing $1.9 trillion to do it. Inequality in America was already sky-high. The Republican tax cut made it far worse.

Skyrocketing inequality undermines our middle-class society in which anyone who works hard has a chance to succeed. It means that for millions of Americans, the American dream may be a myth.

Our second witness, economist Heather Boushey, argues that high levels of inequality undermine economic growth, because strong growth depends, in part, on a strong middle class. Consumer spending accounts for 70 percent of the U.S. economy. But as a larger and larger share of income and wealth go to those at the top, there is less left over for everyone else.

As a result, most Americans have less money in their pockets, less to spend on what businesses sell. Therefore, when the bottom 50 percent, those who consume a much larger share of income compared to those at the top, see no income growth for 40 years, that is a major problem.

Extreme inequality also undermines our communities. The Chairman and I agree that healthy communities with strong social capital are critical to a high quality of life. But extreme inequality undermines that.

When wealth is highly concentrated, and in a society where education is critical to success, families have extremely high incentives to live in towns with other wealthy families so they can put their children in the best school systems. So Americans increasingly become segregated by wealth, and their quality of life becomes dependent on their ZIP Code.

Extreme inequality also undermines our democratic institutions. It enables the powerful to rig the rules to make themselves even more powerful. We see the erosion of antitrust laws, the breakdown of protections for small investors, the rejection of overtime protections for workers. We pay a very high price for extreme inequality.

How bad is inequality in the United States? Economists disagree about the severity of the problem, but while they disagree about how much inequality has worsened in recent decades, there is little disagreement things are getting worse.

One way that we measure the strength of our economy is by quarterly measures of gross domestic product. It is a good aggregate number. It tells us how fast the whole economic pie is growing. But the slices of the pie that go to the rich, middle class, and poor are extremely unequal.

Unfortunately, we currently don't measure how economic growth is shared. For this reason, I have introduced the Measuring Real Income Growth Act of 2019, and I am pleased that Senator Heinrich is introducing a companion bill in the Senate. The bill would require the Bureau of Economic Analysis to report GDP growth by income decile and the top 1 percent alongside the top line number. It will help us understand not just how fast the economy is growing, but who is benefiting from the growth.

Academic economists, such as Dr. Zucman, have produced estimates similar to those we are asking for from BEA, but we need the government to do this in a regular and timely manner.

Inequality is one of the most pressing issues of our day. It is tearing our society apart and undermining much of what we stand for. In order to understand inequality, we must have better ways to measure it, ways that are accepted by those on both sides of the aisle. With that information in hand, we can begin to restore our economy to the land of opportunity.

I would now like to call on Chairman Lee for his opening statement, and then we will go to the panelists.

Thank you.

[The prepared statement of Vice Chair Maloney appears in the Submissions for the Record on page 36.]

OPENING STATEMENT OF HON. MIKE LEE, CHAIRMAN, A U.S. SENATOR FROM UTAH

Chairman Lee. Thank you, Vice Chair Maloney, for holding this hearing. This is an interesting topic, and I look forward to our conversation this afternoon.

Inequality has been a hinge of American politics. And indeed, something of a hinge in all democracies for as long as democracies have existed, and with some good reason. Concentration of economic power can be as dangerous as the concentration of political power.

Unfortunately, the debate about inequality, like far too many debates these days, can easily be swept up into a partisan exercise of talking past each other. We could spend our entire time, and we could spend entire days for that matter, haggling over whether inequality is best understood as something that involves unequal opportunity or instead involves unequal outcomes. Or indeed, if the latter, we could argue for hours about whether and how much it is even a problem, given that almost every facet of modern life, from air conditioning to airplanes, can be counted among the blessings of intentionally unequal benefits, the unequal benefits of free enterprise.

Inequality is such a large concept that it is very difficult to tackle in a single hearing. That is why I commend Vice Chair Maloney for organizing today's hearing on measuring inequality and for inviting such an excellent panel of witnesses to talk to us, people with a lot of expertise and insight.

The subject of data measurement techniques is, at once, narrow enough to keep our discussion focused and, hopefully, technical enough that even Congress can set aside political temptations and simply drill down on some very important questions.

For instance, how exactly should we define income for purposes of measuring inequality between rich, poor, and middle class? How should we count government transfers, like the earned income tax credit for lower income workers? As the scholarship on inequality measurement has progressed, which technical details have survived peer-reviewed scrutiny and which remain to be worked out before we can reach some type of academic consensus?

These are not the questions that will necessarily lead cable news political talk shows. That is why they are exactly the kinds of questions the Joint Economic Committee should be taking up. Even the best policies involve tradeoffs.

Our economy is growing. And today, our economy happens to employ more people than it ever has before. But it has, in fact, been a long slog out of the Great Recession, much longer for some, regrettably, than for others.

If the data really can afford us a clearer view of how the costs and benefits of economic growth are being experienced as we move up and down the economic scales, as we move up and down the income spectrum, that is the type of analysis we should all insist on getting and insist on making sure that we get it right.

So thank you, again, Madam Vice Chair, and to the witnesses that we are going to hear from today. I look forward to hearing from you.

[The prepared statement of Chairman Lee appears in the Submissions for the Record on page 37.]

Vice Chair Maloney. Thank you so much.

And I am going to introduce our witnesses, and each will have 5 minutes, and then we will go to questions.

Dr. Gabriel Zucman is associate professor of economics at the University of California, Berkeley. His research focuses on distribution and taxation of global wealth. Professor Zucman is the author of "The Hidden Wealth of Nations," which found that 8 percent of the world's wealth is held in tax havens. He is coauthor of the just released "The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay." Dr. Zucman received his Ph.D. from the Paris School of Economics.

Dr. Boushey is the president and CEO and cofounder of the Washington Center for Equitable Growth. Her research focuses on the intersection between economic inequality, growth, and public policy. Dr. Boushey is author of the just released "Unbound: How Inequality Constricts Our Economy and What We Can Do About It."

Previously, she worked as an economist in several organizations, including the Center for American Progress, the Economic Policy Institute, and the Joint Economic Committee. She received her Ph.D. in economics from The New School for Social Research.

Dr. Holtz-Eakin is president of the American Action Forum, which he founded in 2009. Previously, he served as director of the nonpartisan Congressional Budget Office and as chief economist at the Council of Economic Advisers.

Dr. Holtz-Eakin spent more than a decade at Syracuse University, where he was Trustee professor of economics at the Maxwell School. He has a Ph.D. in economics from Princeton University.

Dr. Eric Zwick is associate professor of finance in the Booth School of Business at the University of Chicago. His research focuses on the impacts of public policy on corporate behavior, with a particular focus on the challenges facing small and medium-sized firms. He has a Ph.D. in business economics from Harvard University.

Thank you all for coming on this really important subject.

And, Dr. Zucman, you are recognized first, and we will go right down.

Thank you.

STATEMENT OF DR. GABRIEL ZUCMAN, ASSOCIATE PROFESSOR OF ECONOMICS, UNIVERSITY OF CALIFORNIA, BERKELEY AND CO-DIRECTOR, WORLD INEQUALITY DATABASE, BERKELEY, CA

Dr. Zucman. Thank you, Chairman Lee and Vice Chair Maloney, for inviting me to speak today. It is an honor to be here.

My name is Gabriel Zucman, and I am an associate professor of economics at the University of California, Berkeley. My work seeks to advance the measurement of inequality. With my colleagues, Facundo Alvaredo, Lucas Chancel, Thomas Piketty, and Emmanuel Saez, I am one of the co-directors of the World Inequality Database, an extensive database on the long-run evolution of income and wealth inequality.

One of our goals is to contribute to the creation of comprehensive, standardized, and internationally comparable inequality statistics that capture all forms of income contributing to GDP. So concretely, when GDP grows 3 percent, let's say, in a given year, we want to be able to know how income is growing for each social group in a way that is consistent with the official rate of GDP growth. We call these statistics distributional national accounts.

To understand the ultimate goal and the value of this project, the following analogy is helpful. According to the official national accounts of the United States, real GDP grew 2.9 percent in 2018. This number involves some uncertainty. The measurement of GDP, after all, relies on many assumptions.

There are projections based on preliminary reports that can only be confirmed months or years down the road. There are imputations, for example, of the rents that homeowners pay to themselves. There are assumptions about how much income is underreported by taxpayers to the IRS. But despite these uncertainties, most people trust official estimates of GDP.

These estimates are based on methods that have been improved over several decades. They are based on internationally agreed and constantly refined concepts and methods. They are constructed by hundreds of highly qualified government statisticians.

My hope is that, one day, we will reach the point where statistics of inequality are constructed and regarded like GDP statistics.

With my colleagues, we try to contribute to this evolution. We have created prototype distributional national accounts, that is, statistics that distribute the national account aggregates—such as national income, household wealth, tax revenue, and government spending—across the population. These prototype distributional national accounts are based on the conceptual framework that we developed over several years. They are based on harmonized guidelines, concepts, and estimation techniques that we have applied and are applying to many countries. They are constantly updated when new data becomes available and refined estimation techniques are designed.

All the data series are made available in a user-friendly manner on the World Inequality Database, wid.world. All programs, computer code, and technical appendices are publicly available. All our results can be replicated using publicly available data. Users are free to change our methodology, and we constantly refine our methods as we receive new feedback and new knowledge emerges.

These prototype distributional national accounts show a large rise in income inequality. In 1980, the top 1 percent earned 10 percent of total pretax income. Today, it earns about 20 percent of total pretax income.

Although we have put a lot of effort in building this prototype, it remains a prototype. The methods underpinning our distributional national accounts are still in their infancy. Much more work needs to be done.

Our hope is that these prototypes will eventually be taken over by government, improved, and published as part of the official toolkit of government statistics. This is what happened for the national accounts in the first place.

It may take years, even decades, before this happens. But in the meantime, it is perfectly normal to have methodological discussions, debates, and disagreements. This does not mean that we cannot know what is happening to inequality today.

A wide array of evidence shows high and rising inequality. Each of these sources has limitations. All economic statistics are constructions, whose limitations must be understood. But by working together, we can arrive at the best possible estimates and reach the stage where the publication of inequality statistics will be just like the publication of GDP.

I look forward to your questions. Thank you.

[The prepared statement of Dr. Zucman appears in the Submissions for the Record on page 38.]

Vice Chair Maloney. Thank you.

Dr. Boushey.

STATEMENT OF DR. HEATHER BOUSHEY, PRESIDENT & CEO AND CO-FOUNDER, WASHINGTON CENTER FOR EQUITABLE GROWTH, WASHINGTON, DC

Dr. Boushey. Thank you, Vice Chair Maloney and Chairman Lee, for inviting me to speak today. It is an honor to be here.

My name is Heather Boushey, and I am president and CEO of the Washington Center for Equitable Growth. We seek to advance evidence-backed ideas and policies in pursuit of growth that is strong, stable, and broadly shared.

One of the most important things we can do to fight inequality in the United States right now is to start keeping track of it. Government statistics drive economic policymaking in Congress, the Federal Reserve, and the executive agencies. Inequality should be added to this pantheon.

And the right way to incorporate inequality is to add measures of growth within income quantiles to the National Income and Product Accounts. This extension to our existing National Income Accounts updates them to better reflect the realities of the 21st century economy.

Vice Chair Maloney has introduced a bill that would do just that, and I want to thank her for her attention to this important issue.

The bill is called the Measuring Real Income Growth Act, and it will tell us what growth looks like for low-, middle-, and high-income Americans. The one number approach to growth we use now is no longer sufficient.

In the 1960s and 1970s, growth in our economy was broad-based. When the economy grew, most families saw their incomes rise in tandem. But that pattern fell apart starting sometime around 1980. Over the past 40 years, most growth has gone to a small group of people, those at the top of the income distribution.

When growth is so unequally distributed, aggregate measures are misleading. Distributional measures of growth answer an increasingly important question: Who prospers when the economy grows? Measuring growth for Americans up and down the income ladder will have profound impacts on economic discourse and on policymaking.

First, it will connect the idea of aggregate economic data with the real-life circumstances of families in the economy. When a worker sees politicians touting strong growth but looks around and sees no evidence of that in their community, they are right to feel that they are being left behind.

Second, distributional accounts will focus our attention on the economic well-being of families, which is, after all, what growth is supposed to deliver.

Third, distributional measures of growth will guide policymakers in designing policies that both raise output and do it in a way that everyone gains.

Finally, these metrics will allow citizens to hold their elected representatives accountable to delivering an economy that works for all.

Now is the time for the Bureau of Economic Analysis to incorporate distributional measures into our regularly released national accounts. The statistical science around this topic is increasingly mature. In addition to work by academics, the OECD has created an expert group to study a new standard for distributional measures of income. Some member countries have already adopted versions of these measures in their official statistics.

Here in the United States, the Federal Reserve has started reporting a distributional breakdown of the financial accounts. Critically, these measurements fill in a significant gap in our understanding of the U.S. economy. For decades, our economic policy has been driven by the presumption that we must increase growth at all costs.

Proponents of this view argue that, quote, "growing the pie is the most important metric of success." This presumption is wrong. There is a large and growing body of empirical research that shows that we cannot create strong or broadly shared economic gains through a policy agenda that allows those at the top to reap the bulk of the gains.

First, research shows that inequality obstructs the development of human capital. Children from low-income families have worse health outcomes and fewer educational opportunities, which has long-run effects on productivity and output.

Second, research shows that inequality is subverting the proper function of the institutions that manage the market. A small number of citizens with immense wealth exercise outsized influence on policy entrenching their wealth by lowering taxes and weakening protections on labor.

Third, inequality distorts both consumption and investment. Research confirms the intuition that the rich save more of their income. Rising income inequality puts more money in the hands of the rich and depresses overall economic demand, while simultaneously encouraging a greater reliance on credit rather than productive investment.

Because rising inequality obstructs, subverts, and distorts our economy, we cannot be indifferent to how growth is distributed. The new measurements proposed by Vice Chair Maloney will help us chart a path to stable, broad-based growth that benefits all Americans.

I look forward to your questions. Thank you.

[The prepared statement of Dr. Boushey appears in the Submissions for the Record on page 42.]

Vice Chair Maloney. Dr. Holtz-Eakin.

STATEMENT OF DR. DOUGLAS HOLTZ-EAKIN, PRESIDENT, AMERICAN ACTION FORUM, WASHINGTON, DC

Dr. Holtz-Eakin. Vice Chair Maloney, Chairman Lee, members of the committee, thank you for the privilege of being here today to discuss this important research area and the policy implications of it.

We are all by now quite familiar with the characterization of income inequality and its evolution over the past four decades, a characterization that includes the share going to the top 1 percent rising from roughly 10 to 20 percent and incomes for those in the bottom half of the distribution remaining essentially flat.

So as someone who is a consumer of this research literature as much as anyone, it is disconcerting to read recent research by Gerry Auten and David Splinter that reexamines these patterns and finds, in fact, at the top, the rise was quite modest, perhaps 2 percent, and that in the bottom 50 percent, the income increased by about a third over that period. And that is a very different picture of the level and evolution of inequality in the United States.

It is clear there is no consensus. And if you dig into this, it turns out that the results that you get are incredibly sensitive to the kinds of things that neither you nor I would know how to make a decision on. What is going to be the basic unit of observation? Are we going to look at households? Are we going to look at tax filing units? What is going to be the definition of income? What will be in it? Will we try to scale to get all national income or not? How do we impute the things that we don't actually directly observe?

And it is quite striking how sensitive the results are to different choices of the measure of inflation over that time period. It makes a big difference for the results.

And so I think it is fair to say, at this point, there is no real consensus about the level or evolution of income inequality, and that this is an ongoing and active area of research that, hopefully, some agreement will be reached by the various researchers.

It does for me, at least, raise the question of how we want to think about the policy implications of the research. If we really don't know where we are, it is hard to figure out exactly what the policy design would be. And on top of that, it is not obvious what

the goal is. What is the right level of inequality? And how would you actually identify it and institute policies to get to it?

Surely, we are not trying to get to zero where everyone gets exactly the same thing. So that we have to stop somewhere in between. And I have yet to see anyone articulate a stopping point in a way for us to think about the objectives of this—of this policy.

And so if you don't know where you are starting, you don't know where you are going, it is not much of a situation where you want to take aggressive policy action.

The final thing I would emphasize that comes out quite clearly in this is, while there is casual talk of the top 1 percent or the middle income or the lower income, as if they were monolithic entities, there is a huge amount of movement in and out of those.

In research that Gerry Auten did, you find that something between 37 and 47 percent of those people in the 1 percent are gone a year later. So being a 1 percenter might be a one-time lifetime event. You sell a business, you are a 1 percenter. You weren't before, you never will be again. And how we think about policies toward any part of that income distribution, we should think hard about whether people are going to be there for any sustained period of time. It makes a difference in the policy design.

So when I look at this literature and I recognize the sort of deep caring that has always been true in the United States about inequality, it leads me to the modest suggestion that perhaps the right thing to do until the research is settled is to focus on the piece of inequality about which we all agree, the lower tail, those people who are poor in America, have been poor, may remain poor. There, I think, is consensus that we ought to do something about that wherever possible and spend a little less time fighting about policies toward the rich and spend a lot more time thinking about strategies to reduce the level of poverty in the United States on a permanent basis.

Thank you, and I look forward to your questions.

[The prepared statement of Dr. Holtz-Eakin appears in the Submissions for the Record on page 54.]

Vice Chair Maloney. Dr. Zwick.

STATEMENT OF DR. ERIC ZWICK, ASSOCIATE PROFESSOR OF FINANCE AND FAMA FELLOW, UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS, UNIVERSITY OF CHICAGO, CHICAGO, IL

Dr. Zwick. Vice Chair Maloney, thanks to you, Chairman Lee, members of the committee, for the opportunity to appear today to discuss my research and lessons for measuring economic inequality.

My name is Eric Zwick. I am an associate professor of finance at the University of Chicago Booth School of Business.

I make three points in my testimony that I will summarize here. First, inequality is high and has risen. A meaningful scientific consensus supports this basic point. However, the academic community is still debating the size of this increase and learning about the composition of high-end inequality. For example, relative to what we previously thought, households at the top of the income distribution derive more of their income from work and from entre-

preneurship and less from investment income like dividends and interest.

Most top earners are private business owners, a group that includes lawyers, doctors, consultants, owners of mid-sized businesses, such as auto dealers and wholesale distributors. In both number and aggregate income, these groups far surpass that of high-tech billionaires and public company CEOs who have been the focus of much inequality commentary.

In an early stage paper, I have found that wealth concentration has risen, but risen less, and depends more on private business ownership than previously thought. I do want to stress that our results do not imply that wealth concentration is low or irrelevant from a policymaker's perspective.

Second, my second point, is that measuring broad inequality does require assumptions based on evolving data collection and methods. Therefore, conclusions from the research frontier are somewhat uncertain. The state-of-the-art on implementing distributional national accounts, or DINAs, which would provide statistics like GDP but broken out by income groups, remains a work in progress. The core issue is that DINA methods require many assumptions. The ultimate conclusions are sensitive to which assumptions we make.

When data are missing on who gets what type of income, researchers make certain assumptions to fill in the gaps. For example, in the leading prototype of DINAs for the United States, there is a strong link between Saez and Zucman's—and Dr. Zucman's wealth estimates, Piketty, Saez, and Zucman's DINA estimates, and Saez and Zucman's recent work on tax progressivity. If we change the assumptions for estimated wealth inequality, that will change distributional income estimates, and changing distributional income estimates will change estimates of average tax rates at the top and bottom.

In my view, these assumptions are, in most cases, well justified, but they necessarily rely on incomplete data and convenient simplification. Thus, alternative assumptions can be equally, and in some cases better justified, with significant implications for what stories we tell about how inequality has evolved and what lessons we draw for tax policy.

It is also important to recall that what we observe in tax data is influenced by reporting responses to changing tax rules over time. So the same high-level statistics might be consistent with very different underlying stories of what is going on. This uncertainty is where the scholarship plays its role.

So third, my third point is that I recommend several clear next steps for collecting new data to help implement DINAs and improve inequality measures.

First, task the Bureau of Economic Analysis with developing a process to produce DINA estimates, to prepare a public technical report, and open up findings and methodological details to expert feedback. A recent effort by economists at the Federal Reserve to distribute the U.S. Financial Accounts demonstrates the value of such a process.

Second, new tax laws that require partnerships and C corporations to trace and report their ultimate owners could help improve our DINA estimates.

Third, expanding the IRS' random audit program could improve our understanding of underreported income and help improve our DINA estimates.

And last, improving data collection and retirement account balances and the portfolio composition could improve our DINA estimates, because that data is currently not used.

The academic literature remains somewhat divided on the technical specifics of distributional accounts. But these divisions largely reflect an evolving state of current knowledge that is changing as new data becomes available. This is not unusual in academic research; the glass is half full. I strongly believe that we will reconcile these differences and continue to build toward a consensus method over time.

Some final remarks. To advance our learning, I think this committee could facilitate a substantive conversation about several outstanding questions. For example, what roles have population aging, changes in the pension system played in measuring these trends; second, how important is multigenerational wealth versus self-made wealth; third, what are the consequences of inequality for disparities in opportunity, especially for children.

Let me also say that I greatly admire Dr. Zucman's work and that of his colleagues, Thomas Piketty and Emmanuel Saez, despite our occasional friendly disagreements over accounting methods. I have learned a lot from them, and my work would not have been possible without theirs.

And last, I want to reiterate my reading of the evidence. It is not that inequality in America is low or that it has not increased at all. Rather, my reading is that the increase has been more modest, the nature of the increase skews away from the passive capital highlighted in Piketty's book and toward human capital, labor, and entrepreneurial activity.

Thank you for your time. Look forward to questions.

[The prepared statement of Dr. Zwick appears in the Submissions for the Record on page 61.]

Vice Chair Maloney. Thank you.

I am calling first on Senator Heinrich. He has got a conflict. He has got a challenge with his time.

Senator Heinrich. Well, I will keep this short, in respect of all of my colleagues' time.

Dr. Boushey, I just wanted to ask how important it would be to make sure that, as we implement these new statistics, that they actually be produced concurrently with when other statistics are produced. So, for example, most economic statistics come out quarterly. If we want to understand the relationships, how important is it to be on sort of the same calendar as everything else that we rely on when we try to manage the economy?

Dr. Boushey. Thank you. Thank you, Senator. It is a really important question. You know, currently we release data on—from the National Income and Product Accounts on GDP, gross domestic product, quarterly. And I think it would be very important that, as the BEA puts together this methodology, that the goal be for the

distributional data to be released alongside the GDP. It is through doing that that we will learn how growth is distributed.

I think actually what has happened at the Federal Reserve with their distributional accounts on the financial side shows that that is possible. That is what they have done. They have taken the Nation's financial accounts and they have appended them to survey data and are able to make extrapolations that allow that data to be released on a quarterly basis, which has just started this fall. So I think that shows a good roadmap for how BEA could do it.

And I think it is not just possible, but it is imperative for the policy debate that, as we get that quarterly GDP, we understand who in America is benefiting, where it is happening. Ideally, I would like to be able to see that across place and ideally across race and to some extent gender, but probably that is a little bit more complicated. But I think that having people understand who growth is benefiting in that timely way is probably one of the most imperative new statistics that we need from Federal agencies.

Vice Chair Maloney. Thank you.

Chairman Lee is recognized.

Chairman Lee. Thank you very much, Madam Vice Chair. And thanks to all of you for being here.

Dr. Zwick, we are going to start with you, if that is all right. You have written that the data for different types of income are often sensitive to the types of tax regime that is at issue. Do I understand that correctly? And if a particular type of income receives favorable tax treatment, some income may be relabeled to take advantage of that treatment. In other words, you squish one end of the balloon, air is going to go somewhere else in that balloon.

Does this suggest that we should be careful interpreting estimates of income inequality or taxes paid in the year immediately following a major tax reform package? For example, a year like 1987 or like 2018. And what is the most recent year for which you feel that we have sufficiently high quality and reliable data?

Dr. Zwick. Yes. So thanks for the question. I think, yeah, the basic point is that if there is a different tax rate for types of income—I think we see this especially in entrepreneurial situations, where you have the ability to pay yourself either as labor or capital dependent and, you know, subject to the tax rules, of course. We have seen responses to tax regimes that include this relabeling response. And so the income that is reported as capital, for example, might actually reflect labor income sort of under the hood, if you actually thought about the economic nature. And we use a bunch of methods to try and estimate the extent to which capital income as reported actually reflects labor using, say, when an owner prematurely dies in a small business or an owner prematurely retires, thinking about how the business reacts to that. If it were just passive capital, the business would continue operating. But if it were more a mix of capital and labor, the business would change.

So those kinds of issues show up—they are always present. And to the extent that there are different tax rates on different kinds of income, those issues can be larger. So as we move, you know, capital tax rates relative to labor tax rates, those issues can be larger.

So, you know, over time we have had different tax changes. And come right around these reforms, the specific behavior labeling response is uncertain.

Chairman Lee. Do we have a complete and reliable dataset yet for 2018, the first year following the——

Dr. Zwick. I don't think so.

Chairman Lee. Dr. Zucman, in your New York Times op-ed, you have consumption taxes at 12.3 percent of income for the lowest income group. And yet, to my knowledge, no state has sales taxes higher than around 9 percent. And many states, of course, have carve-outs designed to make the sales tax less regressive by carving out things like unprepared food.

Your methods state that this is because they pay sales tax on goods purchased with transfer income. Is that correct? Am I stating that correctly? In other words, that the difference between the fact that no state has sales taxes higher than 9 percent and your figure of 12.3 percent is made up for as a result of the fact that you figure that some of these transfer programs involve people paying for things using money that they get through one of the programs. Is that right?

Dr. Zucman. So what we try to do in this book is very much what we try to do in this overall project of distributional national accounts, which is allocate the aggregate amount of tax revenue collected by the U.S. Just like we want to allocate total GDP. Total consumption taxes are broader than sales taxes, they include excise taxes or other indirect taxes. So that is a main explanation for the numbers that you mentioned.

And what I want to say is that——

Chairman Lee. Federal excise taxes aren't made up for in that difference between 9 percent and 12.3 percent, are they?

Dr. Zucman. Yes—no——

Chairman Lee. You maintain that they are?

Dr. Zucman. State sales taxes are only a fraction of total consumption taxes in the U.S. You have Federal excise taxes. You have tariffs. You have other indirect taxes, such as business licenses.

So what I want to say is, ultimately, I think it would be helpful also for the government to publish statistics of effective tax rates by income that are comprehensive, that take into account 100 percent of the official amount of tax revenue collected by the U.S. We try to provide a prototype of this. We are the first ones to distribute 100 percent of the total amount of tax revenue, 28 percent of national income. This is work in progress. These are methods that can be improved and that, hopefully, will be improved and taken over by government statisticians in the future.

Chairman Lee. But do I have this right, though, that if some government transfer program expanded, the program itself expanded and poor people who benefited under that program, who received money under that program, were able to buy more things as a result of that expansion, that would show up in your estimates as higher tax rates for poor people, because they would pay more sales tax, but they would not be credited with having more income? Am I understanding that correctly?

Dr. Zucman. This is an interesting methodological question, Mr. Chairman. And we took that into account by restricting the population to people who earn more than half the Federal minimum wage in income. So, typically, these are people who might receive some transfer income. That is not playing a big role in the specific statistics. So we have thought hard about this question——

Chairman Lee. But the answer is yes, right? The answer is yes, isn't it?

Dr. Zucman. The answer is yes, but quantitatively this is very minor.

Chairman Lee. Understood.

Dr. Zucman. Qualitatively you are correct.

Chairman Lee. My time has expired. Thank you, Madam Vice Chair.

Vice Chair Maloney. Thank you. I would like to ask each of the witnesses, what level of confidence do you have in evidence that inequality is rising?

We are all here today because shared prosperity matters to the American people. GDP is the commonly used indicator to measure the growth of the economy, but it doesn't tell us how the growth is shared across the economy. We often have to wait years for researchers to get the data and report on key trends.

So I would like to ask each of you, do you agree that having more detailed data produced by the Federal Government and shared on a regular basis on who is benefiting from economic growth will allow us to better evaluate the impact of policies?

And I'd like to start with you, Dr. Zucman, and let's just have everyone's thought on it.

Thank you.

Dr. Zucman. Thank you very much for your question. As our discussion showed, there is a great demand in society for statistics that decompose GDP, National Income, other macroeconomic aggregates by income groups. And there would be a huge value in publishing those statistics.

The way that I see this process unfolding is very much like what happens—what happened with the national accounts in the first place. You know, the national accounts were developed by economists such as Simon Kuznets in the 1930s in the U.S. And then they were taken over by official government statisticians and government agencies. And ever since, they are refined and improved year after year. And I think that is the path forward, and we hope to contribute to that process. That is how to build trust in these all-important statistics.

Dr. Boushey. Thank you.

I think it is very important that we have more detailed data on how growth is being distributed. One of the things that we see when we look at the way that policy is discussed, the way that the economy is talked about, we get data regularly on the aggregate economic output through GDP and other measures. But what we—we only get data irregularly, only once a year, on income inequality. And I think it is very important that we put those two conversations together.

Because we used to be a country in the sixties and seventies where, when GDP grew, most Americans saw their incomes grow

at the same rate. Since 1980, it is only for people in the top 10 percent of the income distribution that see their incomes grow at least at the average of GDP, if not above. So most people are not experiencing that average growth. Yet we are going out—the Federal Government is going out every quarter and saying the economy grew by 3.3 percent or the economy grew by 2 percent, when the vast majority of families are experiencing growth in their income, which is far below that.

I think we have a responsibility to connect those dots, and we have the tools and the prototype and the skills within the inside of the Bureau of Economic Analysis to make this real.

Dr. Holtz-Eakin. I certainly think if you want to have solid policies, you ought to measure better. I don't think that that should be an objectionable goal.

We do get annual reports on inequality and on income growth. And they point out, quite vividly sometimes, the difference between the top line and what is going on.

So in 2016, families who worked full time for the full year saw exactly zero increase in their real incomes. That is Census data. Nevertheless, we didn't have zero macroeconomic growth. And so we don't reconcile those in a deep way statistically. So I think we should not object to the fact that we need to understand this better, measure it better.

And the thing that I would just repeat from my opening remarks is, it is important not to pretend that people are somehow stuck in a particular place. They are moving around a lot, and measuring that mobility would be comparably important, in my view.

Vice Chair Maloney. Dr. Zwick.

Dr. Zwick. Yeah, I think I generally—I mean, I am an empirical researcher, so I am always going to be supportive of more high-quality data. So I think this is a case where not only the empirical researchers, but I think a much broader community would really value this product. I think what we know about whether inequality is rising is—you know, we learn with a considerable lag currently.

So I can say that the scientific consensus is that it has risen, but what is going on right now is much harder to say.

Vice Chair Maloney. Thank you very much. My time is expired.

I now call on Representative Schweikert, to be followed by Representative Beyer.

Representative Schweikert. Mr. Chairman, Madam Vice Chair.

Okay. This is like a kid in a candy store for some of us, which is why my staff, I think, is—has given up caffeine, because I make them nervous.

Three of you, I have actually read a number of your things. Can I throw out first a couple of concepts? I am going to read something, and then let's do a couple of quick questions.

I will argue in many ways the fixation, particularly on some of the tax reporting data from both our country and around the world, and the—I have a fixation on income inequality. But I believe you are missing a whole bunch of the way you would properly model it, everything from if you actually do proper overlays of where we are demographically. Some of the unusual things we have seen in

the data of millennial males underperforming in the labor force participation, the fixation on what wealthy have compared to the thing I wish—Doctor, I know you have done some of this—velocity. What is my movement from someone being—and can I use the language quartiles? Just because when I was in school, that is what we called it and no one else here on the panel did that. So I don't want to be—I am so fearful of being offensive to anyone.

But, you know, when we would talk about the two or three lower quartiles, we had a fixation of what was healthy in an economy was our brothers and sisters moving up and out of some of those lower quartiles. And a fixation by distribution difference is actually in many ways dishonest, because if my vast portion of my population, you know, my brothers and sisters who didn't graduate high school, and all of a sudden I see amazing movement, particularly in the last year, two years.

So, look, I am looking at some data right here. Real median earnings for female households with no spouse present jumped 7.6 percent last year. We should be giddy about those sorts of numbers. But the data you provide us, the data that are modeling, should be talking to us as policymakers of how do we do more of that.

I mean, if I came to you and said a 7.6 movement in a time of almost no inflation in a quartile that had a brutal previous decade, we should be joyful and we should be figuring out how to do more of it.

And my fear is the partisan rage that often here, as we are trying to make arguments on income distribution, instead of there are things that are stunning numbers. They are preliminary. And, you know, we have a couple authors out there in your field that are saying the last year may be the very first year in modern times where income inequality either was flat or shrunk because our lower quartiles, particularly the lower three, had such income movement. It is not done yet. Maybe I am being pathologically hopeful.

And, Dr. Holtz-Eakin, I consider you a friend, because you tolerate some of my eccentricities.

Dr. Holtz-Eakin. And I consider you pathologically hopeful.

Representative Schweikert. Yeah, that too. Look, I am 57 with a four year-old.

That should have been funnier for the room.

What do we do to understand the uniqueness of right now where all my economic studies—I have been on Joint Economic since I got here—from just a couple of years ago said the types of numbers I have seen in the last year were impossible, moving back well over 63 percent labor force participation was impossible.

How do I understand—knowing the data, knowing the—it is great. How do I understand what has worked?

Dr. Holtz-Eakin. Measure it. I mean, honestly, the—for those of us who care about the evolution of the economy, we are always really reading economic history. At best, we are getting data which are last month's; usually, they are older than that. We are guessing about what is going on right now. We never really know.

And for me to give you—I think it is kind of a scientific answer to what is different in 2018–2019 in terms of labor market perform-

ance, we are going to have to measure better. We have lots of suspicions about it, but we don't know for sure. And that is the reality.

Representative Schweikert. Do you all consider it statistically very significant that in a single year, a half point drop in the poverty rate in a single year?

Dr. Holtz-Eakin. Yes.

Representative Schweikert. So, A, you know, from the political world, we should be joyful. But, B, how do we find out datawise what was working, what drove that?

Because I know in our modern politics, we fixate on the wealthy and say, look, what they have you don't have. But if we are going to be actually great for our society, we should be fixating what our brothers and sisters in those lower quartiles have and how we get them to have more.

Dr. Zwick. I think including, you know, the kind of characteristics like you described, like more fixed characteristics and seeing what happens to those people from year to year, the data are available in the distributional accounts.

Representative Schweikert. Well, in the last—because we also have the problem in the Joint Economic world where we are seeing here is Census data, here is BLS data, here is—and as we know, tax data has stunning amounts of noise in it. And then trying to normalize that and then trying to put all of what is happening in our State and local and trying to normalize each jurisdiction and their effects, it would be fascinating and you will spend a lifetime just doing adjustments. And you know when you do that many adjustments, your final outcome, the variance, is unacceptable.

So, with that, I yield back, Madam Vice Chair.

Vice Chair Maloney. Mr. Beyer.

Representative Beyer. Thank you, Madam Vice Chair. And thank y'all very much for coming and being a part of this. First time we have ever had a panel with two people whose names begin with Z. This is really——

Representative Schweikert. And they are bookends.

Chairman Lee. And both doctors.

Representative Beyer. Exactly. All doctors.

You know, when the Tax Cut and Jobs Acts of 2017 was signed, I feared it would result in a significant redistribution of wealth towards the richest among us. But I was really struck by Dr. Zucman's figure published a lot last week that after the law went into effect, the 400 richest households now shoulder a lower overall tax burden, 23 percent, than the entire bottom 50 percent, which is 24 percent. It is the first time in a hundred years this has been true. So this is very relevant that you are here.

Dr. Zwick, I struggled through all 800 pages of Thomas Piketty's book. And the main takeaway I had from it was that the return on capital is much greater than the return on labor. And yet you talk about that in your research, you found the top inequality is more human capital intensive. And it seems like you basically—the cut is that you look at passthrough income as more on the wealth side rather than the income side, whereas as a car dealer, whom you refer to in here, I note that it is often run very much on the labor side.

Can you talk about your differences with Piketty on his central conclusion?

Dr. Zwick. Sure. And I will be very brief. But thank you so much for the question, Congressman.

The difference is basically about using—the difference between using aggregate statistics, the aggregate flows, you can compute in the interest rate. You can get—you can compare it to these aggregate returns on labor might tell one story. And what we do is use sort of microdata, so it is kind of from the bottom up trying to ask, of the top 1 percent, what share of them is in different industries, how big are their firms? How many firms do they own? Basic descriptive statistics that you don't need a Ph.D. to understand.

And what we find is that—and it was surprising to us when we looked underneath, it was not what we were expecting. There are just a ton of doctors, there are a ton of dentists, there are auto dealers. There is like sort of a much broader, richer view of the economy than what you see if you read the newspaper. You know, all the journalists live in New York. There is a lot of finance in the newspaper. But it is a much broader economy. And that includes at the very top of the income distribution.

Representative Beyer. Okay, great. Thank you very much.

Dr. Zucman, one of the criticisms people are throwing back about your research, which I very much appreciate—the research, not the criticism—is that they leave out all the transfer payments. You know, the earned income tax credit and food stamps.

And how do you—is that valid? And would the—would the income inequality not be nearly as great if you included the things that are not part of that AGI?

Dr. Zucman. Thank you very much, Congressman, for this very important question.

So we do look at all taxes and also all government spending. In our prototype distributional national accounts, we care about both, because we want to study what is the overall distributive effect of government intervention in the economy.

So we have two sets of statistics. We have statistics on income distribution before taxes and transfers, and we have statistics on income distribution when you measure income after taxes and transfers. And in both cases, adding up to 100 percent of national income or 100 percent of GDP.

And when you do that, what you see is that there is less inequality after taxes and transfers. So, you know, the overall tax and transfer system is redistributive, and that is very important.

But we also find that the rise in inequality is almost the same after taxes and transfers as compared to before taxes and transfers. In both cases, you had a big increase in income concentration.

Representative Beyer. Okay. Thank you very much.

Dr. Boushey, you—I have three millennial daughters, and they are very much affected by this income inequality, at least until they inherit the car dealer's money.

From a policy standpoint, how do we address the millennials?

Dr. Boushey. Oh, what a great question. You know, I mean, so what we are here to talk about today is how we measure economic progress. We know that the younger generations, from a lot of different datasets, are struggling in this economy. There are a lot of

different ways that the concentration of wealth and income is making it harder for them to get their footing, to move their way up, if they are not lucky enough to have a parent that is, you know, bequeathing them a small business or the like.

So I think starting by figuring out how we can increase opportunity, remove the obstructions to opportunity, especially for kids, those millennials that are at the lower end of the income distribution. Personally, some of my favorites include things like thinking about how we are going to deal with education, especially early childhood education? How we are going to ensure that there are good jobs for them? Will they have the right to join a union? Will they have the right to have a job that has access to benefits like healthcare or paid family medical leave? Those are some of the places I would focus. But those really hinge on making sure that we address the concentration of wealth and particularly market concentration.

Many of those millennials are looking at labor markets that what—economists are so great with our words—but are monopsony—monopsony labor markets, meaning that they don't have a lot of options where to work. And I think thinking about that side of the economy, we haven't done enough of. So I would start by focusing there.

Representative Beyer. Okay, great. Thank you very much.

Madam Vice Chair, I yield back.

Vice Chair Maloney. Thank you.

Representative Joyce Beatty.

Representative Beatty. Thank you, Madam Vice Chair. And thank you to all of our scholarly witnesses here.

Let me start by saying I am overwhelmed. I am just simply overwhelmed. And here is where I want to go with this. You know, this is like the new thing. You know, and for me coming to Congress when President Barack Obama was in office, he made statements that he observed that inequality was the defining issue of our time. Well, that has continued. Whether I am talking about the Congressional Black Caucus forums, when we do our scholarly work, it is the same titles that we have here. It is wealth creation, it is inequality, it is the gap, it is how we bring it through.

Now, I am not going to say that I have read, but I have muddled through all of your scholarly work here. And I am having a hard time separating inequality and poverty, because I think they have an effect on each other directly and indirectly through their link with economic growth.

But when I read this, and then I get resolved from you, making statements like there is no consensus in the research or the literature, bottom line, that will give us an answer. So I am here for some answers.

I have read the theories. I read again—you will say, given these challenges to the policies, there is no scientific research that tells us.

When I go home to the 3rd Congressional District, where I represent the wealthiest and the poorest, the number one thing that I get beaten up on is this topic here today, Madam Vice Chair. And they want answers.

So when I think of the question of I want to pose to you—and I will start with you, the female, Ms. Boushey—Dr. Boushey. This past July, you authored an article entitled, "Neither history nor research supports the supply-side of economics." In it you stated that the Reagan tax cuts did not pay for themselves and they ushered in a period of broad economic inequality. I am with you. A substantially similar phenomenon occurred with the Bush tax cuts.

Well, we already know that the Republican tax cuts passed in Congress will not pay for themselves. I think mostly everyone agrees that it was a myth.

But how do you think this will affect the income equality? Is the Tax Code the primary driver of this income inequality or what?

Because I have to go back and tell people. They will say, how do you fix me? You know, we have got the Census data. And I agree with my colleague over there. I remember the quartiles and how growth——

But is there a real bottom line answer that I go back—when people say, you serve on this powerful committee. What did the experts tell you of how we resolve this?

Dr. Boushey. Well, let me—a couple of answers. First, I think that the people in your community, I would bet, would be really gratified to know that what their experience is in the economy was reflected in how we talked about economic progress. And that is the kind of data that we have been talking about, that we want the Bureau of Economic Analysis to do.

So no longer would we just say the economy grew at 3.3 percent, but we would be able to say, in the average it grew by 3.3 percent, but for most people in the bottom quartile, growth was only 1 percent or growth was 5 percent, whatever that number is.

Representative Beatty. How do we get to increase this growth?

Dr. Boushey. So yes. So the first thing, though, is I think giving people the power of the data, really important. But then——

Representative Beatty. I don't think the poor people—poor people don't—this is inside baseball. No offense to you. This is inside baseball.

When you go out—it is not people like us that are asking the question. You go into a room with a thousand people, and what they are saying to me, how do we—they are the factors on the other end of that. So this works for us, because this is intellectual dialogue.

But are there any answers—do we need higher paid jobs? You know, we have got disparities and discrimination. We have got women who don't make the same amount as their male counterparts. We have got—where is all of that in this for resolve? And anyone can answer that.

One of the guys, jump in, somebody, because I only have 30 seconds.

Dr. Holtz-Eakin. As I said in the outset, I think it is appropriate, given all the uncertainty about what is going on at the upper end of distribution, to focus on the bottom end. Focus on poor people.

Representative Beatty. Okay.

Dr. Holtz-Eakin. And we know that there are things that really need to be done there. Education is a big problem, including early

childhood education, where the evidence is there are very high returns.

Representative Beatty. Okay.

Dr. Holtz-Eakin. So, you know, start with getting Americans prepared to enter the labor force and compete effectively. Do that and the rest of their future will be brighter.

And, you know, there is a big difference between inequality rising because people got poor and inequality rising because everyone stayed the same and the rich got richer. Let's worry about when people are poor. That should be a focus.

Representative Beatty. Okay. Thank you. And my time is up. But thank you very much.

Vice Chair Maloney. And Denny Heck, Representative Heck.

Representative Heck. Thank you, Madam Vice Chair. And thank you for holding a hearing on such an incredibly important subject.

In addition to the other factors that my colleague mentioned, we have also got the Federal Reserve. And it is pretty—Heather knows exactly where I am going on this.

It is pretty clear that over the last 25 years, the Fed, in a well-intended effort to anticipate an overheating of the economy, has tapped the brakes before we reached full employment. We know this to be the case, because they rarely reach their inflation target. They are almost always below it.

And as a consequence, inarguably, especially low-skilled or low-income workers, are having a harder time receiving wage growth. And that is not an insignificant part of the overall suppression of the wage growth over the last 30 years.

So I guess my first question is, have any of you studied, in particular, the impact on wage growth for—as a consequence of the Fed's policy? No, not their policy, I would suggest, because they are not achieving their policy. Their practice. Have any of you studied the impact on wage growth of Federal policy?

Dr. Boushey first, if you don't mind, sir, because she is from Washington State.

Dr. Boushey. I have got the home court advantage here. I am not from Olympia, though.

I mean, I think that—I am so glad you asked about the Fed. And I think it is connected with the Congresswoman's question about what we can do to help families all across the United States.

You know, the Fed has a mandate to keep employment high and inflation low. And, of course, we think there is a tradeoff there. What we are seeing right now is that we have very low unemployment, and yet that hasn't led to the kinds of wage increases that we would have expected. If you would have told us a decade ago, oh, you would have seen unemployment this low for——

Representative Heck. Let me stop you.

Dr. Boushey. Yeah.

Representative Heck. Are you going to argue that the Phillips curve is broken? Because we don't have enough—we don't have enough time for that argument. Because the truth is, Dr. Boushey, we are still adding jobs into the labor market at a rate in excess or at a number in excess of replacement. So we are clearly not at full employment yet.

Dr. Boushey. Right, exactly. And so the Fed needs to keep doing its job. But here's the thing: I think what this moment shows us is that we need other policies around the Fed to ensure that communities, that people in those communities see the wage increases that they should be seeing with low unemployment.

So last time that we saw unemployment this low, we had communities where more people were members of unions. So they had an institution where they could bargain for higher pay without having to threaten to quit their job, right? You had less market concentration, because the—because we were enforcing—you know, especially in the sixties, we were enforcing antitrust differently, which gave workers more opportunities to be able to switch jobs and to raise their pay.

So my point is that the Fed is incredibly important. But I am not letting you off the hook, because there are other parts of the policy that we need to—the policy environment that we need to do to make sure that we——

Representative Heck. Heather, I have never tried to wriggle off the hook. Let's be real clear about that.

But it seems to me the great unspoken part of this discussion is the Fed is not actually doing what their statutory charge is. And we don't know what it would look like over the last 25 years, as they have continued to fight the last war, hyperinflation of the seventies, in order to squeeze out that incredibly destructive impact on the economy.

Dr. Boushey. But you are in a pickle—you are in a pickle now, Congressman, because we have interest rates that are very low, and the Fed does have all of these new tools that they have been using.

Representative Heck. They raised them four times last year.

Dr. Boushey. That they did, but they——

Representative Heck. And we were not at full employment and we are still not at full employment. Can we at least allow an experiment in realizing what their statutory mandates are?

Dr. Boushey. I a hundred percent agree with you.

Representative Heck. Okay. I am not wiggling off the hook. I want to go to Dr.——

Dr. Boushey. I am 100 percent with you, but I just want to make sure that we take into account that they can't——

Representative Heck. You have always made that abundantly clear, and it is gratefully received again today.

Dr. Holtz-Eakin, I actually have a follow-up question.

Is there a better way to measure full employment?

Dr. Holtz-Eakin. No.

Representative Heck. Well, that is depressing.

Dr. Holtz-Eakin. Yeah, it is. But here is what I would say. I agree with Heather on using lots of policies, not relying so much on the Fed. I mean, I think Europe is a testament to overreliance on monetary policy, a big problem. Right now, I think the Fed is actually quite cognizant of the sort of dilemma they face in achieving their mandate.

Representative Heck. Let me stop you there.

Dr. Holtz-Eakin. If I could just finish.

Representative Heck. No, let me stop you there, because I have got 18 seconds.

Former Federal Reserve Chairs acknowledge this problem.

Dr. Holtz-Eakin. But the current——

Representative Heck. Ben did it; Janet did it, after they left.

Dr. Holtz-Eakin. Sure, sure. I think to Chairman Powell's credit, I spent a day at the San Francisco Fed talking about the benefits and costs of running a hot economy. They are thinking hard about when it is that they say stop. They know that the benefits of continuing the expansion disproportionately benefit those who are marginally taxed labor force, have the weakest skills, lowest education.

Representative Heck. Let me—because I am over time. Because I do want to acknowledge that Chairman Powell has been more explicit in his acknowledgment of this need. And Chair Yellen was implicitly, while she was chair, more willing to acknowledge it and explicitly since she's been—I think the trend line is good. But the fact is, under the current statutory construct, they didn't do what they were asked to do for 25 years, and they could do that again.

And with that, I yield back. Thank you, Madam Vice Chair.

Vice Chair Maloney. Thank you so much.

And the Chair has requested a second round of questions. So we are going to do that for those who would like to.

And I would like to ask Dr. Zucman, you have written extensively on how the wealthy hold trillions in assets in offshore accounts. As much as 8 percent of the global wealth is held in offshore havens. You estimate about $200 billion in global tax revenue is lost each year. And how do these offshore havens affect estimates of inequality, and are we getting a complete picture?

And also, any of the panelists, how does the U.S. experience compare to that of other advanced economies over the last 30 to 40 years? What is the trend internationally? What should we learn from other high-income countries on their efforts to track and report on inequality?

Starting with Dr. Zucman and anyone who wants to weigh in.

Thank you.

Dr. Zucman. Thank you. Thank you very much, Madam Chairwoman, for this question.

Yes, in my work, I have estimated that about 8 percent of the world's household financial wealth is held in tax havens globally. And this has implications for inequality, you know, that wealth and the income it generates, because it is not captured by GDP statistics or national income statistics. So they are not even in the aggregates and so they are not in our distributional national accounts. So it is possible and perhaps likely that we are actually underestimating the rise of income and wealth concentration for that reason.

Now, I am working with colleagues, including colleagues at the IRS, to improve statistics, drawing on data that has become available in recent years, about Americans with offshore bank accounts and better measuring high-end tax evasion, in particular, its implication for inequality. So that is a very important field of research. And again, that is an area where the series will be improved, will

be revised, will have—we will always have better estimates in the future.

Vice Chair Maloney. Thank you.

And does anyone want to comment on the U.S. experience compared to other advanced economies over the past 30 to 40 years?

Dr. Zwick. I will just say a couple of quick things. I think Dr. Zucman and his colleagues have done a lot of work studying other countries. And the issues I raised—back to Chairman Lee's original question about the rules being quite important for what we measure in those series, in Europe where we have seen relatively low increases in inequality, in their reported series, there is also a lot of important closely held private business, retained earnings are not distributed necessarily. And so I think there is additional new research, looking at Scandinavia in Europe, that has raised again this issue that like measurement, a fully distributional account would be quite helpful. So that is one point I just wanted to raise.

Dr. Holtz-Eakin. I think there are two interesting things that we are thinking about. One is that the rising inequality over the past four decades is a global phenomenon. It is not unique to the United States. Labor markets have higher returns to skill across the globe. And, you know, it is important to think about that and think about the common factors.

The second is—and this is particularly important now in the aftermath of the 2017 Act, that reform moved the taxation of business from global to territorial and changed the incentives to invest, innovate, and do it in the United States.

Our developed country competitors have all done that, basically one a year for decades. And so in the data will be the implications for that reform on the way things get reported, including the more than half of business income that shows up on individual returns. And that is an important part of this debate.

Vice Chair Maloney. And, Dr. Boushey, could you—what is going to happen—what is the risk to our economy and our society if we as a Nation continue down the path we are on now with economic inequality continuing to worsen?

I will start with you and anyone else who would like to comment.

Dr. Boushey. Well, if we——

Vice Chair Maloney. Not a good trend.

Dr. Boushey. No, it is not a good trend.

You know, if we believe Thomas Piketty's book, if we allow income inequality to continue unabated, it leads to greater wealth concentration. And, you know, it will only—it will take a seemingly heroic political effort to change that.

I think that the evidence is also that that kind of wealth concentration is constricting of our economy more generally. It obstructs people's ability to move up. It is making it harder for people to start new businesses and to have the kind of innovation economy that we want in many sectors because of the concentration. And it is having real distortionary effects on both consumption and investment.

There is new research out that talks about the ways that, because of the rise in the concentration of savings, one would expect that that leads to investment. But, in fact, it has been leading to

an expansion in household credit, which as we all learned during the Great Recession, can be destabilizing.

I want to add on the international comparisons that our level of income inequality and wealth inequality here in the United States, when you look across countries, appears to be very much a choice that we have made. Other countries, according to the data we have, have not experienced the same kind of inequality that we have, but they have been subject to the same trends in terms of globalization and technology. And so I think really looking deep inside the kinds of institutions that we are putting in place to constrain inequality is important.

Vice Chair Maloney. Thank you. And my time has expired.

Chairman, Chairman Lee.

Chairman Lee. Thank you, Madam Vice Chair.

Dr. Zucman, I would like to get back with you for a minute. For purposes of determining tax rates, you group people, as I understand it, by the income that they receive. And my understanding is also that you include Social Security benefits and unemployment insurance income when you create those groupings. Is that right?

So someone receiving unemployment benefits would end up looking a lot poorer and does have a higher tax rate if you didn't count those benefits as income. Is that correct?

Dr. Zucman. That is correct, but we do count these benefits as income.

Chairman Lee. Got it. And yet you don't count other government transfers as income when you group people. So doesn't that make them look a lot poorer and thus have higher tax rates than if you counted those benefits in that category?

Dr. Zucman. Yes. Thank you, Mr. Chairman. We have thought a lot about these methodological questions, which are extremely important. There are many ways to compute income, many ways. And government agencies use a variety of ways and research papers use different definitions.

Chairman Lee. No, I get it. And I don't want to oversimplify the task. I don't want to describe it as overly simple. I just want to make sure I am understanding correctly. You do make this classification?

Dr. Zucman. What we do—specifically what we do is we distribute 100 percent of national income, you know, which is GDP minus capital depreciation, plus net income received from abroad, 100 percent. If you want to include transfers in your measure of income to compute tax rates, then you are allocating more than 100 percent of national income.

And so by construction, if you give people more income than the total amount of income that there is in the economy, you are going to underestimate the tax rates of certain groups of the population. So that is the reason why we do things the way we do.

But what I want to emphasize, which is very important, is, again, what we are doing is a prototype to be improved and to be better done by government statisticians than by researchers. We hope the work we put out will be taken over, will be improved, will be refined, and will be published by government statistical agencies, including, you know, covering the entire distribution from the bottom to the very, very top.

Chairman Lee. I totally get that, and I respect the effort. And that is one of the reasons we are having this conversation today, is because we have got to figure out effective, agreed-upon ways of measuring these things.

I guess my question to you is, why is your treatment of Social Security income and unemployment insurance income different than the other categories of government transfers? How is that—how is it consistent ideologically?

Dr. Zucman. We have two measures of income. One measure is pretax income after the operation of the pension system, so including Social Security benefits and unemployment insurance benefits. And another measure of income that we have is post-tax income, subtracting all taxes and adding all other forms of government spending.

These are the two consistent measures of income that you can compute in the sense that they distribute 100 percent of national income. You can construct other measures—and we do both. And you can compute tax rates as a fraction of pretax income or post-tax income, and we do both. You can construct other measures of income, but they won't add up to 100 percent of national income. So they won't make it possible to decompose economic growth by social group. They will capture either less or more than 100 percent of national income, which then raises lots of technical problems when computing tax rates and so on.

Chairman Lee. Yeah, I get it. I get it.

I still—as long as we are having the conversation about, you know, making sure that we have effective measures, I don't think that really responds to the underlying concern about how you differentiate that. I understand that if you plus certain things up, if you leave them out, you are going to have less than 100 percent. If you count other things twice, that would be bad too. But that doesn't answer this central concern.

I got one more question in the small amount of time I have got remaining. In—your peer-reviewed 2018 paper indicated that the top 1 percent of the top 1 percent saw its tax rate fall between 1964 and 2014 by 1 percentage point. Your book, if I understand it correctly, now shows a drop of 20 points.

Am I reading those wrong or is there an inconsistency? If there is, which one is right?

Dr. Zucman. So we constantly refine and improve our methods to incorporate new data and better techniques. So for that particular question, we changed the way that we allocate the corporate tax, because now we have a better understanding of how to do that conceptually.

Chairman Lee. Thank you.

Vice Chair Maloney. Congressman Beyer.

Representative Beyer. Thank you very much.

One of the—when we talk about income inequality, I occasionally get the question "so what?" You know, Jeff Bezos makes $110 billion, and my daughter makes $48,000, but she is not hungry and she is maybe happier than he is.

Dr. Boushey, you talked about why income inequality is bad for the economy. I would love for you to expand on the first point, which is that it obstructs the supply of talent, ideas, and capital.

I had an economics professor who spent the last 10 years of his career trying to figure out why kids in the lowest quartile never applied to my alma mater, even though they are obviously—IQ is fairly randomly distributed. And you would point out that far more important than a child's aptitude score is their parental income.

Dr. Boushey. Yeah. There is a lot of great—there are a lot of great pieces of research that answer that "so what" question. One of the ones that I keep coming back to is work by Raj Chetty and a long list of coauthors that looks at the distribution of patents. There is fascinating data on who gets a patent, who applies for a patent and who gets one, and the person's income as an adult. And they also have data on that person's third grade math test scores and their parents' income when they were in third grade.

So they find—you know, on the first cut, they find the obvious, kids that do really good on those third grade math tests are much more likely to grow up and get a patent, become an inventor. But they also find that children from the top quartile who are the children who get the top math scores, who are in the top income quartile are four times as likely to grow up and get a patent than other children.

So income inequality has this really important effect on whether or not smart kids who, you know—who otherwise could be innovators in our economy, or contributing in a variety of ways, are moving their way up.

Now, there are a lot of different hypotheses and research on why those kids aren't moving up. Is it because they are living in different communities and they don't see opportunity? Is it because they can't get a student loan? Is it because they don't graduate from high school, again, because of a bad neighborhood?

So there are a lot of different policy interventions. But what is important to note is that there is something peculiar about a society where you have, you know, the rungs of the income ladder further and further apart that makes it really difficult for people to move up.

And so where the research keeps coming back to is that that indicator of inequality is something in and of itself that we need to address above and beyond all of the kinds of micropolicy interventions that we might take to help that one child succeed.

Representative Beyer. I want to keep building on your second point. Because one of the things that we struggle with all the time is how incredibly polarized the American public is, especially over politics. And as a Democrat, I am always trying to understand the core 40 percent that is very, very loyal to our President. And there are some interesting essays in the last couple of weeks about people who have felt so left out of the economy, they just want to burn the house down, the notion of the chaos theory.

And your second point is, you talked about the fundamental institutions being distorted by this; you know, that economic inequality gives people disproportionate political influence; laws, regulations, things like that.

Dr. Boushey. Yeah. I mean, I think that this is—this question is actually why I am so passionate about this data that we are talking about here today. Because we have not connected the dots that so many communities have been left behind. And because we

aren't faced with that information every quarter, we are not searching for solutions to get at it.

I fear that it has been 40 years where—you know, we know that it has been 40 years where income inequality has been rising, but we haven't focused on making sure that we are bringing all those people forward.

And so now, in 2019, you have got communities where people are like, yeah, we haven't seen economic growth, we haven't seen vitality, people are ignoring us. And I think—and being in this town for 20 years, it is because we haven't seen it.

So, I mean, just to sort of bring it back to today's hearing, seeing that I think can help us open up the doors to all of the different solutions that we need to take to make sure that we are including people in our economy. Because the reality is, is that the data available shows that we aren't.

And it is everything from the lack of jobs available to what we are doing in terms of investments in education, and, you know, everything in between. But that reality that some communities are being left behind and policymakers haven't taken the steps to forge that comprehensive agenda seems to be at the core of a lot of this polarization. But I am an economist, so I am always going to read economics into politics.

Representative Beyer. But I, too, I sometimes wonder if I lived in a very disadvantaged rural community that had seen no growth whatsoever, that I might be drawn to a "Make America Great" message also.

Dr. Boushey. Yeah.

Representative Beyer. I yield back.

Vice Chair Maloney. Congressman Schweikert.

Representative Schweikert. Thank you. And I will try to stay off the hook this time.

Dr. Zwick, a question I have had in—and I have actually hunted for credible information on it. What is the size of the underground economy?

Dr. Zwick. In the United States?

Representative Schweikert. Just the United States.

Dr. Zwick. So it is a little bit outside my lanes. My understanding is it is smaller than it is in other developing countries, but——

Representative Schweikert. Understood. And where I go with that is, many years ago when I was a much younger man, one of the projects we were assigned is try to take individuals in our community and model, not their income, but their consumption, what they had.

And, look, this was undergraduate, so it wasn't particularly brilliant math. But we had consumption double what we believed the very households we looked at's income. And that was just really hard to say were they just brilliant in their consumption? Were there things we didn't understand? Were there—because just—if that is—in two or three of the lowest quartiles, that sort of distortion, it lets you start to understand what is wrong in our sample data, what are we not understanding.

And I had some—many years later, some experiences when I was the treasurer for a very, very large county and doing the taxes, col-

lections, and all those things, and realizing some of the things didn't seem to line up where, you know, the value of the home, this and that, didn't match what we thought we knew about the household.

Dr. Zwick. If I may, Congressman, briefly. One of the open questions in this measuring inequality literature is how we distribute the underreported or unreported income. So one of my suggestions on expanding an audit program that would help us measure the underground economy and think about its distribution, how it is distributed relative to the income we do observe, actually, I think could be quite helpful and speak directly to your question.

Representative Schweikert. Wouldn't a more elegant, at least, test from your income inequality would be a consumption model, just to sort of—because that would let you know that there is something distortive, and see if that same distortion from 30 years ago still exists, because—and also—and help you understand, because it would really give you some great targeting information of why are some communities—and this is where I was heading, and it would be for Doug Holtz-Eakin—we see entrepreneurial—you know, some of our ethnic population, some of our communities, some of the education and those things, have clusters of entrepreneurship, that seems to be what creates tremendous amount of that velocity. And I have always wondered how I could sort of identify why and where. It is—I mean, we often see that the fastest movement for really moving out of lower quartiles is actually some type of entrepreneurship.

Dr. Holtz-Eakin. So before we leave the observation on consumption, there has been lots of very good work. And I would point to Bruce Meyer and his various coauthors, looking at consumption-based measures of poverty. And they do, in fact, paint a different picture than the conventional income-based measures of poverty; the level of poverty is lower, there has been diminished poverty. But it doesn't change the fact that we still have some pressing poverty problems. But I would suggest that to you.

On the entrepreneurship, this is fascinating. So one of the—one of the best test cases and interesting phenomenons is immigrants. Immigrants to the United States are disproportionately entrepreneurial. They start businesses at a higher rate than the native-born population. And in some cases, they have sort of pooled finance as an immigrant community. They will sort of develop the financing mechanisms. And you can take countries in Asia, in particular, Southeast Asia, and look at their performance in the U.S., and there are dramatically different rates of native entrepreneurship when they arrive in the U.S. Very small differences in culture. So it is not just the economic circumstances that determine this.

Representative Schweikert. But does that make an argument, if we desperately wanted to help a community that has suffered, that some of what is in there is better education, better this, but also an entrepreneurship of starting the plumbing or the food truck or whatever, you know, even if it is a level of microfinance?

Dr. Holtz-Eakin. It is Professor Zwick's job to grow new entrepreneurs. I would argue we should just have as few barriers to them as possible.

Representative Schweikert. Well, in many ways, that is one of the discussions we have a lot, particularly in Arizona, is can you make it not scary. A single stop to get a permit, to get a license, to get this, to get that. So—because in many ways, it is a knowledge barrier that keeps these things from actually happening.

So, Madam Vice Chair, thank you.

Vice Chair Maloney. Congressman Heck.

Representative Heck. Thank you.

Maybe next to Fed policy that revs my motor is housing policy. So I want to begin by asking if any of you have either studied the issue of the relationship between homeownership and wealth inequality or have a working knowledge of other people's work in this regard?

Dr. Holtz-Eakin. I have studied homeownership over a number of years, especially tax policy toward homeownership.

Representative Heck. So—good. Thank you.

Let me lay out my construct and then just have you react to it. Homeownership is falling, especially among millennials. It is fully 15 percent lower than the generation of 30 and 60 years ago, even when excluding those who are still living upstairs or downstairs.

And what we know about homeownership is that while consumer preferences are changing, it is still a commonly held aspiration of this country. We know that it is, on average, the number one net worth building tool for Americans, and we know that to defer homeownership is to squeeze down the value at the end of that journey.

My favorite expression, when I am not citing another favorite expression, is the two most powerful forces on the face of the Earth are the status quo and compound interest. And with long term—the longer term homeownership you have, the more compounded interest you have, as it were, which obviously affects people's retirement security. It affects what it is they are able to bequeath to their—to their offspring. Obviously, it also disproportionately affects those who are unable to capture that first rung on the ladder.

So like everything else, low-income people are disproportionately impacted by deferred homeownership or lack of access to homeownership.

So, I guess, there is my construct. There are a lot of reasons to explain what is happening. That is not our purpose here today. But I would appreciate some reflection on just this general construct.

Dr. Holtz-Eakin. I think it is a complicated area. It is a really good question. The first thing I would just politely disagree with a little bit is I was——

Representative Heck. Careful.

Dr. Holtz-Eakin. I am aware, sir.

You know, I was in the White House in 2001, 2002, and there was a heavy emphasis on getting minority homeownership up, pushing, pushing, pushing. The instruments by which we typically push are subsidies to the debt portion of the homeownership acquisition. That continued on a relatively bipartisan basis right into the Great Recession, and we wiped out the wealth of a lot of minority America.

So I am more skeptical than some about the automatic wealth-building aspects of homeownership. We have some history that sug-

gests people might want to be cautious about, especially people who are young who just looked at that. They are concerned about it. So that is sort of number one.

Number two, there are——

Representative Heck. Stop. That is an argument about how you go—what is the best way to go about solving the problem statement.

Dr. Holtz-Eakin. I also agree with that, yes.

Representative Heck. It is not an argument about any of the things I laid out in my construct, because I didn't offer a solution. In fact, if I would offer a solution, I would go back to the last discussion we had, which is the best way to increase homeownership overall is get people's incomes up so they can afford it. But there are a lot of——

Dr. Holtz-Eakin. That is what I was going to say next. So I agree with that.

Representative Heck. Okay. But is it a material factor in wealth inequality or is it becoming one?

Dr. Holtz-Eakin. It was a very material factor in the rise in wealth inequality in the Great Recession, because the bottom disappeared. They lost their wealth. There is no question about it.

It has consequences—knock-on consequences. So, for example, lots of entrepreneurs use the equity in their home as the way to finance things. So, you know, how—how big is that right now? I don't know, but it is a phenomenon.

In terms of things that can be done, probably most of the important levers are at the State and local level where land use restrictions, zoning and things like that, are making some things just too expensive, and the restrictions on the supply are a big concern. And that is something that could be dealt with by States and localities.

Representative Heck. And you say that as somebody who has actually studied the relationship between tax policy and homeownership.

I—our purpose here today is not to argue—well, maybe it is—the specific solutions to the problem statement I laid out. But I would push back very considerably on your notion that the Federal Government does not have a significant role to play in this, be it tax policy or how—you said the major——

Dr. Holtz-Eakin. To be clear, it has a major role. I just don't like the way it has executed that. I would rather see, for example——

Representative Heck. Okay. Come up with something better.

Dr. Holtz-Eakin [continuing]. Have a new—a new homeowner tax credit instead of, hey, get a big mortgage. That is not a good message.

Representative Heck. Something that enables more people.

All right. We are good. I yield back. Thank you, Madam Vice Chair.

Vice Chair Maloney. Thank you. This has been a very spirited conversation.

And I want to go back to how you were measuring wealth. I am a former teacher and a former social worker. And I worked in incredibly poor neighborhoods in New York. And I have worked with

families that had significant social transfers from the State, living on welfare, subsidized housing and public housing. We have 700,000 families in public housing, subsidized housing in New York. The WIC program, which is food for children. Fuel, they had—we have these programs where the fuel is subsidized, and many, many food programs. And even before ObamaCare, in New York City, the healthcare of the poor is taken care of. Anybody who is sick is taken care of in our public hospitals.

So that is a significant amount of support that is going to a family. Are you measuring that in your—in your numbers?

Dr. Zucman. Yes. Thank you very much, Madam Chairwoman.

Yes, we do, in our work, distributional national accounts, we do allocate all government spending, including monetary transfers, in-kind transfers, such as health spending, Medicare, Medicaid, and also spending on public goods like education, like police, like defense, everything. We take all forms of government spending that we distribute to the—that we allocate to the entire population. Just like we do for taxes, we do the same—the exact same thing, comprehensively for government transfers.

And when you do that, what you see is that U.S. Government does redistribute resources. It is overall, you know, redistributive, of course.

And what I want to stress, again, is that, you know, it is hard to allocate many forms of government spending. Who benefits from defense spending?

Vice Chair Maloney. Everyone.

Dr. Zucman. Some people believe that wealthy benefit more from defense spending. That is arguable. It is hard. It is not for us to say.

Vice Chair Maloney. 9/11 attacked everyone in the vicinity. It didn't benefit anyone.

Dr. Zucman. I totally agree that—and that is the way we do it. You know, the way we allocate it is we allocate it to everyone. But what I want to say is that these are difficult questions—or difficult choices to make, and these choices are better made by government statisticians——

Vice Chair Maloney. I need to read your book. Then we can have another hearing.

Dr. Zucman [continuing]. By government agencies than by academics. We hope that our little prototype is going to be taken over, is going to be done by government statisticians and improved. It can be improved in many ways.

Vice Chair Maloney. I would now like to yield to—call on Mr. Lee and——

Chairman Lee. I didn't want to end this hearing without giving you a chance to talk to us about the concept of tax competition and whether or not you think we are in a vulnerable position as a result of it. What worries you about tax competition?

Dr. Holtz-Eakin. Tax competition is very real. And it drove the structure of the corporate reforms in the Tax Cuts and Jobs Act, because those mimic what has happened across the OECD and the movement away from worldwide systems.

The reality is that it is impossible to identify where and when a dollar is earned around the globe. And to try to tax it in the U.S. at that moment is a virtually impossible job.

So we have moved toward, I think, a realistic positioning of ourselves in the competitive world for the moment. The rates in the middle of the developed country world, 21 percent. The base is more like one we would have. And it better positions our companies to compete internationally, and that is good for the workers. And that ultimately is the objective.

I don't think that will—that will stay still. Like when we did the 1986 reforms, we had the lowest corporate rate in the developed world, and we were way behind by the time 2017 rolled around. I expect the rest of the world to keep moving. We will have to just see where we are competitively.

Vice Chair Maloney. I thank everybody. It really has been incredibly interesting. Economic inequality is a major challenge facing this country. It is not good for the rich. It is not good for the poor. It is not good for the country overall. And we need to do a better job measuring inequality, tracking it, and most importantly, addressing it.

So I am really very grateful to all of you for your research and for what you shared with us today. You gave us a lot of good insights on a very critical issue. Thank you so much.

We are adjourned.

[Whereupon, at 4:25 p.m., the committee was adjourned.]

SUBMISSIONS FOR THE RECORD

PREPARED STATEMENT OF HON. CAROLYN B. MALONEY, VICE CHAIR, JOINT ECONOMIC COMMITTEE

Last month, the Census Bureau reported that income inequality in the United States, by one measure, had reached its highest level since they began tracking it more than 50 years ago.

For the typical worker, wages have been stagnant for four decades.

On the other hand, those at the top are doing great.

The top 1 percent of households in the United States now take home about 20 percent of the total income.

The wealthiest 1 percent own nearly 40 percent of total wealth.

Those at the very top—the top one-tenth of 1 percent—have seen their share of wealth double since 1990.

That narrow sliver of the population—the top tenth of 1 percent—now own more than the bottom 80 percent of Americans.

One of our witnesses today, Dr. Gabriel Zucman, has done important work tracking these trends going back a century.

His most recent work looks at the role played by our tax system.

It is widely believed that our tax system is progressive—that the rich pay a larger percentage of their income in taxes.

However, Dr. Zucman's recent work reveals that in 2018 the wealthiest 400 Americans paid a lower tax rate than any other income group.

Sadly, this is not an accident—it is deliberate public policy.

In 2017, the Republican Congress and President Trump slashed taxes on the rich . . . Borrowing $1.9 trillion to do it.

Inequality in America was already sky high.

The Republican tax cuts made it far worse.

Skyrocketing inequality undermines our middle-class society, in which anyone who works hard has a chance to succeed.

It means that for millions of Americans, the American dream may be a myth.

Our second witness, economist Heather Boushey, argues that high levels of inequality undermine economic growth . . .

. . . because strong growth depends in part on a strong middle class.

Consumer spending accounts for 70 percent of the U.S. economy.

But as a larger and larger share of income and wealth go to those at the top, there is less left over for everyone else.

As a result, most Americans have less money in their pockets, less to spend on what businesses sell.

Therefore, when the bottom 50 percent—those who consume a much larger share of income compared to those at the top—see no income growth for 40 years, that's a major problem.

Extreme inequality also undermines our communities.

The Chairman and I agree that healthy communities with strong "social capital" are critical to a high quality of life.

But extreme inequality undermines that.

When wealth is highly concentrated and in a society where education is critical to success, families have extremely high incentives to live in towns with other wealthy families, so they can put their children in the best school systems.

So, Americans increasingly become segregated by wealth and their quality of life becomes dependent on their zip code.

Extreme inequality also undermines our democratic institutions.

It enables the powerful to rig the rules—to make themselves even more powerful.

We see the erosion of antitrust laws, the breakdown of protections for small investors, the rejection of overtime protections for workers.

We pay a very high price for extreme inequality.

How bad is inequality in the United States?

Economists disagree about the severity of the problem.

But while they disagree about how much inequality has worsened in recent decades, there is little disagreement . . .

. . . things are getting worse.

One way that we measure the strength of our economy is by quarterly measures of gross domestic product. It is a good, aggregate number—it tells us how fast the whole economic "pie" is growing.

But the "slices" of the pie that go to the rich, middle class and poor are extremely unequal.

Unfortunately, we currently don't measure how economic growth is shared.

For this reason, I have introduced the Measuring Real Income Growth Act. And I'm pleased that Senator Heinrich is again introducing a companion bill in the Senate.

The bill would require the Bureau of Economic Analysis to report GDP growth by income decile and the top 1 percent alongside the top line number.

It will help us understand not just how fast the economy is growing but who is benefiting from that growth.

Academic economists, such as Dr. Zucman, have produced estimates similar to those we are asking for from BEA. But we need the government to do this is in a regular and timely manner.

Inequality is one of the most pressing issues of our day. It is tearing our society apart and undermining much of what we stand for.

In order to understand inequality, we must have better ways to measure it—ways that are accepted by those on both sides of the aisle.

With that information in hand, we can begin to restore our country to the land of opportunity.

PREPARED STATEMENT OF HON. MIKE LEE, CHAIRMAN, JOINT ECONOMIC COMMITTEE

Thank you, Vice Chair Maloney, for calling this hearing.

Inequality has been a hinge of American politics, and indeed in all democracies, for as long as there have been democracies. And with good reason. The concentration of economic power can be as dangerous as the concentration of political power.

Unfortunately, the debate about inequality—like many debates these days—can be easily swept up into a partisan exercise of talking past each other.

We could spend our entire time today haggling over whether "inequality" is best understood as unequal opportunity, or unequal outcomes.

Or indeed, if the latter, we could argue for hours about whether and how much it is even a problem, given that almost every facet of modern life—from air conditioning to airplanes—can be counted among the blessings of the intentionally unequal benefits of free enterprise.

Inequality is such a large concept that it is impossible to tackle in a single hearing. That is why I commend the Vice Chair for organizing today's hearing on "measuring" inequality. And for inviting an excellent panel of witnesses who can help us navigate the issue.

The subject of data measurement techniques is at once narrow enough to keep our discussion focused, and—hopefully—technical enough that even Congress can set aside political temptations and simply drill down on some important questions.

For instance:

- How should we define "income" for purposes of measuring inequality between rich, poor, and middle class?
- How should we count government transfers—like the Earned Income Tax Credit—for lower-income workers?
- As the scholarship on inequality measurement has progressed, which technical details have survived peer-review scrutiny, and which remain to be worked out before we can reach academic consensus?

These are not the questions that will lead cable news political talk shows. That's why they are exactly the kind the Joint Economic Committee should be taking up. Even the best policies involve tradeoffs.

Our economy is growing, and today employs more people than ever before. But it has been a long slog out of the Great Recession, much longer for some than others.

If the data really can afford us a clearer view of how the costs and benefits of economic growth are being experienced up and down the income scale, that is analysis we should all insist on getting . . . and insist on getting right.

Thank you again Madam Vice Chair, and to the witnesses for being here today. I look forward to your testimony and our discussion.

Gabriel Zucman
Associate Professor of Economics, UC Berkeley
Testimony before the Joint Economic Committee,
Hearing on "Measuring Economic Inequality in the United States"
October 16, 2019

Thank you, Chairman Lee and Vice Chair Maloney, for inviting me to speak today. It's an honor to be here.

My name is Gabriel Zucman and I am an Associate Professor of Economics at the University of California, Berkeley.

My work seeks to advance the measurement of inequality.

With my colleagues Facundo Alvaredo, Lucas Chancel, Thomas Piketty, and Emmanuel Saez, I am one of the co-directors of the World Inequality Database, an extensive database on the long-run evolution of income and wealth inequality.

One of our goals is to contribute to the creation of comprehensive, standardized, and internationally comparable inequality statistics that capture all forms of income contributing to GDP.

Concretely, when GDP grows 3% in a given year, we want to be able to know how income is growing for each social group, in a way that's consistent with the official rate of GDP growth.

We call these statistics Distributional National Accounts.

To understand the ultimate goal and the value of this project, the following analogy is helpful.

According to the official National Accounts of the United States, real GDP grew 2.9% in 2018.

This number involves some uncertainty.

The measurement of GDP, after all, relies on many assumptions.

There are projections based on preliminary reports that can only be confirmed months or years down the road.

There are imputations, for example of the rents that homeowners pay to themselves.

There are assumptions about how much income is under-reported by taxpayers to the IRS.

Despite these uncertainties, most people trust official estimates of GDP.

These estimates are based on methods that have been improved over several decades.

They are based on internationally-agreed and constantly refined concepts and methods.

They are constructed by hundreds of highly qualified government statisticians.

My hope is that one day, we'll reach the point where statistics of inequality are constructed and regarded like GDP statistics.

With my colleagues, we try to contribute to this evolution.

We have created prototype Distributional National Accounts, that is, statistics that distribute the national account aggregates — such as national income, household wealth, tax revenue, and government spending — across the population.

These prototype Distributional National Accounts are based on a conceptual framework that we developed over several years.

They are based on harmonized guidelines, concepts, and estimation techniques that we have applied and are applying to many countries.

They are constantly updated when new data become available and refined estimation techniques are designed.

All the data series are made available in a user-friendly manner on the World Inequality Database WID.world.

All programs, computer code, and technical appendices are publicly available; all our results can be replicated using publicly available data.

Users are free to change our methodology and we constantly refine our methods as we receive new feedback and new knowledge emerges.
These prototype Distributional National Accounts show a large rise in income inequality.

In 1980, the top 1% earned 10% of total pre-tax national income.

Today it earns close to 20% of total pre-tax national income, according to these data.

In 1980, the average pre-tax income of adults in the bottom 50% of the income distribution was $18,000, adjusted for inflation.

Today, it is almost the same number—$18,500.

Although we put considerable effort in building this prototype, it remains a prototype. The methods underpinning our Distributional National Accounts are still in their infancy.

Much more work needs to be done.

Our hope is that these prototype Distributional National Accounts will eventually be taken over by government, improved, and published as part of the official toolkit of government statistics.

This is what happened for the national accounts in the first place.

The national accounts were developed in the first half and in the middle of the twentieth century by scholars in the United States (such as Simon Kuznets), the United Kingdom (such as James Meade and Richard Stone), France (such as Jacques de Bernonville), and many other countries.

Then governments agencies took them over, refined them, and still constantly improve them today.

We hope the same process will happen for Distributional National Accounts.

It may take years, even decades.

In the meantime, it is perfectly normal to have methodological discussions, debates, and disagreements.

This does not mean that we cannot know what is happening to inequality today.

A wide array of evidence shows high and rising inequality.

This includes survey data such as the Current Population Survey (for income) and the Survey of Consumer Finances (for wealth), company data on CEO pay (from Compustat), tabulations of tax returns by the IRS, and named lists of wealthy individuals (e.g., by Forbes magazine).

All these data show inequality rising markedly since the 1980s.

Each of these sources have limitations. All economic statistics are constructions, whose limitations must be understood.
But by working together, we can arrive at the best possible estimates and reach the stage where the publication of inequality statistics will be just like the publication of GDP.

I look forward to your questions. Thank you.

Heather Boushey
Washington Center for Equitable Growth
Testimony before the Joint Economic Committee,
Hearing on "Measuring Economic Inequality in the United States"
October 16, 2019

Thank you, Chairman Lee and Vice Chair Maloney, for inviting me to speak today. It's an honor to be here.

My name is Heather Boushey and I am President and CEO of the Washington Center for Equitable Growth. We seek to advance evidence-backed ideas and policies that promote strong, stable, and broad-based economic growth.

By any measure, income inequality in the United States has increased significantly over the past 40 years. This increase in inequality has constricted the growth of our economy and had an insidious effect on our political institutions. The topic of today's hearing speaks to a small but significant step we can take toward more equitable growth.

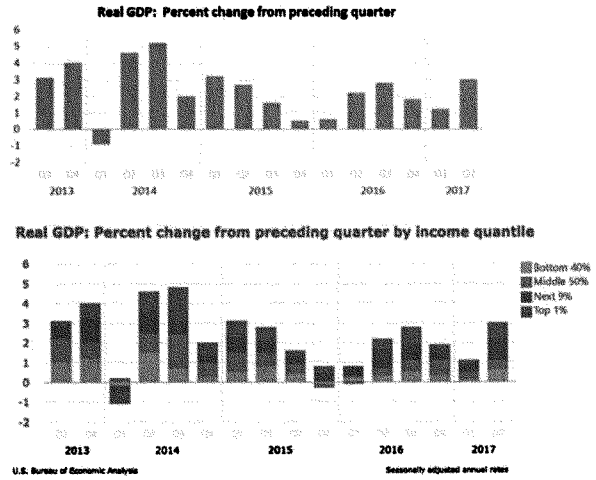
One of the most important things we can do to fight inequality in the United States right now is to start keeping track of it. Government statistics—Gross Domestic Product growth, inflation, jobs added, wage increases—drive economic policymaking in Congress, the Federal Reserve, and executive agencies. Better measurements of inequality are overdue additions to this list.

To properly contextualize economic growth, policymakers should ask the U.S. Bureau of Economic Analysis, or BEA, to add measures of growth within income quantiles to the National Income and Product Accounts. This is what we at Equitable Growth call "GDP 2.0"—an extension to our existing National Income accounts that updates them to better reflect the realities of our 21st century economy.

I want to thank Vice Chair Maloney and Sen. Heinrich, as well as Senator Schumer, for introducing a bill in 2018 that would do just that and for continuing their efforts in this Congress. The Measuring Real Income Growth Act of 2018 would tell us what growth looks like for low-, middle-, and high-income Americans.

This bill would task the Bureau of Economic Analysis with adding distributional measures of growth to its quarterly National Income and Product Account releases so we could see not just that the economy grew by 2 percent or 3 percent, but also how much it grew for Americans of different incomes. (See Figure 1.)

Figure 1: *Existing BEA GDP report and sample rendition of GDP 2.0*



Publishing this information would have four important effects.

- First, it will connect the idea of aggregate economic data to the real-life circumstances of families in the economy. When members of the working class see politicians touting strong growth but look around and see no evidence of it in their communities, they are right to feel that their economic needs are not being paid attention to.
- Second, by highlighting differences in how the economy is working for different groups of workers, it will focus our attention on the economic well-being of most families.
- Third, distributional measures of growth will guide policymakers in designing policies that both raise output and do it in a way in which everyone gains.
- Finally, these metrics will allow citizens to hold their elected representatives accountable to delivering an economy that works for all.

It is critical to start capturing this data so we can ensure strong, stable, and broad-based economic growth. There is a large—and growing—body of empirical research that shows we cannot create strong or broadly shared economic gains through a policy agenda that presumes growth follows from allowing those at the top to reap the bulk of the gains. The policy agenda we have pursued for decades, driven largely by the desire to maximize GDP growth at any cost, is not delivering for American families and is creating inequities in the economy that actually constrict growth.

In the sections that follow, I will explain why GDP growth became such an important indicator of economic success, how it became a poor proxy for the success of the average American family, and why we need a GDP 2.0 to better capture the full range of economic progress that is experienced by Americans up and down the income ladder. In the final section, I explain how inequality is constricting growth in the economy.

One number for an entire economy

The National Income and Product Accounts were pioneered in the 1930s by the economist Simon Kuznets. At the time, it was a radical new development in economic measurement. It let policymakers see for the first time just how much had been lost in the Great Depression and later helped them understand how the U.S. economy could be harnessed to go to war. For this groundbreaking work, Kuznets won the Nobel Memorial Prize in economics.

The member nations of the Organisation for Economic Co-operation and Development, or OECD, at the time adopted Kuznets' principals as a general framework and National Accounts became a global phenomenon. GDP, the most prominent measure of aggregate output in the National Accounts, has attained a unique level of authority to the exclusion of other markers of a nation's development. Because it is standardized across nations and available as a relatively long time series, economists and policymakers alike have latched onto GDP as a way to adjudicate which national economies are best and to conduct inquiries into what makes some economies grow faster than others.

But this was never the intent of Kuznets himself. In a section of his 1934 report to Congress titled "Uses and Abuses of National Income Measurements," Kuznets noted that, "The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income."[1] This is true for many reasons, but Kuznets was especially concerned with the distribution of resources in society. He understood that high aggregate output was not necessarily indicative of well-being if the underlying distribution of income was highly unequal. To address this concern, he helped compile some of the very first breakdowns of inequality by income quintile. For a short time in the 1950s, BEA regularly produced these statistics, but they were abandoned due to a lack of funding.[2]

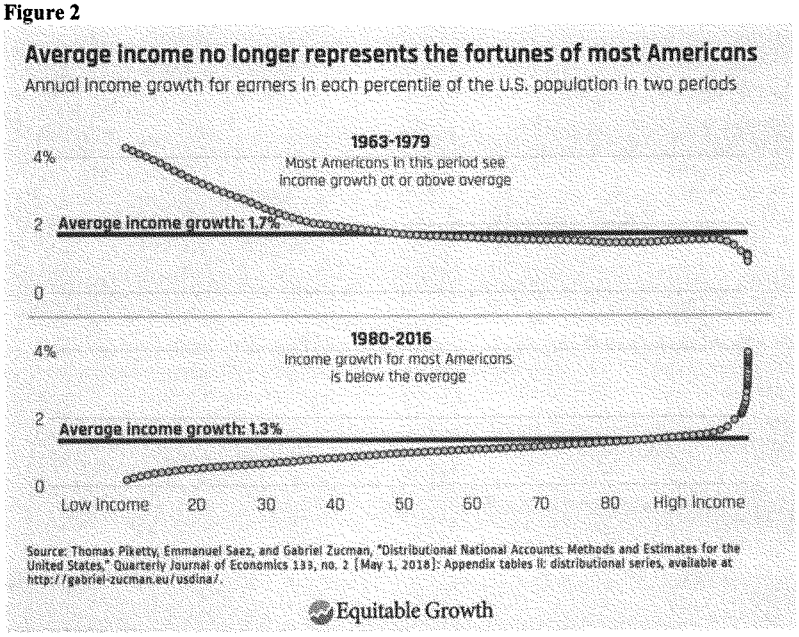
Kuznets' warnings have been repeated many times in the 85 years since he authored his report to Congress. Robert Kennedy famously echoed Kuznets' warning when he said that GDP "measures everything … except that which makes life worthwhile."[3]

GDP growth has been treated for decades by pundits and policymakers alike as synonymous with prosperity, but this is no longer a useful indicator of well-being. President John F. Kennedy famously alluded to it when he said that "a rising tide lifts all boats." In the decades since, economists and commentators have used the metaphor of "growing the pie" to indicate that we should first and foremost be concerned with growing the economy rather than concerning ourselves with who gets a slice. But the pie is no longer growing for many Americans because much of the growth of the past four decades has been captured largely by Americans at the top of the income distribution.

Rising inequality means less informative aggregate statistics

Over the period from 1980 to 2016, average growth was about 1.4 percent annually. Yet the bottom 85 percent of all adults saw income growth lower than this. Only those in the top 15 percent experienced better-than-average growth.[4] (See Figure 2.)

Figure 2



This is a new phenomenon. Prior to this period, there was little need to disaggregate national growth because the headline GDP growth statistic was broadly representative of the economy as experienced by most Americans. Average growth was around 1.7 percent between 1963 and 1979—higher than in the years since. And that growth was broadly shared, as the scatter plots of pretax and post-tax income growth for each percentile of income show in Figure 2. Most Americans saw income growth at or above that average.

Today, GDP growth is decoupled from the fortunes of most Americans. What was once a useful indicator of how most families were faring is now unmoored from the experience of most families. Today's economy is growing slower than in the past, and much of this growth benefits only those at the very top of the economic ladder. Incomes for the working class and the middle class have grown slowly for decades while incomes at the very top have exploded.

Between 1980 and 2016, the bottom half of Americans by income saw average annual income growth of just 0.6 percent. The richest 10 percent of Americans, by contrast, enjoyed annual income growth of 2 percent, resulting in this group doubling their income over the 35-year period. But even they were left behind by the top 1 percent, who saw their income increase by 162 percent over the same period.[5]

The result is that the pretax distribution of income has returned to the Gilded Age levels of the 1920s. The story is not quite so dramatic after government taxes and transfers, but by either measure, the share of total national income held by the top 1 percent has nearly doubled since hitting lows in the 1970s. (See Figure 3.)

Figure 3

We see these same divergent trends across multiple measures of economic well-being: wages, income, and wealth. The implication for how we evaluate the economy is that mean economic progress is pulling away from median economic progress. Almost all of our national economic statistics are becoming less representative of the experience of most Americans. Reforming our national statistical infrastructure to account for this reality is long overdue.

GDP 2.0: Measuring what matters

GDP 2.0 refers to adding subpopulation estimates of income growth to our existing National Income and Product Accounts reports. Currently, the Bureau of Economic Analysis releases a

new estimate of quarterly or annual GDP growth every month. Distributional national accounts would add to some of these releases an estimate that disaggregates the topline number and tells us what growth was experienced by low-, middle-, and high-income Americans.

Academics have already constructed such a measure. The Distributional National Accounts (or DINA) dataset constructed by economists Thomas Piketty, Emmanuel Saez, and Gabriel Zucman disaggregates National Income growth from 1962 to 2016.[6] This dataset gives us a complete picture of how inequality has changed in the United States over time and how recent growth in national output is being shared by Americans. In 2014, for example, total National Income growth was 2.1 percent. According to the DINA dataset, income growth for the lowest-earning 50 percent of all Americans was just 0.4 percent, while growth for the richest 1 percent of Americans was 5.3 percent.

The Bureau of Economic Analysis has begun studying how it could create its own similar dataset and has published preliminary findings for a small number of years in its *Survey of Current Business*.[7]

Members of Congress have also realized the importance of constructing these new indicators. In 2018, Sens. Charles Schumer (D-NY) and Martin Heinrich (D-NM) and Rep. Carolyn Maloney (D-NY) introduced the Measuring Real Income Growth Act of 2018 in both chambers. The Senate bill garnered 24 co-sponsors.

This initial legislative action has been followed by a flurry of further congressional interest. In March 2019, the conference report accompanying the Consolidated Appropriations Act of 2019 included a clause instructing Bureau of Economic Analysis to report income growth within deciles of income starting in 2020.[8] In their appropriations bill for the Department of Commerce for FY2020, House appropriators instructed the agency to report on its progress toward the FY2019 appropriations language.[9] Most recently, Senate appropriators allocated $1 million to the effort.[10]

It is expected that Bureau of Economic Analysis will publish a prototype set of distributional growth figures in 2020 in accordance with these instructions from Congress.

GDP 2.0 will inform policy

Distributional national accounts will be an important tool for crafting policy in today's unequal economy. To give one powerful example, distributional national accounts might have allowed policymakers to spot and correct the significant decline in absolute intergenerational income mobility in the United States that occurred over the past 60 years.

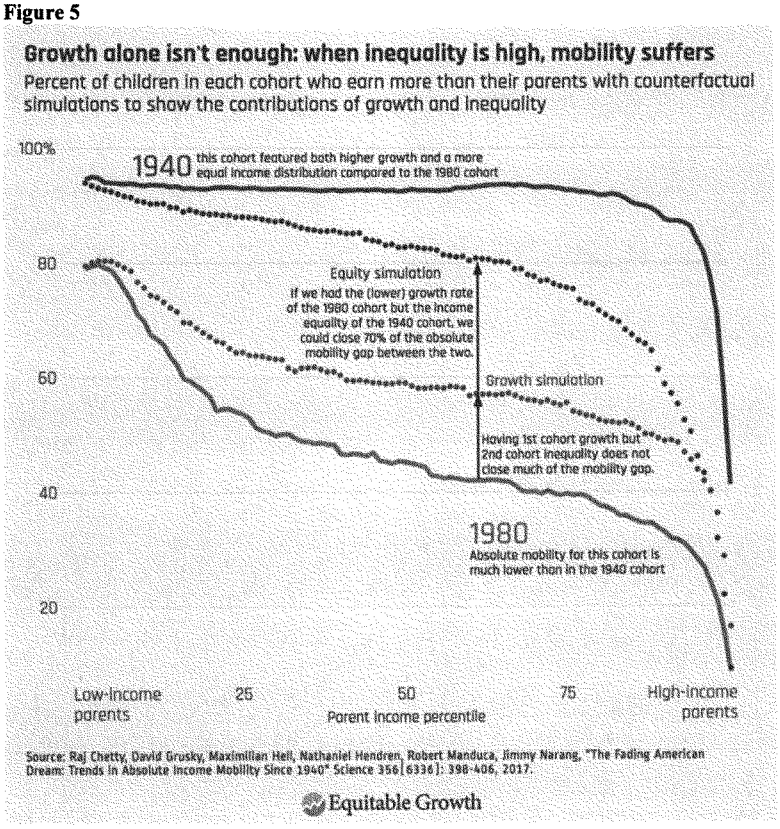
It is intuitively unsurprising that societies with higher inequality are also societies with low economic mobility. Economist Miles Corak created what former Chair of the Council of Economic Advisers Alan Krueger called "The Great Gatsby Curve," which plots the relationship between inequality and intergenerational mobility across countries. Countries with higher inequality tend to have lower economic mobility. Figure 4 shows one version of this curve.

Figure 4

While critics often suggest that the relationship is not causal, more recent research shows that increasing inequality in the United States has significantly reduced absolute intergenerational mobility. Economist Raj Chetty has shown that children born in 1940—just before the baby boom, when inequality was low and growth was high—had a 90 percent chance of earning more than their parents. In contrast, Generation Xers born in 1980, when income inequality was high and growth was low, have just a 50 percent chance of surpassing their parents' income.[11]

More importantly, the evidence shows that even if children born in 1980 had experienced the same higher growth experienced by children born in 1940, this would have closed only about one-third of the mobility gap. But if children born in 1980 had instead faced the same levels of inequality as children in 1940 (even with the lower growth), this would have closed two-thirds of the mobility gap. Figure 5 illustrates rates of absolute mobility by parent income percentile and shows these counterfactuals.

Figure 5



The implication is clear: Growth alone is not enough to produce strong absolute mobility. Distributional national accounts would allow us to track how growth is distributed annually and manage the economy accordingly to increase economic mobility. Notably, to diagnose this problem, it is not enough to know that median household income is stagnant. Understanding how mobility might be changing requires a complete picture of how growth is accruing to families all along the income curve, including at the very top.

GDP 2.0 will help families understand the economy

In addition to helping policymakers craft responses to changes in our economy, GDP 2.0 will also help families across the country understand how economic growth is related to their own personal circumstances. The separation of average growth from the experience of most Americans, as demonstrated above, leaves many feeling alienated when media trumpets high

growth that does not reflect their own situation or the situation of those in their communities. GDP 2.0 will help people understand how the economy is working for them.

Equally importantly, when the economy is not working for families up and down the income curve, that information will be widely known and voters will be empowered to hold policymakers accountable if the economy is not performing for all Americans. This link is important, because inequality isn't simply bad for some families at the bottom of the income distribution. Inequality is bad for the economy itself.

Economic inequality is bad for the economy

The most critical reason we need to measure who is prospering from growth is because the levels of inequality we see now are harming our economy. Inequality constricts growth by:

- **Obstructing the supply of people and ideas** into our economy and limiting opportunity for those not already at the top, which slows productivity growth over time
- **Subverting the institutions that manage the market**, making our political system ineffective and our labor markets dysfunctional
- **Distorting demand** through its effects on consumption and investment, which both drags down and destabilizes short- and long-term growth in economic output

Inequality obstructs the supply of talent, ideas, and capital

The economic circumstances into which children are born affect children's development in everything from their health to their ability to focus at school to their educational opportunities, and these, in turn, affect their economic outcomes as adults. Research by economists shows the links between factors such as children's varying birth weights and their different levels of school performance, job-holding, and earnings as adults, relative to others with similar skillsets.

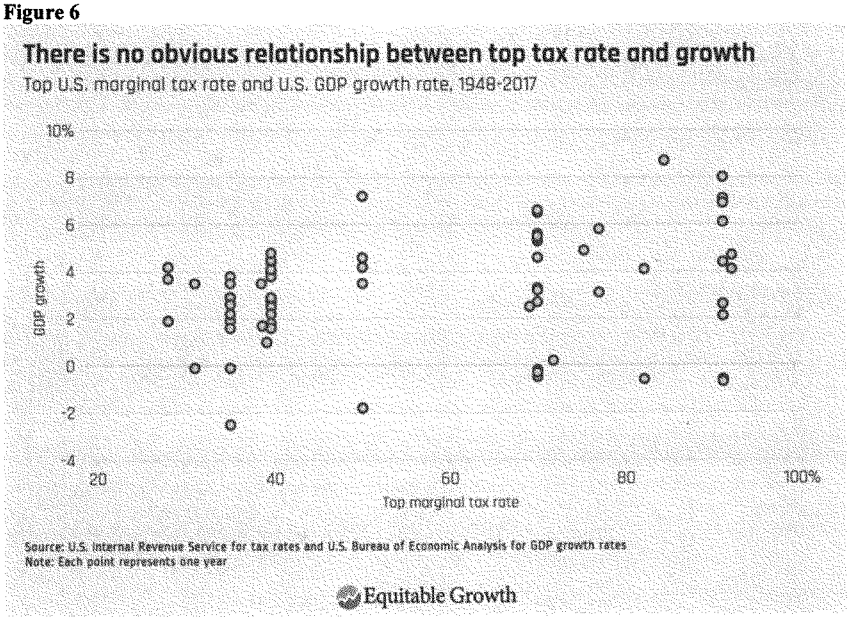
Even when children have access to skills, inequality obstructs their contributing to the economy to the best of their abilities, and these obstructions hinder productivity and growth. Research led by Harvard's Chetty measured what is more important to earning a patent later in life: scoring high on childhood aptitude tests or parental income. Disturbingly, the richer the family, the more likely the child will be to earn a patent—far outweighing demonstrated intelligence. If a child who shows aptitude early on cannot climb the income and wealth ladder, then there's something broken in the way our economy works. Inequality has blocked the process and, as result, drags down national productivity by making our workforce less capable than it could be and our economy less innovative.

Inequality subverts the institutions that manage the market

Growing inequality is subverting the public institutions and the policymaking processes we need to support our economy. It discourages a focus on the public interest and promotes the efforts of firms to accrue larger profits than truly competitive markets would allow.

Today, firms are able to manipulate the functioning of the marketplace because economic inequality gives their owners the financial wherewithal to wield political influence. By exerting pressure on political processes, they can minimize the taxes on firms, owners of capital, and top-salaried workers. And they can rewrite laws and regulations in their favor. Research shows that lower taxes on those at the top of the income ladder do not lead to the kinds of beneficial outcomes some economists and policymakers suggest. The evidence is that when the rich pay less in taxes, it encourages them to act in unproductive ways. (See Figure 6.)

Figure 6



When a firm has too much power in its product or services market, it has monopoly power, which means it can raise prices with impunity and stymie competition. Indeed, our economy is increasingly dominated by a few firms in many industries. In healthcare markets, the biggest healthcare companies are increasing their stronghold by merging and then charging higher prices, which, in turn, leads to higher profits for managers and shareholders alongside less affordable—and sometimes lower quality—healthcare for everyone else. It also means lower wages for those working increasingly in what economists call "monopsony labor markets," where there's only one or a handful of employers in a given market, giving these firms outsized wage-setting power. What's happening in healthcare is emblematic of changes across our economy.

By subverting our economy in various ways, inequality undermines confidence that institutions of governance can deliver for the majority. But for the economy to function, the public sector

needs to function, and function well. In the 19th and 20th centuries, the U.S. government implemented policies that launched many families into prosperity with a solid financial foundation, including the Homestead Act, the estate tax, universal primary and secondary schools and land grant colleges across the nation, and the GI Bill. These policies weren't perfect and were discriminatory in multiple ways, but they showed that the federal government could embark on big agendas to reduce inequality. Today, however, inequality in wealth and power is thwarting the government from taking on collective endeavors that provide the foundation for broad-based economic growth while promoting the interests of monopolists and oligopolists over others.

Inequality distorts both consumption and investment

Inequality distorts everyday decision-making by consumers and businesses. These outcomes are evident at the macroeconomic level. People's spending drives business investment, as consumers account for nearly 70 cents of every dollar spent in the United States. But for the past several decades, U.S. families in the bottom half of the income distribution have seen no income gains, and the gains for those families not among the top 10 percent of income earners have been meager. This means that if firms were to invest more, they may not be able to sell additional goods and services because consumers might not be in positions to buy them.

Many businesses, eyeing demand, have understandably not invested much over this period. U.S. firms are sitting on record-high piles of cash, which have been steadily accumulating since the 1980s.[12] Others have found customers willing to purchase their wares, but only because of the financially unstable expansion of household debt—as seen especially in the run-up to the Great Recession in the middle of the past decade, and as is occurring again today.[13] Growing economic inequality thus destabilizes spending because everyday consumers either don't have enough money to spend or are borrowing beyond their means to buy what they need.

Inequality is even driving changes in what firms are producing, with a number of economic implications for innovation and even inflation. Xavier Jaravel at the London School of Economics finds that businesses are investing in new products targeted at high-end consumers while developing fewer products for those in the lower end of the market. For those at the low end, there's less competition for their business, which means lower productivity, lower innovation, and higher prices and inflation. This shows up in the data: Jaravel found that between 2004 and 2013, families with incomes greater than $100,000 per year saw yearly prices rise by 0.65 percent less than for families earning below $30,000 in the respective bundles of goods that those families bought.

With consumption dragged down by flagging middle-class incomes, too much money in the hands of those at the top, and investors sitting on the sidelines, conditions are ripe for an increase in the supply of credit. The deregulation of the financial sector over the past 40 years has made it easier to lend to U.S. households—in no small part due to the influence of the financial services industry. Empirical research and the U.S. experience over the past several decades show the consequences of these distortions and how credit-driven economic growth both increases economic instability and leads to lost economic opportunity.

Conclusion: Measure who prospers when the economy grows

Simon Kuznets knew that tracking GDP growth was not the endpoint for his National Income and Product Accounts. Much more needed to be done to ensure that the National Accounts were not just accounting tables but also could, in fact, say something meaningful about the well-being of American families. But despite some early progress toward adding a distributional component to the accounts in the 1950s, little changed over the next seven decades. It is time to fulfill this promise. Implementing GDP 2.0 will change our economic narrative and focus us on achieving broad-based growth. A new commitment to fighting inequality will, in turn, yield dividends for our economy.

Endnotes

[1] Simon Kuznets, "National Income, 1929-32" (Washington: U.S. Government Printing Office, 1934).
[2] Dennis J. Fixler and others, "A Consistent Data Series to Evaluate Growth and Inequality in the National Accounts," *Review of Income in Wealth* (63) (2017).
[3] Robert F. Kennedy, "Remarks at the University of Kansas, March 18, 1968," available at https://www.jfklibrary.org/Research/Research-Aids/Ready-Reference/RFK-Speeches/Remarks-of-Robert-F-Kennedy-at-the-University-of-Kansas-March-18-1968.aspx.
[4] Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," *Quarterly Journal of Economics* 133 (2) (2018).
[5] Ibid.
[6] Ibid.
[7] Dennis J. Fixler and others, "Toward National and Regional Distributions of Personal Income," *Survey of Current Business* (97) (2017).
[8] *Consolidated Appropriations Act*, H.J. Res.31, 116 Cong. (2019), available at https://www.congress.gov/bill/116th-congress/house-joint-resolution/31.
[9] *Making Further Continuing Appropriations For The Department Of Homeland Security For Fiscal Year 2019, and For Other Purposes*, H. Rept. 116-9, 116 Cong. 1 sess (2019), available at https://www.congress.gov/congressional-report/116th-congress/house-report/9/1?overview=closed.
[10] *Commerce, Justice, Science, Agriculture, Rural Development, Food and Drug Administration, Interior, Environment, Military Construction, Veterans Affairs, Transportation, and Housing and Urban Development Appropriations Act, 2020*, H.R.3055, 116 Cong. (2019), available at https://www.congress.gov/bill/116th-congress/house-bill/3055.
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[12] Moody's Investors Service, Inc., "US Corporate Cash Pile Grows to $1.84 Trillion, Led by Tech Sector," Moodys.com, July 19, 2017, available at https://www.moodys.com/research/Moodys-US-corporate-cash-pile-grows-to-184-trillion-led--PR_369922.
[13] Federal Reserve Bank of New York, "Quarterly Report on Household Debt and Credit 2019:Q2" (New York: Federal Reserve Bank of New York, 2018), available at https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC_2019Q2.pdf.

Hearing to Discuss Controversy Over Measuring Economic Inequality

Testimony to the Joint Economic Committee, United States Congress

Douglas Holtz-Eakin, President
American Action Forum*

October 16, 2019

* The views expressed here are my own and do not represent the position of the American Action Forum. I am indebted to my colleague Gordon Gray for his invaluable assistance.

Introduction

Chairman Lee, Vice Chair Maloney, and members of the Committee, I am honored to have the opportunity to testify on the state of the science of measuring income inequality and its implications for public policy. Inequality has been famously described as the "defining issue of our time" and has been deployed as a rationale for significant federal policy changes, particularly with respect to taxation. But the casual adoption of policies on the basis of inequality belies the serious disagreement in the research community over the state of understanding of the level and changes in inequality.

In my testimony, I wish to make three simple points:

- There is no consensus in the research literature on the measurement of inequality, the level of inequality, or recent changes in inequality.
- Policies predicated on specific inequality goals therefore suffer from critical flaws: Advocates cannot accurately describe the starting point, the desired end point, or the benefits and costs of getting from here to there.
- Given these challenges to policies designed to reduce inequality, lawmakers could instead focus on the component of inequality-reduction that has uniform support: reducing poverty and raising the standard of living for working Americans.

Let me discuss these in turn.

Approaches to Measuring Income Inequality

In 2003, Drs. Thomas Piketty and Emmanuel Saez published "Income Inequality in the United States," which found that income going to the top 1 percent nearly doubled over the period 1979-1998.[1] The authors have since updated these findings, which present still higher shares of income accruing to the "one percent." In the words of *Vox,* "It's hard to overstate the influence of this line of research."[2]

President Obama observed that inequality was the "defining issue of our time" in a State of the Union address. Reducing inequality for its own sake is now regularly cited by advocates as a worthwhile policy, and sweeping generalizations about inequality pervade the public-policy debate. What has gotten lost is a critical evaluation of the science of measuring income and, by extension, income inequality. A serious examination of that research reveals that despite widespread and popular embrace of one strand of this literature – the recent *New York Times* piece on

[1] Thomas Piketty, Emmanuel Saez, Income Inequality in the United States, 1913–1998, The Quarterly Journal of Economics, Volume 118, Issue 1, February 2003, Pages 1–41,
[2] https://www.vox.com/policy-and-politics/2018/1/10/16850050/inequality-tax-return-data-saez-piketty

historical tax rates, for example – there is no expert consensus view on the level of, or recent changes in, income inequality in the United States.[3] That observation alone should instill some humility in policymakers in pursuing policies designed to address inequality for its own ends. Moreover, it is also the case that the estimates of inequality presented by the authors of the original 2003 study and its subsequent iterations are outliers in the literature.

Before examining the specifics on any one study, it is important to think about the definition of income. First, popular discussions on the topic of inequality frequently conflate wealth (the stock of resources owned) and income (the flow of resources over a specific period).

This testimony largely focuses on measures of income inequality. Even then, however, there are a wide range of variations in what is measured as income. Studies also differ with respect to *whose* income is measured. Should the basic unit of analysis be a household? A taxpayer? Something else? Finally, inflation changes the real value of income over time, and how it is accounted for affects measurements of income, yet there is divergence here as well over how to control for inflation. On top of these problems is the reality that the data are imperfect, and studies use different sources for determining individual and household income.

At the most basic level, income can be understood as cash that individuals earn or otherwise receive over the course of the year.[4] This income can include tips, wages, interest, and any number of other form of receipts. But even this simple definition of income becomes complicated. The Congressional Budget Office (CBO), for example, includes in labor income: "Cash wages and salaries, including those allocated by employees to 401(k) plans; employer-paid health insurance premiums (as measured by the Current Population Survey); the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes; and the share of corporate income taxes borne by workers."[5] This definition of just once source of income involves several assumptions and assignments – and is inextricably linked to federal policy. Specifically, this definition contemplates payroll taxation, corporate taxation, and federal entitlement programs.

This basic measure is already quite complex, but hardly tells the whole story of the economic resources that can accrue to individuals and households over the course of the year. Here, researchers often diverge. Some researchers define income as pre-tax. Other researchers use post-tax measures. Some researchers include federal cash transfer programs such as Social Security and Unemployment Insurance. Still others include non-cash transfer programs such as Supplemental Nutrition Assistance

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[3] See: https://www.nytimes.com/interactive/2019/10/06/opinion/income-tax-rate-wealthy.html

[4] For definitions of various measures of income, the forgoing discussion draws upon https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53597-distribution-household-income-2014.pdf

[5] Ibid.

Program benefits (SNAP) and major federal health programs. Each researcher has a rationale for the inclusion or exclusion of these additional income sources. I note them here to highlight that there are very real technical differences among income measures that should caution observers about the reliance on any one measure. As the Urban Institute's Stephen Rose observes, "Simply, there is not methodological agreement between the studies' income measures."[6]

With each additional source of income, researchers must rely on additional sources of data, potentially with different basic units of analysis. Some studies use tax units as the unit of analysis, while others use households. In addition, some studies adjust for household size. These adjustments can have a significant effect on a household's relative position on the income scale.[7]

To the extent these studies report on income trends over time, they must control for inflation. Here, researchers again diverge. Some researchers use standard consumer price index (CPI-U-RS), while others chose to use the personal consumption expenditure (PCE) deflator. The key distinction is that, essentially, the use of the PCE, all else equal, will tend to show higher income growth across over time, as opposed to inflation, than the CPI-U-RS.

Summary of Findings and Methodological Choices in Income-Inequality Studies[8]

Study	Change in Median Income (%, 1979-2014)	Price Deflator	Income Concept	Unit of Analysis
Piketty and Saez (2003)	-8	CPI-U-RS	Gross income as reported on tax forms without government transfers	165 million tax filers
CPS	7	CPI-U-RS	Pretax, postcash transfers and no employer benefits	123 million households
Rose (2016)	30	PCE	Pretax, postcash transfers and no employer benefits	186 million independent adults
Piketty, Saez, Zucman (2018)	33	National income deflator	All national income including homeownership and government services	234 million adults age 20 and older
Burkhauser, Larrimore, and Simon (2011)	37	CPI-U-RS	Posttax, posttransfer income with health benefits	117 million households
CBO (2018)	51	PCE	Posttax and post-cash and noncash transfers and employer benefits employer benefit	310 million people

The above table presents several leading income-inequality studies and describes the key assumptions made related to the chosen concept of income, unit of analysis, and price deflator. The table also summarizes the studies' findings by presenting the change in median income found by these studies.

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6 https://www.urban.org/sites/default/files/publication/99455/how_different_studies_measure_income_inequality_0.pdf

7 Ibid.

8 Reproduced from: https://www.urban.org/sites/default/files/publication/99455/how_different_studies_measure_income_inequality_0.pdf

Perhaps the most remarkable observation about the original Piketty and Saez study is that its core finding is a conspicuous outlier. This observation remains true when comparing other measurements of inequality as well, such as share of income captured by higher income deciles and percentiles. It is remarkable that when the authors embarked on a new measurement of inequality, with Dr. Zucman in 2018, they found that median incomes over the period 1979-2014 was *41 percentage points higher* than that of their original finding. This departure, stemming from significant methodological changes from their previous, oft-cited, work, should suggest some humility by practitioners regarding the policy-readiness of their findings.

Indeed, other recent work offers some contrast to this particular strand of the literature. Gerald Auten and David Splinter found that "since the early 1960s, increasing government transfers and tax progressivity resulted in little change in after-tax top income shares." This finding stands in contrast to even the more recent Piketty, Saez, and Zucman (2018) finding. As Auten and Splinter note, in stark contrast with the Piketty, Saez, and Zucman finding "that average real pre-tax incomes of the bottom 50 percent remained virtually unchanged, we estimate that they increased by nearly one-third. For pre-tax/after-transfer income (which includes Social Security benefits) and after-tax income, we estimate a real increase for the bottom half of the distribution of nearly two-thirds." [9]

What explains this distinction? As the authors put it, "Tax rules and incentives for reporting income have changed over time as the result of tax legislation. Declining marriage rates and changing household structures can lead to biased results when tax units are the unit of observation. While many adults do not file tax returns, many returns are filed by individuals under age 20, other dependents, and non-residents. Important sources of income are missing in tax data, including government transfer payments and non-taxable employer-provided benefits. The share of income missing in tax data has increased over time, such that market income on tax returns accounts for only about 60 percent of national income in recent years. In addition, there are many technical issues with respect to differences between what is reported on tax returns and what economists regard as current-year economic income. Prior studies may have been misleading as a result of failure to adequately account for these challenges."

Implications for Public Policy

The state of inequality presented by Piketty and Saez, and Piketty, Saez, and Zucman has become conventional wisdom among some policymakers and animates a range of policy proposals. In general, these policies appear largely unchanged from many progressive policy priorities; they simply have a new rationale – to staunch the growth of inequality. But this line of reasoning suffers from three conceptual flaws. First, as noted above, the research literature has nothing like a consensus on income

[9] http://davidsplinter.com/AutenSplinter-Tax_Data_and_Inequality.pdf

inequality. Accordingly, there will be no consensus method for evaluating policy changes that purport to "reduce inequality." Indeed, the advocates cannot credibly state what the current level of inequality is. Perhaps more important, advocates for policies focusing on inequality cannot articulate what a "just" level of inequality would be. Surely it can't be the case that everyone should have exactly the same income. Thus, for a given policy to reduce inequality, policy advocates cannot provide a credible framework for evaluating its merit.

As part of their respective bids for the presidency, Senators Warren and Sanders have both proposed new taxes on wealth. While there are some differences – Sanders' proposal has a higher top rate – the basic approach is the same: a single-digit tax on the reported assets of households with net worth over certain threshold amounts. Setting aside administrative and constitutional challenges, the new taxes suffer from key design flaws if viewed through a conventional efficiency lens.

While the candidates couch their new taxes as being mere cents on the dollar, the effective rates under these plans are quite high. In essence, these annual wealth taxes amount to an annual tax on the return to capital. Senator Warren "would levy a 2 percent annual tax on all assets — including stocks, real estate and retirement funds, held either in the United States or abroad — owned by households with a net worth of $50 million or more."[10] It would add an additional 1 percent "billionaire surtax" on households with net worth exceeding $1 billion.

If the rate of return to invested wealth is 5 percent, a 3 percent tax on the 2nd billion dollars (which raises $30 million) is the same as a 60 percent tax on the $50 million of earnings (which also raises $30 million). Put differently, it would be a sharply higher capital income tax on a very narrow base. Senator Sanders proposed still higher rates. The economic implications are far beyond simply making certain households worse off. The notion that a significant fraction of the economy's capital is owned by these households means that a significant portion of the capital income will face highly distortionary, anti-growth tax rates. The implications for investment, innovation, productivity growth, and the future path of real wages should be well understood before contemplating such a policy.

An Alternative Approach to Inequality

The idea that the economy is not delivering, and has not delivered, adequate outcomes is not controversial. The CBO projects that real U.S. economic growth will average 1.8 percent over the next 10 years. This rate of growth is below that needed to improve the standard of living at the pace typically enjoyed in post-war America. During the early post-war period, from 1947 to 1969, trend economic growth rates were quite rapid. Gross domestic product (GDP) and GDP per capita grew at rates of 4.0 percent and 2.4 percent, respectively. Over the next 25 years, however, these fell to 2.9 percent and 1.9 percent, respectively. During the years 1986 to 2007, trend

[10] https://www.nytimes.com/2019/01/24/us/politics/wealth-tax-democrats.html

growth in GDP recovered to 3.2 percent, while trend GDP per capita growth rose to 2.0 percent.

These rates were quite close to the overall historic performance for the period. These distinct periods and trends should convey that the trend growth rate is far from a fixed, immutable economic law that dictates the pace of expansion, but rather subject to outside influences — including public policy.

More rapid growth is not an abstract goal; faster growth is essential to the well-being of American families.

Table 1
The Importance of Trend Growth to Advancing the Standard of Living

Trend Growth Rate Per Capita (%)	Years for Income to Double
0.50	139
0.75	93
1.00	70
1.25	56
1.50	47
1.75	40
2.00	35
2.25	31
2.50	28
2.75	26
3.00	23

The trend growth rate of post-war GDP per capita (a rough measure of the standard of living) has been about 2.1 percent. As Table 1 indicates, at this pace of expansion an individual could expect the standard of living to double in 30 to 35 years. Put differently, during the course of one's working career, the overall ability to support a family and pursue retirement would become twice as large.

In contrast, the long-term growth rate of GDP in the most recent CBO projection is 1.8 percent. When combined with population growth of 1.0 percent, this long-term growth rate implies the trend growth in GDP per capita will average 1.0 percent. At that pace of expansion, it will take 70 years to double income per person. The American Dream is disappearing over the horizon.

Rather than focusing on making the top end of the distribution worse off, policymakers should consider a robust growth agenda for raising the incomes of those at and near the bottom. After all, every dollar of successful poverty reduction reduces inequality and benefits the most deserving in the population. In this regard, it is worth noting that because the income-inequality measures developed by Piketty and Saez and Piketty, Saez, and Zucman do not include certain anti-poverty and income support transfers, no amount of income support programs would alter their estimates of inequality.

Prepared Testimony for Joint Economic Committee Hearing
Hearing on "Measuring Economic Inequality in the United States"
Eric Zwick, Associate Professor of Finance, Booth School of Business, University of Chicago
October 16, 2019

I. Executive Summary

Vice Chair Maloney, thanks to you, Chairman Lee, and members of the Joint Economic Committee for the opportunity to appear today to discuss my research and lessons for measuring economic inequality.

My name is Eric Zwick. I am currently Associate Professor of Finance in the Booth School of Business at the University of Chicago. In my research, in addition to working with academics at other universities, I have collaborated with staff economists across the government, including in the Treasury's Office of Tax Analysis (OTA), the Internal Revenue Service (IRS) Research and Statistics Division, the Federal Reserve, and the Congressional Budget Office (CBO). However, the views I express today are my own.

I will make three points today that I first summarize here:

1. **Inequality is high and has risen.** There is a significant and well supported scientific consensus that inequality in America is high and has risen. However, the academic community is still debating the size of this increase and learning about the composition of high end inequality. Specifically, top inequality is more human-capital intensive than previously thought. In other words, relative to what we previously thought, households at the top of the income distribution derive more of their income from their work and entrepreneurship and less from investment income like dividends and interest.

2. **Measuring broad inequality requires assumptions based on evolving data collection and methods, therefore conclusions from the research frontier are somewhat uncertain.** The state of the art on implementing *distributional national accounts*, which would provide statistics like GDP but broken out by different income groups, remains a work in progress. The conclusions we can draw from various attempts at distributional accounts are therefore somewhat uncertain.

   The core issue is that distributional national accounts methods require many assumptions, and the ultimate conclusions are sensitive to which assumptions we make. When data are missing on who gets what type of income, researchers make certain assumptions to fill in the gaps. These assumptions are in many cases well justified and defended. But they necessarily rely on incomplete data and convenient simplifications. As a result, alternative assumptions

can be equally and in some cases better justified, with significant quantitative implications for measuring income inequality, wealth inequality, and progressivity of tax burdens.

It is also important to recall that what we observe in tax data is influenced by reporting responses to changing tax rules over time.

3. **I recommend several clear next steps for collecting new data to help implement distributional national accounts and improve inequality measures.** The academic literature remains somewhat divided on the technical specifics of distributional accounts. These divisions largely reflect an evolving state of current knowledge that is changing as new data becomes available. This is not unusual in academic research and I strongly believe that we will reconcile these differences and continue to build toward a consensus method over time. My recommendations for a path forward are predicated on this belief. These recommendations include having the experts at the Bureau of Economic Analysis (BEA) take on this exercise, as well as several concrete suggestions for new information that can improve distributional national accounts while also aiding tax enforcement.

At the outset, let me also say that I greatly admire Professor Zucman's work despite our occasional friendly disagreements over accounting methods. I also have tremendous respect for the work of his colleagues Thomas Piketty and Emmanuel Saez, who have been asking essential and fascinating questions about economic growth and inequality and who have pioneered methods to answer these questions. My work would not have been possible without theirs.

Furthermore, I want to be clear that my reading of the evidence is not that inequality in America is low or that it has not increased at all. Rather my reading is that the increase has been more modest and the nature of that increase—what factors contribute, who benefits—skews away from the passive capital highlighted in Piketty (2014)[1] and toward human capital, labor, and entrepreneurial activity.

II. Top Inequality is More Human-Capital Intensive than Previously Thought

My research seeks to understand the nature of top income inequality and the drivers behind its recent rise. As a first step, I worked with economists Danny Yagan of UC Berkeley, Owen Zidar of Princeton, and researchers at the Office of Tax Analysis and IRS to assemble new data from de-identified administrative tax records on the population of businesses in the United States linked to their owners and workers. Our first paper documents the increasing role of pass-through businesses since the Tax Reform Act of 1986 and estimates the tax rate faced by different types of

[1] *Capital in the Twenty-First Century*, Harvard University Press.

businesses in 2011.[2]

Though it may seem an arcane topic, the rise of pass-through business has implications for interpreting trends in income inequality and economic measurement. By way of background, pass-through businesses, including S-corporations and partnerships, are taxed only at the owner level; in contrast, traditional C-corporations are taxed at the firm level and then again at the owner level if they receive taxable distributions. The relative importance of these different kinds of businesses has evolved over time in response to changes in federal tax policy.

Within the base of taxable income, nearly half of the rise since 1980 in the top 1% income share comes from pass-through business, which includes the ordinary income earned by partners in partnerships and the profits of S-corporation owners (Figure 1). In a paper with Yagan, Zidar, and Matt Smith, we present a comprehensive analysis of the nature of this income, with the goal of answering the question: how important is human capital at the top of the U.S. income distribution?[3] We define human capital broadly to refer to all factors embodied in people, including labor supply, networks, reputation, and rent-seeking ability. Human capital contrasts with nonhuman, or financial, capital because (in the modern economy) it can't be sold, and it is not bequeathed at death.

Combining rich descriptive analysis with natural experiments, we find that human capital, as opposed to financial capital, remains central to rising top incomes in the United States. This finding depends crucially on how we think about pass-through income, which we estimate to have a human capital share of 75% despite its appearance as business profits in tax data. When ignoring pass-through income, it appears that a minority of top earners are human-capital rich. However, when defining labor income comprehensively to include that due to pass-through income, this assessment reverses: most top earners are human-capital rich, not financial-capital rich (Figure 2). Hence, the human capital component of pass-through income transforms one's view of the typical top earner.

This finding is bolstered by the basic facts that our new data reveal. Most top earners are pass-through business owners—a group that includes consultants, lawyers, doctors, and owners of large non-publicly traded businesses, such as auto dealers and wholesale distributors. In 2014, more than 69% of the top 1% of income earners and more than 84% of the top 0.1% of income earners accrued some pass-through business income. In absolute terms, that amounts to more than 1.1 million pass-through owners with annual incomes above $390,000 and 140,000 pass-through owners with annual incomes of more than $1.6 million. In both number and aggregate

[2]"Business in the United States: Who Owns It and How Much Tax Do They Pay?" (with Michael Cooper, John McClelland, James Pearce, Richard Prisinzano, Joseph Sullivan, Danny Yagan, and Owen Zidar), *Tax Policy and the Economy*, 30(1), 91-128, 2016.

[3]"Capitalists in the Twenty-First Century" (with Matthew Smith, Danny Yagan, and Owen Zidar), *Quarterly Journal of Economics*, 134, 1675-1745, 2019.

income, these groups far surpass that of top public company executives, who have been the focus of much inequality commentary (Figure 3). In terms of age, they more closely resemble the working-age distribution of top wage earners and not the older age distribution of top passive-capital-income earners (Figure 3).

In short, the typical top 1% earner is not a public company CEO or tech billionaire; instead, she or he is a doctor, lawyer, or owner-operator of a middle-sized business.

III. The Tax Code Affects Economic Measurement

Another way of thinking about our results is that, while pass-through income is taxed as business profits, its underlying nature more closely reflects the labor income of business owners. This fact underscores a more fundamental issue facing those who use tax data to measure and study economic inequality. The nebulous boundary between labor and capital income, especially among business owners who can flexibly characterize their income to reduce tax, introduces uncertainty into the data. For example, if payroll tax applies to owner-manager payments recorded as wages but not to profits, then owner-managers will have a tax incentive to reduce wages and increase profits (subject to tax rules). These profits will appear as capital income in aggregate statistics, although their economic nature reflects a mix of labor and capital.

When we compare data from different points in time under different tax regimes, we must take into account how the tax code affects the income being measured. The same high-level statistics might be consistent with very different underlying stories of what is going on. This uncertainty is where the scholarship plays its role—more data are needed to draw the appropriate conclusions. For example, while we found that the majority of the growth since 1990 in entrepreneurial income reflects real economic growth, a significant share (approximately 30%) reflects businesses reorganizing to pass-through form (Figure 4). This reorganization effect occurs because pass-through owners report income in pre-tax form, whereas C-corporation owners report income after the corporate tax. It does not represent a real increase in pre-tax income inequality.

In preliminary follow-on work, we also find that correcting for tax effects in how labor income is reported can account for a meaningful part of the decline in the corporate sector labor share since the 1980s.[4] In other words, neglecting how taxes influence income reporting would lead us to overstate how much economic growth has accrued to capital instead of labor.

The issue is even more severe when comparing data across countries. For example, in many European countries (such as in France) where income inequality series based on tax data imply low and stable inequality, closely-held private businesses are even more important for economic activity than in the U.S. (Figure 5). These countries often have tax rules that encourage business

[4] "The Rise of Pass-Throughs and the Decline of the Labor Share" (with Matthew Smith, Danny Yagan, and Owen Zidar), in preparation.

owners to keep income within the firm and off their personal tax returns. So far, there has been less research into how important this issue is for measuring inequality outside the U.S.

IV. Distributional Accounts Have Tremendous Potential

This brings me to distributional income accounts, which Piketty, Saez, and Zucman (2018, henceforth PSZ) developed to address this and other concerns with inequality measures derived from tax data alone.[5] The most important concern is that income distributions from tax data do not fully capture much of what is generally considered income, including untaxed compensation like health insurance and pensions, and also the way in which ultimately all of the retained profits of corporations are owned by people. As mentioned above, the problem of missing income retained in firms is "solved" with distributional accounts, which use ownership information to allocate this missing income to people. In principle, this approach can also help reconcile estimates across years and countries. Beyond providing a full macroeconomically consistent inequality series, the distributional accounts also attempt to measure both pre-tax and post-tax distributions, which can be used to evaluate how government policy affects inequality.

Recently, economists at the Federal Reserve have released the results of an analogous project that attempts to distribute national wealth. The Distributional Financial Accounts layer detailed household wealth data from the Survey of Consumer Finances onto the official aggregates in the U.S. Financial Accounts, thereby integrating two alternative data sets that can teach us about wealth inequality. In addition, because the Distributional Financial Accounts will be released quarterly and in "near-real-time," we can now study how wealth evolves into and out of recessions and inform policymakers on the fly.

These resources have tremendous potential to further our understanding of economic activity. As an empirical researcher, I am always excited about the prospects of new data. But I believe a timely and well done distributional accounts product would have value well beyond the academic community.

It is worth noting that such series are most informative about inequality at a point in time, relative to what they tell us about the distribution of growth. Studying the latter will require panel data that allow us to follow the same people over time and adjust for life cycle forces and temporary shocks.[6]

[5] "Distributional National Accounts: Methods and Estimates for The United States," *Quarterly Journal of Economics*, 133, 553-609, 2018.

[6] See Kopczuk, Saez, and Song (2010) and Auten and Splinter (2019, citation below) for a discussion of the conceptual issues here.

V. The Link between Income and Wealth in Distributional Accounts

In our investigation of human capital income, we implemented a full replication of PSZ's distributional account series.[7] In general, replication is an important step in academic research, which allows scholars to learn from prior work, to determine the reliability of past findings, and to reconcile conflicting results. In the process, we established that our conclusions about the human-capital rich hold even after accounting for this broader notion of income, which includes capital income missing from tax data.

This work has given me insight into the state of the art on implementing distributional national accounts. The methods in the Saez and Zucman (2016, henceforth SZ)[8] and PSZ papers are based on strong assumptions that entail significant uncertainty, which could be made more salient. The foundation of the PSZ data comes from tax returns. But approximately 40% of national income does not show up on tax returns.[9] As much of this unobserved income is capital income, PSZ have to make an educated guess about who owns the capital that receives this income. As the basis for this guess, they use SZ's estimates of the wealth distribution.

A new paper that I have co-authored with Smith and Zidar uses our data to refine the wealth estimates of SZ and study implications for income and wealth taxation.[10] This paper is a work in progress, so the numbers are preliminary. We believe the conclusions are robust, but are still working to reconcile our findings and address questions Saez and Zucman have raised.

The wealth estimation method proposed by SZ scales up, or "capitalizes," income observed on tax returns to estimate wealth. This approach relies upon having an accurate mapping of income to wealth, or equivalently knowing the rates of return earned on different types of income by different groups of people. Currently, their estimates deploy the simplifying assumption for converting income flows to wealth that everyone gets the same return within an asset class. In contrast to recent estimates of wealth concentration based on the Survey of Consumer Finances or estate tax data, which show high levels of wealth concentration and modest increases, SZ's estimates show rapidly increasing concentration in recent years (Figure 7). They also show that fixed income wealth rapidly increased as a share of top portfolios, in contrast to the portfolio composition revealed in other data sets.

Several studies have raised concerns about these estimates, in particular, arguing that the equal

[7] We refer to this series as "Imputed National Income" to contrast it with the tax income-based series because the distributional accounts impute missing components of national income to individuals based on observed tax income.

[8] "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data," *Quarterly Journal of Economics*, 131, 519-578, 2016.

[9] National income is a concept very similar to GDP but that subtracts out depreciation and adjusts for income earned by U.S. residents outside the country.

[10] "Top Wealth in the United States: New Estimates and Implications for Taxing the Rich" (with Matthew Smith and Owen Zidar), preliminary working paper.

returns assumption can bias wealth estimates toward the top when top wealth holders actually earn higher returns than average. Kopczuk (2015) suggests these adjustments are especially important when average returns are close to zero, such as was the case for interest rates in the wake of the Great Recession. Other papers, especially Bricker, Henriques and Hansen (2018) and Fagereng, Guiso, Malacrino and Pistaferri (2016), also emphasize that higher returns at the top affect these wealth estimates.

We follow these authors and consider the effect of allowing returns to differ across people. We draw on new data from a variety of sources to discipline our approach. We also correct for bias at the geographic level, which allows us to produce wealth estimates by state and metropolitan area. Our preliminary findings reveal that wealth concentration is lower and more dependent on private business ownership than previously thought (Figure 7). We stress that our results do not imply that wealth concentration is low or irrelevant from a policymaker's perspective: the top 1% in our preferred series has as much wealth as the bottom 90%.

Overall, we view our work as helping to clarify how capitalization works in practice, to emphasize the quantitative importance of relaxing the equal returns assumption, and to make more salient the uncertainty that remains. To the extent possible, we also seek to reconcile the capitalized income approach with additional sources of data, including the Survey of Consumer Finances and estate tax data. Acknowledging the uncertainty in current practice, the sensitivity to specific assumptions, and the need for additional data are especially important as statistical agencies consider adopting this approach to produce distributional national accounts (Figure 8).

VI. Distributional Accounts Are a Work in Progress

As mentioned above, there is a strong link between SZ's wealth estimates, PSZ's distributional income estimates, and Saez and Zucman's recent work on tax progressivity (Figure 9). Changing the assumptions for estimated wealth inequality will change distributional income estimates. And changing distributional income estimates will change estimates of average tax rates. For example, one way to understand the concerns David Splinter at the Joint Committee for Taxation recently raised about Saez and Zucman's tax rates is that they correspond to concerns about distributional income estimates.[11] It is important to keep in mind that, despite this debate about the current level of progressivity, there is fairly strong agreement that the tax-and-transfer system has become somewhat less progressive over the past few decades.

A recent working paper by Gerald Auten at the Office of Tax Analysis and Splinter (henceforth

[11] "U.S. Taxes are Progressive: Comment on Progressive Wealth Taxation," unpublished note. There are a number of other questions that have been raised about their tax rate estimates that I do not address here, like deciding who ultimately pays corporate taxes and whether to include the Earned Income Tax Credit.

AS) questions PSZ's approach for estimating distributional national accounts.[12] AS also attempt to construct distributional accounts, motivated as an improvement to the CBO's measures of broad market income. The takeaway from the AS paper is still that income inequality has risen, but the trend is less dramatic than in the PSZ series (Figure 6).

What is the difference between these papers? The core issue is that distributional national accounts are very sensitive to assumptions. Both PSZ and AS start with the same data from tax returns. Thus, the papers are making different assumptions about missing gaps in the data, essentially taking components of national income not on tax returns and making different educated guesses about who gets what. Whereas PSZ rely on SZ's wealth estimates to allocate unobserved capital income, AS use a different approach: they combine surveys, tax data, and data from other sources to allocate this income. My reading of this back and forth is that PSZ's assumptions are in many cases well justified and defended. But they necessarily rely on incomplete data and convenient simplifications. As a result, alternative assumptions can be equally and in some cases better justified, with sometimes surprisingly large quantitative implications.

The AS paper is currently going through the peer-review and publication process, so their final estimates may differ from those in the working paper. My goal today is not to adjudicate this debate. Instead, I hope this discussion helps give a sense of why there is a debate at all, and of why I believe further data collection and encouraging additional work in this area, including by the BEA, can help.

For the interested reader, I summarize four important outstanding questions related to producing distributional accounts:[13]

1. **Underreported income.** There is a large gap between pass-through income in PSZ distributional national income and in fiscal income, despite the fact that in principle all of this income should appear on tax returns. This gap owes primarily to the allocation of underreported income included in proprietors' income in the national accounts. AS identify this factor as the most important difference between their estimate of the top 1% share and imputed national income in PSZ. In my view, neither AS nor PSZ fully settle this issue. Additional data would help narrow the gap between them.

2. **Retained earnings.** PSZ allocate the household share of aggregate retained earnings to individuals in proportion to the sum of the individual's observed dividends and realized capital gains. The rationale is that when C-corporation income does appear on personal tax returns, it appears as either dividends or realized capital gains. However, published IRS

[12] "Income Inequality in the United States: Using Tax Data to Measure Long-term Trends," working paper, 2019.

[13] This discussion draws on Auten and Splinter (2019) and Online Appendix Sections C-G in Smith, Yagan, Zidar, and Zwick (2019).

reports indicate that at least 25% and as much as 75% of realized capital gains are not from the sale of C-corporate stock and are instead gains from real estate and other asset sales or carried interest. Realized capital gains are much larger than dividends and much more concentrated among top earners. Hence, imputing retained earnings in proportion to each individual's sum of dividends and 100% of realized capital gains likely allocates too much retained earnings to the top.

3. **Pensions.** AS raise concerns about the use of certain nontaxable pension distributions, which partly reflect pension account rollovers. Because these rollovers capture the entire value of retirement accounts, they should not be mixed with taxable pension flows when being used to infer pension wealth and to allocate missing pension income.

4. **Fixed income.** The largest component of non-business capital income that differs from fiscal income and contributes to top 1% growth is interest income. Within the PSZ distributional account data, the taxable interest series is substantially lower than the imputed national income series and fell as a share of national income in recent decades. I believe this is related to concerns about SZ's approach to estimating fixed income wealth.

VII. A Fact-Finding Mission is a Clear, High-Payoff Step Forward

While the academic literature remains somewhat divided on the technical specifics of distributional accounts, these divisions largely reflect an incomplete and evolving state of current knowledge. I strongly believe that we can reconcile these differences and continue to build toward a consensus method as time passes and new data become available. My recommendations for a path forward are predicated on this belief.

First, the academic literature will continue to make progress, but it is not too early to propose that the experts at the BEA, who have intimate knowledge of what goes into the national income accounts, take on the exercise as well. In doing so, I expect they will rely on the methods proposed by both PSZ, AS, and other contributions to this debate, including the BEA's own contributions. It would be natural for the BEA to follow a process similar to that of the Federal Reserve, which would include developing estimates, preparing a technical report, and distributing and presenting their findings to solicit feedback from the broader community.

Second, several outstanding areas of disagreement could be assessed through improved information reporting and collection by the IRS. Requiring partnerships and closely held C-corporations to trace and report their ultimate owners would both help improve tax enforcement and aid the production of distributional accounts.[14]

[14]Partnership ownership is especially opaque: we estimate that 20% of the income goes to unclassifiable partners,

Third, expanding the IRS random audit programs, whose estimates form the basis of assumptions about the distribution of underreported income, would be extremely valuable. This proposal would likely require an additional budget allocation.

Fourth, improving data collection on retirement account balances and portfolio composition could help the BEA allocate undistributed pension income. Collecting this data could also be a task for the IRS or perhaps could benefit from collaboration and information sharing between the IRS and the Federal Reserve.

Of course, such additional information reporting requirements entail compliance and privacy costs that must be weighed in deciding whether they are worthwhile. Because I am an academic and not a policymaker, I defer to the experts on who would be in charge of implementing these ideas and whether they require legislation.

VIII. Conclusions

As mentioned above, there is a general consensus to which I subscribe that inequality has risen in the United States. A better understanding of the facts about inequality is important because we want to narrow the set of policy instruments to those most likely to work. The list of potential solutions is long and diverse, including those that target the top—such as bolstering existing taxes or imposing new taxes on capital and high incomes, competition policy, charitable-giving reforms, and restrictions on political contributions and lobbying—and those that target the bottom—such as direct transfers, support for public education, affordable housing policy, and other expansions to the safety net. Whether a particular policy will have the desired effect depends on whether we correctly target the root causes and worst consequences of inequality.

Therefore, a clear next step is to continue the kind of fact-finding mission taking place here today on how to continually improve our accounting methods. To reiterate, I recommend several important next steps in moving toward a consensus method:

1. Task BEA with developing a process to produce distributional national accounts estimates, to prepare a publicly available technical report, and to open up findings and methodological details to expert feedback;
2. Pass new tax laws requiring partnerships and C-corporations to trace and report ultimate owners;
3. Expand the IRS random audit program to improve understanding of underreported income; and
4. Improve data collection on retirement account balances and portfolio composition.

and 15% of the income is earned in circularly owned partnerships (CMPPSYZZ, 2016, citation above).

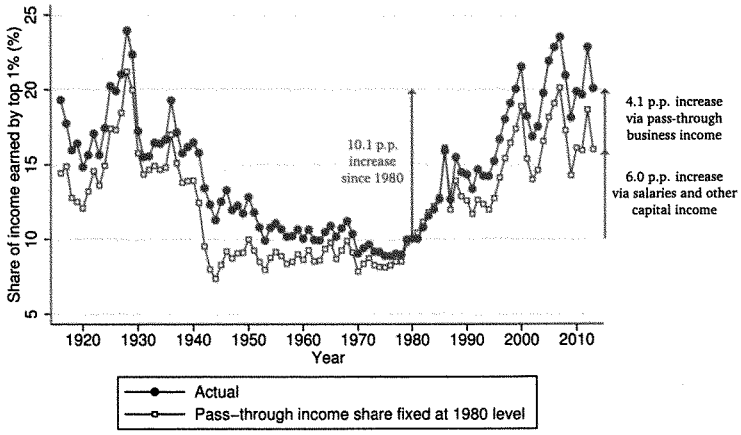
To advance our learning about the causes and potential policy mechanism for combating inequality, this committee could facilitate a substantive conversation about the following questions:

- What do we know about the nature of rising inequality?
- What role have demographic shifts and changes in the structure of the pension system played in measuring these trends?
- What are the consequences for disparities in economic opportunity, especially for children?
- What is the relative importance of multi-generational wealth as opposed to self-made wealth?
- What are the effects of inequality on the distribution of political influence?
- Is wealth inequality related to income inequality, for which human capital plays a significant role, or do wealth inequality trends represent a distinct phenomenon?

A fact-finding mission would serve three purposes. First, it would help inform policymakers and the public, moving everyone toward a common set of facts. Second, it would shed light on which policy ideas best suit the problem. Third, it would inject needed humility into the debate, given our current incomplete and evolving state of knowledge.

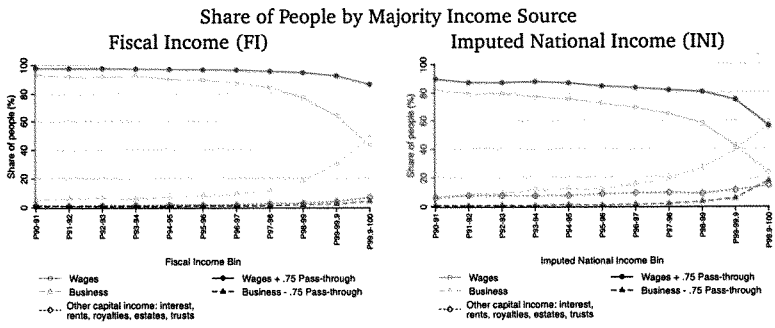
Thank you for your time and consideration of my testimony. I would be delighted to answer any questions you may have.

Figure 1: Role of Pass-Through Income in Rising Top-1% Income Share



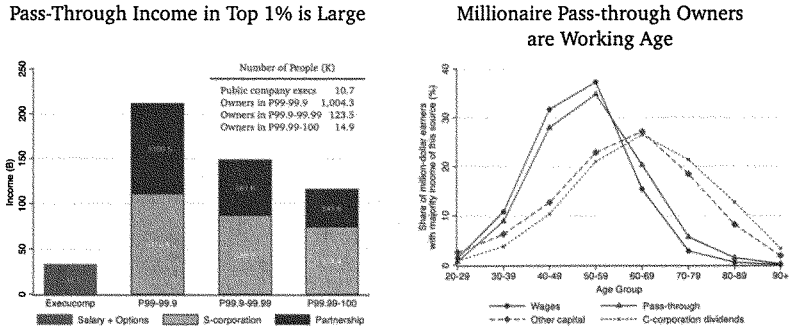
Source: Cooper, McClelland, Pearce, Prisinzano, Sullivan, Yagan, Zidar, Zwick (2016).

Figure 2: Are Top Earners Human-Capital Rich?



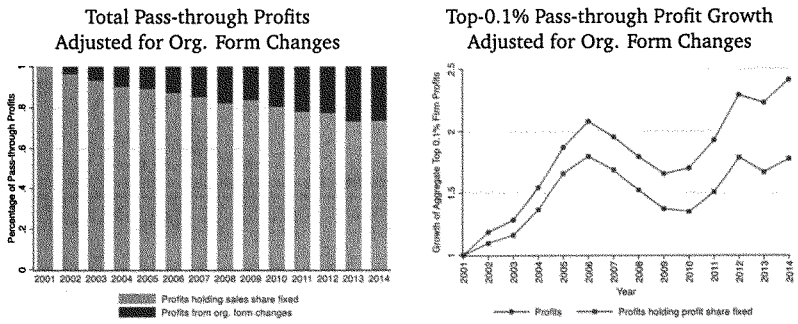
Source: Smith, Yagan, Zidar, Zwick (2019).

Figure 3: Working-Age Pass-Through Owners Prevail at the Top of the Income Distribution



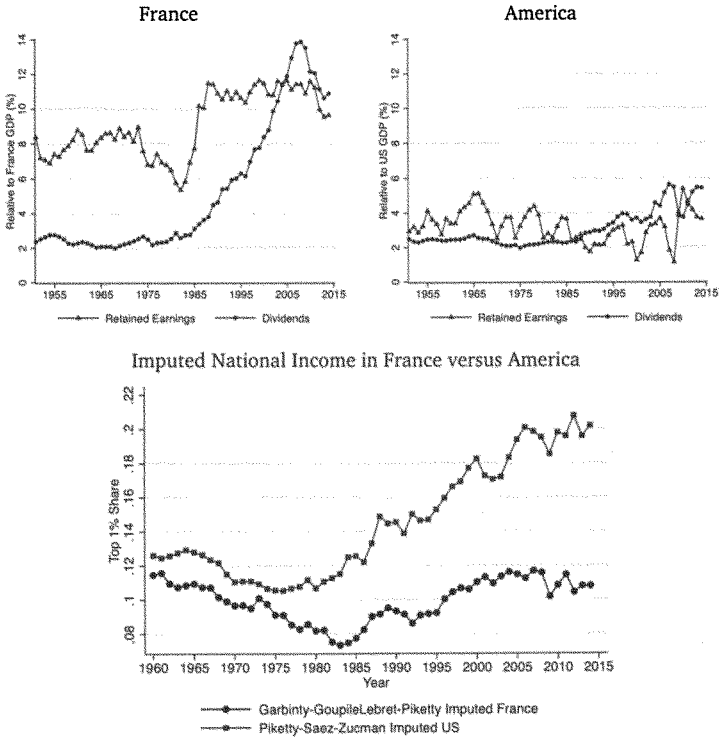
Source: Smith, Yagan, Zidar, Zwick (2019).

Figure 4: Growth in Pass-through Profits Accounting for Organizational Form Changes



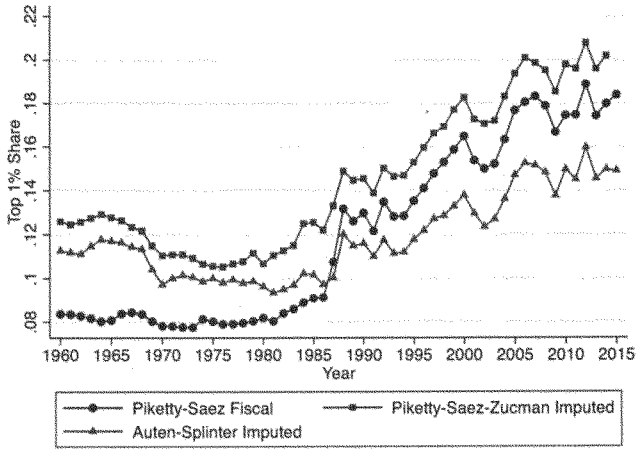
Source: Smith, Yagan, Zidar, Zwick (2019).

Figure 5: Inequality and Retained Earnings in France and America



Source: U.S. data from Piketty, Saez, and Zucman (2018). France data from Garbinty, Goupille-Lebret, and Piketty (2018). Author calculations reflect an imperfect understanding of the national accounts data for France. Suggestions welcome.

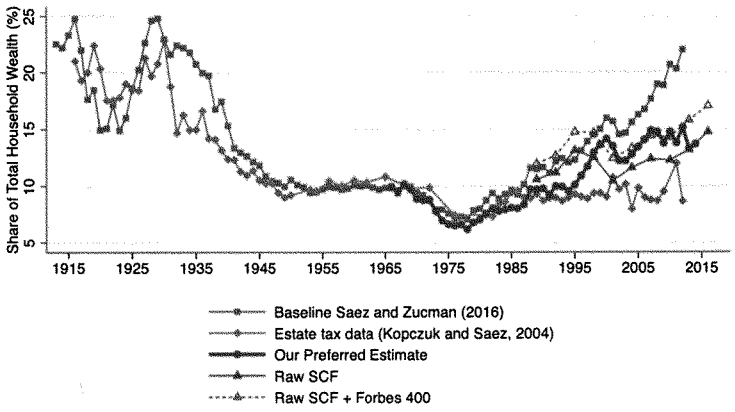
Figure 6: Comparing Fiscal and Alternative Distributional Accounts Series



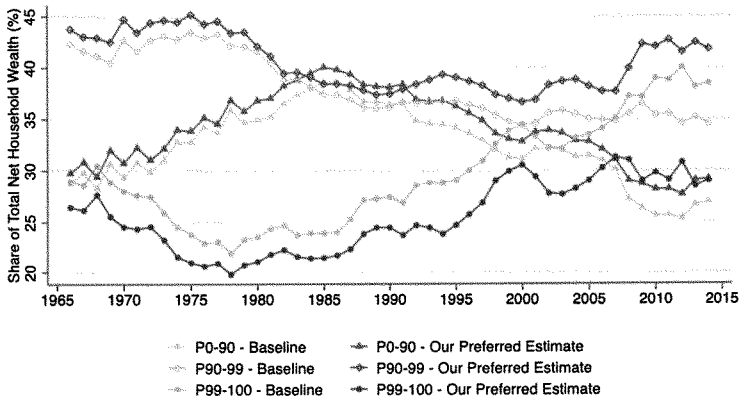
Source: Piketty and Saez (2003, updated to 2014); Piketty, Saez, and Zucman (2018); Auten and Splinter (2019).

Figure 7: Wealth Concentration in the United States

Top 0.1% Share of Total Wealth

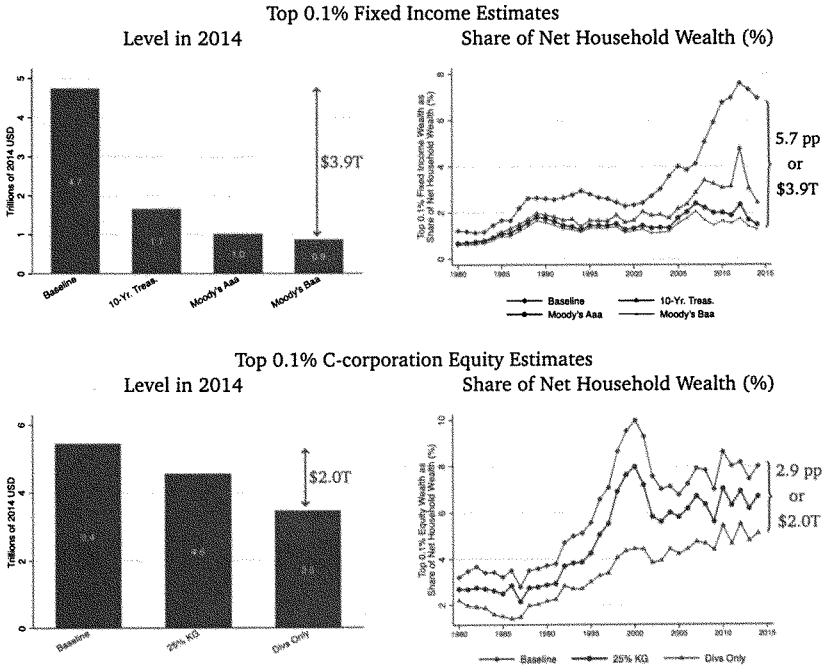


Wealth Shares of the Bottom 90%, P90-99, and Top 1%



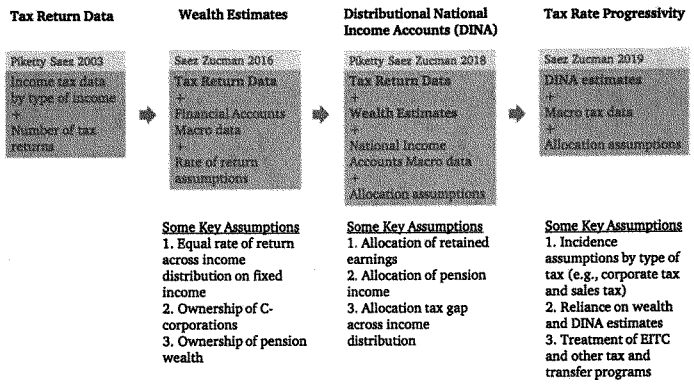
Source: Smith, Zidar, and Zwick (2019, preliminary working paper).

Figure 8: Sensitivity of Top Wealth Estimates to Assumptions



Source: Smith, Zidar, and Zwick (2019, preliminary working paper).

Figure 9: Link between Wealth, Income, and Tax Distribution Estimates



RESPONSE FROM DR. ZUCMAN TO QUESTION FOR THE RECORD SUBMITTED BY SENATOR KLOBUCHAR

You have extensively researched how wealthy taxpayers and corporations take advantage of offshore tax havens to evade payment of U.S. taxes.

- **In your opinion, how has the 2017 Tax Cuts and Jobs Act affected the amount of wealth stored in these offshore tax havens, and what impact has this had on economic inequality?**

Thank you for your question, Senator. The Tax Cuts and Jobs Act reduced the Federal corporate income tax rate from 35% to 21% and moved the U.S. towards a so-called "territorial" tax system, whereby profits booked outside of the United States are not taxable in the U.S. Such a system gives corporations incentive to book profits in foreign tax havens. Although the Act contains a number of anti-abuse provisions, it is thus possible that the amount of profits booked by U.S. companies in offshore havens will grow as a consequence of the Tax Cuts and Jobs Act. It is too soon, however, to make precise quantitative statements about this phenomenon at this stage. In my opinion the main effect of the Tax Cuts and Jobs Act was to dramatically reduce Federal corporate income tax revenue, increasing income for shareholders. Because equity ownership is highly concentrated in the United States, this is likely to increase inequality.

RESPONSE FROM DR. BOUSHEY TO QUESTION FOR THE RECORD SUBMITTED BY SENATOR KLOBUCHAR

Our antitrust enforcement agencies need adequate tools and resources to address the threat of economic concentration, promote competition, and protect consumers. In recent decades we have seen weakened antitrust enforcement coupled with rising economic inequality. I have introduced legislation to modernize antitrust enforcement—including by updating merger filing fees to reflect the 21st century economy.

- **What role does vigorous antitrust enforcement play in promoting innovation and reducing economic inequality?**

Vigorous antitrust enforcement protects competition and helps address inequality. Modern studies show that growing monopoly power is a problem for consumers and innovators. A recently released antitrust literature review summarizes modern antitrust and competition research, much of which shows us that more competition is good for innovation.[1] Over the last decade, we have seen the role rising monopoly power has on stifling innovation, especially in the drug manufacturing and tech industries.[2] Monopoly power also exacerbates inequality because those who benefit from higher monopoly rents (stockholders and senior executives) are wealthier than the consumers, who pay higher prices, and the workers, who earn lower wages, harmed by market power.[3]

However, the agencies charged with enforcing these laws need adequate resources to take appropriate action. Today, the Federal Trade Commission (FTC) and the Department of Justice's (DOJ) Antitrust Division are under-resourced, with annual appropriations on a steady decline since 2010 and now 18 percent lower in real terms

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[1] 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/*.

[2] Colleen Cunningham, Florian Ederer, and Song Ma, "Killer Acquisitions" Working Paper (Washington Center for Equitable Growth, 2019), available at *https://equitablegrowth.org/working-papers/killer-acquisitions*; Ryan A. Decker and others, "Declining Dynamism, Allocative Efficiency, and the Productivity Slowdown," The American Economic Review 107 (5) (2017).; 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. 24287 (National Bureau of Economic Research, 2018).

[3] Joshua Gans, Andrew Leigh, Martin Schmalz and Adam Trigs, "Inequality and Market Concentration, When Shareholding is More Skewed than Consumption." Working Paper No. w25395 (National Bureau of Economic Research, 2018), available at *https://ssrn.com/abstract=3306105*. Mordecau Kruz, "ON the Formation of Capital and Wealth: IT, Monopoly Power and Rising Inequality"), available at https://ssrn.com/abstract=3014361. Einer Elhauge, "Horizontal Shareholding," Harvard Law Review 129 (2016): 1267–1317. See generally, Bonnie Kavoussi, "How market power has increased U.S. Inequality," *https://equitablegrowth.org/how-market-power-has-increased-u-s-inequality/*.

than in 2010.[4] Enforcement has fallen to historic lows as funding has dropped. Merger enforcement actions have stagnated as merger filings have risen over the past decade and fewer corporations are being fined for antitrust violations since 2012–2014, and especially since the 1990s. As our economy grows, the need for resources to regulate it grows in unison.

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[4] Michael Kades, "The state of U.S. federal antitrust enforcement" (Washington: Washington Center for Equitable Growth, 2019), available at *https://equitablegrowth.org/research-paper/the-state-of-u-s-federal-antitrust-enforcement/?longform=true*.