

**EXAMINING THE RISE OF AMERICAN EARNINGS  
AND LIVING STANDARDS**

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**HEARING**

BEFORE THE

**JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES**

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# CONTENTS

## OPENING STATEMENTS OF MEMBERS

Hon. Erik Paulsen, Chairman, a U.S. Representative from Minnesota .....	1
Hon. Martin Heinrich, Ranking Member, a U.S. Senator from New Mexico .....	2

## WITNESSES

Dr. Casey Mulligan, Chief Economist, Council of Economic Advisers, Washington, DC .....	5
Dr. Russell Roberts, Research Fellow, Hoover Institution, Stanford University, Stanford, CA .....	7
Mr. Stephen Moore, Distinguished Visiting Fellow, The Heritage Foundation, Washington, DC .....	8
Dr. Heather Boushey, Executive Director and Chief Economist, Washington Center for Equitable Growth, Washington, DC .....	10

## SUBMISSIONS FOR THE RECORD

Prepared statement of Hon. Erik Paulsen, Chairman, a U.S. Representative from Minnesota .....	28
Prepared statement of Hon. Martin Heinrich, Ranking Member, a U.S. Senator from New Mexico .....	29
Prepared statement of Dr. Casey Mulligan, Chief Economist, Council of Economic Advisers, Washington, DC .....	31
Prepared statement of Dr. Russell Roberts, Research Fellow, Hoover Institution, Stanford University, Stanford, CA .....	35
Prepared statement of Mr. Stephen Moore, Distinguished Visiting Fellow, The Heritage Foundation, Washington, DC .....	43
Prepared statement of Dr. Heather Boushey, Executive Director and Chief Economist, Washington Center for Equitable Growth, Washington, DC .....	52
Response from Dr. Mulligan to Questions for the Record Submitted by Chairman Paulsen .....	62
Response from Dr. Mulligan to Questions for the Record Submitted by Representative Karen Handel .....	63
Response from Dr. Roberts to Questions for the Record Submitted by Representative Karen Handel .....	64
Response from Mr. Moore to Questions for the Record Submitted by Chairman Paulsen .....	65
Response from Mr. Moore to Questions for the Record Submitted by Representative Karen Handel .....	65
Response from Dr. Boushey to Questions for the Record Submitted by Representative Carolyn B. Maloney .....	66
Report submitted by Representative Maloney titled "Disaggregating growth: Who prospers when the economy grows" by Heather Boushey and Austin Clemens .....	67



# EXAMINING THE RISE OF AMERICAN EARNINGS AND LIVING STANDARDS

WEDNESDAY, SEPTEMBER 26, 2018

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

The Committee met, pursuant to call, at 10:47 a.m., in Room 1100, Longworth House Office Building, the Honorable Erik Paulsen, Chairman, presiding.

**Representatives present:** Paulsen, Schweikert, Delaney, Maloney, and Handel.

**Senators present:** Heinrich and Lee.

**Staff present:** Ted Boll, Colin Brainard, Kim Corbin, Gabrielle Elul, Hannah Falvey, Connie Foster, JP Freire, Ricky Gandhi, Colleen Healy, Christina King, Paul Lapointe, Alex Schibuola, Ruben Verastigui, Jim Whitney, Scott Winship, and Tommy Wolfe.

## OPENING STATEMENT OF HON. ERIK PAULSEN, CHAIRMAN, A U.S. REPRESENTATIVE FROM MINNESOTA

**Chairman Paulsen.** Good morning. We will call this committee hearing to order.

America is a beacon to the world. It is the land of opportunity, where everyone has a shot at the American Dream. Our Nation isn't perfect, of course, and not everyone gets to start from the same position. Many Americans face tremendous adversity, and as lawmakers, we must avoid standing in the way of Americans being able to enter the workforce or switching to jobs that pay more, offer better benefits, or provide greater flexibility.

Since commonsense pro-growth policies have been implemented, we have seen a groundswell in opportunity. The so-called quit rate, as measured by the Bureau of Labor Statistics, is at its highest since 2001. Workers are more confident to leave their old jobs for new ones. Job satisfaction is at its highest since 2005, according to a survey by The Conference Board.

These are positive signs as opportunities expand for everyday Americans. And contrary to claims that economic growth is only benefiting the wealthy, the unemployment rates among those workers who normally face the greatest challenges in the job market have fallen drastically since pro-growth policies were initiated. Among those without high school diplomas, the unemployment rates of Blacks, Hispanics, and Whites have fallen 8.1, 3.8, and 3.3 percentage points, respectively.

According to a Washington Post analysis, there has been a 3.3 percent increase in jobs for blue-collar workers in goods-producing

jobs, the best rate since 1984. A New York Times article states that the number of Americans seeking Social Security disability benefits is plunging, a startling reversal of a decades-old trend. It cites a stronger economy as the cause.

This is how we look at the full picture of our economy, by looking at a variety of indicators. While my friends on the other side of the aisle look at the downward movements and measures of average and medium worker earnings, they fail to see that the median worker today is not necessarily the same person as last month or last year or a decade ago. It is possible for these measures to decline even when wage rates are rising.

Many critics fail to acknowledge that people move in and out of different income ranges over their lifetime. Just because it is not easy to measure progress across a population of over 320 million people, we should not assume people are tethered to a given income percentile over their lifetime, despite ample evidence to the contrary.

Millions of people from all over the world continue to relocate to the United States, despite tremendous risks and numerous challenges and, clearly, it is because America remains the land of opportunity. We must take care in reading headline statistics; otherwise, we risk creating policies that destroy the potential for real progress.

If we allow people to thrive, they will thrive. If we allow American businesses to invest in their employees, they will invest in their workers. If we let Americans keep more of their money, they will put it to the best uses for their families and their own well-being, and our economy will thrive.

Our future will only be brighter if we allow the path of smart economic policy. Our prospects for a brighter future will be dimmed if we go back to the old ways. For instance, Democrats have threatened to increase taxes to where they were prior to the Tax Cuts and Jobs Act. America's tax rate for doing business would surge back to the highest in the developed world and would undo the growth-enhancing economic incentives that have powered increased private domestic investment and economic growth in less than 2 years. American workers will not have as much of the capital investment to work with that is critical to raise productivity, and that would be bad news for future wage growth.

The success of recent economic policy is clear. We are again relying on the ability of people to climb up the economic ladder to grow and thrive.

Our star panel of witnesses today will help explain the progress made to date and how and why with pro-growth policies we can continue to prosper as the great Nation that we know America to be.

Before I introduce our witnesses, though, I now yield to Ranking Member Heinrich for his opening statement.

[The prepared statement of Chairman Paulsen appears in the Submissions for the Record on page 28.]

**OPENING STATEMENT OF HON. MARTIN HEINRICH, RANKING MEMBER, A U.S. SENATOR FROM NEW MEXICO**

**Senator Heinrich.** Thank you, Mr. Chairman.

Well, it feels like déjà vu all over again. Another hearing on the Republican tax law passed 9 months ago. Another attempt by Republicans to convince their constituents that they are better off because of that law. But there is a problem. Despite White House promises, working families aren't better off, and another hearing is not going to change that.

Wages are stuck. The typical worker's hourly wages, after adjusting for inflation, were lower in August than they were a year ago. What has increased is the cost of this tax giveaway.

When Republicans passed the bill last December, the estimated cost was \$1.5 trillion, with a T. Today, it stands at \$1.9 trillion. It was a massive waste of resources when workers could least afford it and when we should have been investing in our people and our communities.

Most working Americans have been treading water, with middle-class earnings stalled for years. The typical man working full time year-round earned less in 2017, after adjusting for inflation, than in 1973. While earnings have been stagnant or shrinking, the cost of childcare, of housing, of education have climbed higher, with student loan debt exploding in the past decade.

We will hear today that we just need to look at different inflation measures or use a different survey and then everything looks fine. But telling people across my State, don't worry, you are doing better than you realize, won't make it easier for them to pay their kids' college tuition. It won't help them get health insurance or treatment for addiction.

Even as those in the middle class work harder and harder to make ends meet, those at the top continue to reap large income gains. Between 1980 and 2014, the top 1 percent saw their pretax incomes grow by 204 percent, while incomes for the bottom 50 percent remained virtually flat. And with passage of the Republican tax bill, the gap between those at the top and everyone else is likely to grow significantly wider.

Part of the challenge we face is that we need better, more timely economic data to help us craft smart, forward-looking policies. Knowing in real time who is actually benefiting from economic growth and who is not is key to designing new policies that generate growth which benefits everyone.

Along with Leader Schumer and some of my JEC colleagues, I have introduced legislation that instructs the Bureau of Economic Analysis to start reporting on new Income Growth Indicators. These measures would show how incomes are growing at different levels of income, painting a clearer picture of who the economy is actually working for.

We also need a sustained effort to lift the working standards of working families, to help workers chart a brighter course for themselves and their families. We should invest in programs that reward work and help Americans prepare for 21st century jobs.

Increasing the value of Pell Grants so that a college education is within reach for more students is a good place to start. I have a proposal to expand Pell Grants for students across the country. In New Mexico, the increased grant would cover the full cost of tuition at all of New Mexico's in-State colleges and universities.

Let's expand the Earned Income Tax Credit so that work pays better and more families are able to afford the basic necessities. We should have done that in the Republican tax bill.

Rather than turning the clock back again, allowing insurance companies to deny coverage to those with preexisting conditions, as the Trump administration is trying to do, we need to build on recent gains to make healthcare more accessible and more affordable.

We also need to be smarter about how we use our Nation's fiscal resources. After squandering \$1.9 trillion on the tax bill, the House is preparing to vote on the Republicans' tax plan 2.0. This legislation would add \$3.2 trillion to the deficits from 2029 to 2038, bringing the total cost of their tax policy above \$5 trillion. And remember, the majority of these costly tax breaks go to the richest among us.

I don't think we can have a hearing on living standards without asking ourselves what will happen to the quality of life for tens of millions of Americans who count on Social Security, Medicare and Medicaid if Republicans add literally trillions to deficits and then turn to these programs as their piggybank. The consequences would be disastrous.

I look forward to the testimony from our witnesses and a little healthy debate, Mr. Chairman.

[The prepared statement of Senator Heinrich appears in the Submissions for the Record on page 29.]

**Chairman Paulsen.** Thank you, Senator Heinrich.

And I will now introduce our witnesses.

Dr. Casey Mulligan is currently on leave as a professor with the University of Chicago to serve as chief economist with the President's Council of Economic Advisers. Dr. Mulligan was also a professor at Harvard University and Clemson University, and has authored two well-known books: *The Redistribution Recession: How Labor Market Distortions Contracted the Economy*; and *Side Effects: The Economic Consequences of Health Reform*.

He is affiliated with a number of research organizations, including the National Bureau of Economic Research, the George Stigler Center for the Study of the Economy and the State, and the Population Research Center. He received his doctorate in economics from the University of Chicago and his BA in economics from Harvard University.

And we should note that Dr. Mulligan's parents are with him in the audience today.

Dr. Russell Roberts is also with us. He is a research fellow at Stanford University's Hoover Institution. He is also the host of EconTalk, which is a podcast discussing a variety of topics with economists, authors, and business leaders. Dr. Roberts has been a professor at George Mason University; Washington University in St. Louis; the University of Rochester; Stanford University; and the University of California, Los Angeles. He received his doctorate in economics from the University of Chicago and his BA in economics from the University of North Carolina at Chapel Hill.

Mr. Stephen Moore is a distinguished visiting fellow at The Heritage Foundation and an economic analyst with CNN. Mr. Moore was also a senior economics writer for The Wall Street Journal's editorial board and the founder of the Club for Growth. He has au-

thored and coauthored multiple books on economic policy. He received his MA in economics from George Mason University and his BA in economics from the University of Illinois at Urbana-Champaign.

Dr. Heather Boushey is the executive director and chief economist at the Washington Center for Equitable Growth. She writes regularly for The New York Times, The Atlantic, and Democracy, in addition to making frequent television appearances. Dr. Boushey also served as a senior economist with the Joint Economic Committee. She received her doctorate in economics from The New School for Social Research and her BA in economics from Hampshire College.

Welcome to all of you, and thank you for joining us today. You will each have 5 minutes for your presentations.

And, Dr. Mulligan, you are recognized for 5 minutes.

**STATEMENT OF CASEY MULLIGAN, CHIEF ECONOMIST,  
COUNCIL OF ECONOMIC ADVISERS**

**Dr. Mulligan.** Good morning, Chairman Paulsen and Ranking Member Heinrich and members of the Committee. I appreciate the opportunity today to comment on wages and labor market performance.

The American economy is growing again, but many in the media and policy circles and academia have been puzzled by what appears to be stagnating real wages. The hourly amount that workers are paid can be an important indicator of economic performance and economic policies. But how wages are measured turns out to greatly affect estimates of their level and their trend over time.

Several features of the available wage data provide an incomplete picture. Most national measures of wages focus on a ratio that has cash earnings in the numerator and a denominator of either the time worked or the time paid. Wage changes are then calculated as the difference between the ratio today and the ratio a month ago or a year ago or in the past.

But because cash earnings do not adequately count the full compensation, namely the fringe benefits that are available on many jobs, and the usual measures neither net out payroll or income taxes owed as a consequence of working, this approach misses an important part of the economic value of work for the worker and his or her family. Moreover, cash earnings are naturally measured in dollars and, thus, affected by changes in the value of a dollar over time due to inflation.

In addition to the difficulty with focusing on cash earnings in the numerator, the denominator in the calculation poses additional challenges for accurate measurement of wages. Although not all the wage data do so, it is important to distinguish between hours paid and hours actually worked, because a number of employers now are giving their employees pay when they are not at work, maybe on vacation, sick leave, or parental leave. As the BLS recognizes in its productivity statistics, hours worked rather than hours paid is the proper denominator for measuring either productivity or what a worker received per hour worked.

All the current data measures begin with a sample of individuals who happen to be employed at the time of the survey, or maybe

they begin with a sample of jobs held by those individuals. But the people employed today, as the Chairman said, are a different group of people than who were employed last year and quite a different group of people who were employed a decade ago.

Movements of people in and out of the workforce systematically bias the usual wage growth measures away from being reliable indicators of what individuals are experiencing. Every year, young, inexperienced people enter the workforce and are thereby included for the first time in the national average at wages below those of more experienced workers. And every year, some of the most experienced and highly paid people retire from the workforce and they stop being included in the national average. Both these lifecycle events substantially reduce the national average wage, especially now that the baby boomers are retiring, even though no individual necessarily has a wage that is reduced.

Now, all these issues can be addressed and valid inferences can be obtained by properly using the various publicly available wage data. The recent BLS fringe benefit data show how workers have been receiving bonuses, which contribute to the growth of their compensation but are not included in the headline wage measures. The data also show how employers have been providing more paid time off, which means that earnings per hour worked is increasing more than earnings per hour paid. Health insurance, on the other hand, has not significantly added or subtracted from recent compensation growth rates.

Holding the composition of the workforce constant, the annual growth rate of real compensation over the past year has been about one percentage point higher than the usual wage measures deflated with the CPI-U. In other words, real wages grew 1.0 percent rather than the .1 percent that is usually reported from the monthly real earnings release. Moreover, taking into account the personal income part of the tax reform, after-tax real compensation grew 1.4 percent over the past year, again, well above the headline measures.

I want to be clear that this analysis is not a critique of the Federal bureaus that provide us such excellent data. The Federal agencies are providing a number of data products that address each of the things I mentioned today. The problem is that these additional products get too little attention when it comes to assessing how the labor market is performing.

When the average real household income grows at 1.4 percent per year, that means more than a thousand dollars every year added beyond what is required to keep up with inflation. The additional income is even greater when we recognize that the average household now, as the Chairman has said, has more members with jobs than in the past, and that each worker is also accumulating work experience over time that translates into yet higher pay. None of this is a surprise, given that recent Federal policies have been encouraging business formation and removing disincentives to work.

I look forward to your questions.

[The prepared statement of Dr. Mulligan appears in the Submissions for the Record on page 31.]

**Chairman Paulsen.** Thank you, Dr. Mulligan.

And, Dr. Roberts, you are recognized for 5 minutes.

**STATEMENT OF RUSSELL ROBERTS, RESEARCH FELLOW,  
HOOVER INSTITUTION, STANFORD UNIVERSITY**

**Dr. Roberts.** Chairman Paulsen, Ranking Member Heinrich, Vice Chairman Lee, distinguished members of the Committee, thank you for the opportunity today to testify on the crucial issue of American earnings and living standards.

Adjusted for inflation, the U.S. economy has grown dramatically over the last 30 to 40 years. How much of that growth has gone to the average person? According to many economists, the answer is basically zero.

In a recent gloomy study of the American economy that Ranking Member Heinrich mentioned, economists Piketty, Saez, and Zucman find that the bottom half of the American economy gained essentially nothing between 1980 and 2014, while incomes of the top 1 percent tripled. New York Times columnist David Leonhardt concluded that the very affluent and only the very affluent have received significant raises in recent decades. Noble Laureate Paul Krugman, writing in 2014, said that, quote, “Wages for ordinary workers have, in fact, been stagnant since the 1970s.”

But these depressing conclusions and others like them rely on studies and data that are incomplete or flawed. They understate economic growth for the poor and the middle class because they use measures of prices that mis-measure inflation. They leave out important components of compensation, such as fringe benefits. And many of the most pessimistic studies about the fate of the middle class ignore the fall in the marriage rate that distorts measurements of progress.

When Piketty, Saez, and Zucman say that incomes of the top 1 percent tripled between 1980 and 2014, you might think that people who were in the top 1 percent in 1980 earned three times more than that by 2014, but that isn’t what their numbers measure. Their numbers show that the richest 1 percent in 2014 made three times what the richest 1 percent in 1980 made. It is not the same thing.

The richest people in 2014 aren’t the same people. A lot of them, people like LeBron James or the founders of Google, Larry Page and Sergey Brin, weren’t alive in 1980.

The same is true of the middle class. The change in median income between 1980 and 2014 doesn’t capture what actually happened to the people who were at or near the middle.

Most of the gloomy studies take a snapshot at a point in time and compare it to a snapshot later, ignoring the fact that the people in the pictures aren’t the same.

To find out how economic growth affects people at different income levels, you have to follow the same people over time. A number of studies have done that. I summarize five of them in my written testimony. The results are quite cheerful when compared to the gloomy studies that take snapshots of the American economy.

Studies that follow the same people over time, using survey data, find that since the 1970s, people raised in poor families have a much better chance of surpassing the income of their parents compared to children from rich families. They find that children raised

in poor families have gains in income relative to their parents that are larger than the gains to children in middle-class families which, in turn, are larger than the gains to the richest families.

Studies that use tax data to follow the same people from the 1980s find that the poorest people have the biggest gains in income over time, followed by the middle class and, in fact, the richest people make little or no progress in these studies. The economic growth of the past 40 years did, in fact, help the poor and the middle class. A rising tide does, in fact, lift most of the boats, and it lifts the smallest boats the most. The yachts, the income of the rich, pretty much stays where it is or even falls a little.

Now, don't cry for the rich. Even if they stood still over the last few decades, they had a very pleasant economic life. There is still lots of inequality in America, but measured inequality masks the growing prosperity of average and poor Americans over time. And those gains are understated, I believe, because even the best measures of inflation overstate the rise in prices and, therefore, understate the gains in income for all Americans.

This does not mean that everything is fine in the American economy. We can do better. There are special privileges reserved for the rich that reduce their risk of downward mobility. Financial bailouts are the most egregious example, and we should stop that. There are too many barriers, like occupational licensing and the minimum wage, that handicap the disadvantaged desperately trying to get a foothold in the workplace. And the American public school system is an utter failure for too many children who need to acquire the skills necessary for the 21st century. But the glass is at least half full.

All Americans deserve the chance to get ahead, to thrive, and to flourish. The focus on the gloomy narrative misleads us as to what needs fixing. We should instead focus on getting rid of the barriers that block access to prosperity. And let's remember that economic growth can and does benefit all Americans, especially the poor and the middle class.

Thank you very much.

[The prepared statement of Dr. Roberts appears in the Submissions for the Record on page 35.]

**Chairman Paulsen.** Thank you, Dr. Roberts.

And, Mr. Moore, you are recognized for 5 minutes.

**STATEMENT OF STEPHEN MOORE, DISTINGUISHED VISITING  
FELLOW, THE HERITAGE FOUNDATION**

**Mr. Moore.** Thank you, Mr. Chairman. Thank you, Mr. Vice Chairman, for the opportunity to testify this morning. It is a privilege to be here.

I thought I would talk a little bit about—as many of you probably know, along with Larry Kudlow, I served as one of the senior economic advisers to the Trump campaign and helped author one of the early versions of the Trump tax cut. So I thought I would relate to you how we came about these policies, why we did, and how we think they are working.

And I would start by simply saying this: The philosophy, I believe, of what Donald Trump is trying to do in terms of economic

policies is all focused on growth. Growth, growth, growth. How do you get the economy growing faster?

Now, that higher growth does not necessarily mean you are going to get higher wages, but I can guarantee you this: If you don't have growth, you are not going to get higher wages. So higher growth is a precondition to getting higher living standards and higher wages.

So I brought a few charts that I would like to show, if I may. This is the first on why it is that growth is so important. This is what we call the Obama growth gap. And it shows that this recovery that we had over the last 8 years, it has been—to give Barack Obama his due, it has been a long and durable recovery, Mr. Chairman, but it has been a very flat recovery. And, in fact, if you look at these numbers, you can see that the growth rate of the economy over that 7-year period was about 14.9 percent. The light blue line you are looking at in the middle is the economic growth rate during an average recovery, because we had about eight recessions since World War II.

And then I like to compare the Obama record with the Reagan record, because Obama and Reagan used very different approaches to dealing with the recession. Of course, you see that we grew much, much, much faster under Reagan out of the recovery—in the recovery than we did under Obama. I don't think that is by accident. I think that is because most of the policies that were put in place under Reagan were pro-growth, and many of the policies under Obama were antigrowth.

But the bottom line here is that if we had a recovery under Obama that had been as strong as a normal recovery, we would have had \$2 trillion more GDP by 2016. If we had a Reagan-style recovery, we would have had \$3 trillion more.

Now, if you will turn to the next chart, this is interesting and it gets to this point about—Mr. Heinrich, you were making the point that the cost of the tax cut has increased from \$1.4 to \$1.9 trillion. Let me explain why the CBO is saying that. And it turns out that actually it proves the success, not the failure, of the tax cut.

So if you look at this chart, what you are looking at is from the time right before we passed the tax cut in December of 2017—so the picture that the CBO took of the economy before that, and then comparing that with the most recent forecast the CBO has put out on growth. This is the most amazing story.

In just 7 months, CBO has revised its 10-year forecast for the economic growth of the U.S. economy by \$6 trillion. Think about that. In 7 months, they have increased their growth rate forecast by \$6 trillion. That didn't happen by accident, Mr. Chairman. It happened because you passed the tax cut.

And by the way, I wouldn't say it is only the tax cut. It is all these other factors, the deregulations, the pro-America trade policies. But anyway, so the cost of the tax cut has not gone up from \$1.4 to \$1.9 trillion. We estimate just that extra \$6 trillion of GDP growth is going to lead to somewhere in the neighborhood of \$1 trillion more Federal revenues. And if you look at it that way, then the tax cut, two-thirds of the tax cut has already been paid for just

by the economic growth that we have gotten over the last 7 months.

In terms of how Americans feel about the economy, you can see that, in the next chart, that 3 out of 10 to 4 out of 10 Americans rated the economy as good or great during the Obama years. Today, according to the latest numbers, 7 out of 10 Americans rate the economy as good or great. They realize something big is happening with the economy.

If you will look at the next chart, it shows where we are creating jobs. This is one of my favorite ones. This is manufacturing jobs, it is construction jobs, it is mining jobs. These are those middle-class jobs that are good-paying jobs that have been leaving. And you can see that we have created about a million new manufacturing, construction, and mining jobs in just the last 18 months. That reverses the trend. Look at mining and logging. Look at, you know, what has happened with construction. It is going through the roof.

And then finally, I would say, what do we need to do to keep growth up and to get wages higher? Skip this next chart, if you might, and go to the next one. This one, I think this is the central problem we have with the economy right now. How do we get people into the workforce? Because people can't earn a living, they can't have a high wage if they don't have a job. And what is so interesting about this is that—this is since January of 2000—you are seeing that for older Americans—obviously, we have an aging population. Older Americans are more likely to be working today than they were in 2000. So their labor force participation rate has gone up.

But what is disturbing is look at what has happened to the labor force participation rate of younger workers. They have been actually dropping out of the workforce. A lot of studies show that when people start working at a later age—I mean, when they start working at an earlier age, their lifetime earnings are higher. We have got to get young people into the workforce. It is the best thing we can do for their wages.

Thank you.

[The prepared statement of Mr. Moore appears in the Submissions for the Record on page 43.]

**Chairman Paulsen.** Thank you, Mr. Moore.

And now, Dr. Boushey, you are recognized for 5 minutes.

**STATEMENT OF HEATHER BOUSHEY, EXECUTIVE DIRECTOR  
AND CHIEF ECONOMIST, WASHINGTON CENTER FOR EQUITABLE  
GROWTH**

**Dr. Boushey.** Thank you, Chairman Paulsen, Vice Chairman Lee, and Ranking Member Heinrich, for extending an invitation to speak here today. I am honored to be here.

My name is Heather Boushey, and I am executive director and chief economist at the Washington Center for Equitable Growth. We seek to advance evidence-backed ideas and policies that promote strong, stable, and broad-based economic growth. I am here today to talk about how the economy is working and not working for most American workers.

My fellow witnesses have talked about how Americans are doing well, but the reality is, for many American workers, this is just not the case. I think I am the gloomy economist up here today.

Over the past few decades, incomes and wealth have surged for those at the top, while earnings for low- and middle-income Americans have stagnated. And the reports and top-line statistics that we currently rely on to inform us about the economy often mask the economic situations our friends and neighbors across the country and in your districts are facing.

As the Joint Economic Committee considers the needs of Americans up and down the income spectrum, you should consider supporting the Measuring Real Income Growth Act of 2018, which was introduced by Senator Schumer and Ranking Member Heinrich in the Senate and by Representative Maloney in the House. This bill directs the Bureau of Economic Analysis to provide the American public with measures of how economic growth is impacting Americans of different income levels.

GDP growth is one of our most well-known economic metrics, but it does not reflect how the economy is performing for everyday Americans. Academic economists have constructed a dataset like the one the Ranking Member's bill would direct the Bureau of Economic Analysis to build. It gives us a complete picture of how economic growth over the past 60 years has been shared by American workers.

In 2014, for example, the data tell us that total national income growth was 2.1 percent, but for the remaining—for the lowest earning 50 percent of all Americans, incomes grew by just 0.4 percent, while the growth for the richest 1 percent of Americans was 5.1 percent, more than five times as large. This group at the top enjoyed more than 13 times greater growth than that experienced by most Americans.

Looking at aggregate GDP growth alone leads to misleading conclusions about how well the economy is serving its citizens. Unequally shared growth has detrimental effects on our economy.

One particularly stark example is provided by economist Raj Chetty, who found that the likelihood of children earning more than their parents in the United States has declined between the mid 20th century and today. He and his colleagues find that children born in 1940, just before the baby boomers made their way into the world, had a 90 percent chance of earning more than their parents. But for Gen Xers, those born in 1980, it is a coin flip, a 50/50 chance that they would earn more than their parents.

This is not a good outcome in a growing economy. According to Professor Chetty, two-thirds, two-thirds of the gap in mobility between children born in 1940 and those born in 1980 is explained by faster income growth at the very top and stagnating incomes at the middle and bottom.

Policies like the recent Republican tax cuts are likely to further increase economic inequality in the United States. The nonpartisan Tax Policy Center estimates that the Tax Cuts and Jobs Act will cause inequality to increase sharply, with high-income families enjoying larger income gains in both the short and long term than low- and middle-income families. Meanwhile, we have lowered our

ability to finance the much needed investments that have kept children and families out of poverty and grow our middle class.

The purpose of the tax system, as with public policy in general, is to support the living standards of American families. With legislation like the Tax Cuts and Jobs Act, and the additional tax giveaways that Congress is currently considering, we limit our ability to invest in infrastructure, social insurance, and medical research, all of which support the well-being of American families.

As this Committee considers the ways to make a difference in the lives of Americans up and down the income spectrum, I urge you to consider more than just the headline numbers. Our economy is growing, but that growth is distributed unequally, and many Americans are being left out. And that inequality is itself hampering upward mobility for a large share of American people. I would urge the Committee to think about how we can deliver economic growth that is beneficial for all Americans.

Thank you for allowing me to speak today, and I look forward to answering any questions.

[The prepared statement of Dr. Boushey appears in the Submissions for the Record on page 52.]

**Chairman Paulsen.** Thank you, Dr. Boushey.

And during our question-and-answer period, I would just ask members to keep their questions and comments to 5 minutes. And I will begin.

Let me start, Dr. Mulligan, with you first. I think we all know the economy is performing remarkably well in the last 2 years since economic policy has changed. I think there have been only 8 months in the last 49 years where unemployment has been below 4 percent, and three of those months have been this year.

Indeed, economic growth has clearly exceeded the so-called new normal rate we were told to expect, never getting above 2 percent. We could never get above that any longer as a country. We were told to expect that, which is far below the post-war trend. Consumer confidence is now at, essentially, record highs. And, indeed, the data for business investment, production, and employment are positive without unsettling inflation. And the Federal Reserve Chairman, Jay Powell, has also said the economy is doing very well.

After implementation of tax reform at the beginning of this year, many employers started paying their workers special bonuses, better compensation, better benefits. Worker job satisfaction is up, as their willingness now to change jobs is now a sign of rising confidence.

Dr. Mulligan, maybe you can elaborate a little bit on what prompted the Council of Economic Advisers to prepare the primer on proper wage measurement that you are speaking about today.

**Dr. Mulligan.** Yes. As you mentioned in the introduction, most of my career has been as a professor at the University of Chicago in the social sciences. And there, we literally have it etched on the wall: When you cannot measure, your knowledge is meager and unsatisfactory.

And the CEA—that is why I was so glad to join the CEA. That is their mission. We are the geeks. We are supposed to measure

things and give the information to you guys to make the tradeoffs for the people.

And in my own career, I started from the beginning measuring the labor market, measuring human capital. I testified in this Committee before on measuring after-tax wages and pretax wages. In our field, we know how to do these things. When we have the data, we know how to do it.

And we just, at the CEA, we just apply the same old methods that have been used and tried and tested on how to measure labor market performance. And you want to look at the whole package of what people get. Sick pay, they value that. Paternal leave, they value that. Health insurance, they value those things.

And then you want to turn around and understand, what are they able to buy? How much are they having to give off in taxes? How expensive are the things that they want to purchase? And that was the motivation for the CEA report.

**Chairman Paulsen.** Now I will go to Mr. Moore. And, Dr. Roberts and Dr. Boushey, you can comment last. But can you give me a perspective a little bit perhaps on just the economy and how are workers doing? How are consumers and businesses doing? And do you believe that economic improvements are, in fact, being widely shared?

Mr. Moore.

**Mr. Moore.** Well, look, if you look at the data on wages, I think, you know, Mr. Heinrich has a point that, you know, we have been stuck, you know, for 20 years in flat wages. And, in fact, I would make the case this is one of the reasons Donald Trump won the election. The middle class hadn't seen gains in 20 years.

And I will tell you this. You know, there is a perception out there that this tax cut that you all passed last December was for the rich. And I guarantee you, every conversation I ever had with then-candidate Trump was how do we get middle-class wages up. And there are two things in this bill, I think, that have really helped—look, it is early in the game in terms of wages, so we don't have a lot of great data. We do know that the Heritage study shows that just in terms of tax cuts to middle-class families, the average family is saving \$2,000 a year. So that ain't nothing, right? I mean, that is a nice bonus to their paycheck.

But we thought that two things could happen that would raise wages over time. Number one, we want businesses to invest more, right? The only way you can over time—and we have got three—another economist on this platform, so tell me if you think I am wrong, but you need businesses to invest more in capital, and that plays out in higher wages.

The capital-labor ratio and the wage rate are like 95 percent correlated over time. And so we want businesses to invest more, and so far so good on that. We are seeing some really healthy increases in business investment. I go around the country, by the way. I have been everywhere from Portland, Oregon, to Portland, Maine. Every city you go in, all you see is cranes, building, apartment buildings, condos, factories, warehouses. Those are workers that are getting those jobs.

The second thing we wanted to do was to create a tighter labor market. Boy, do we have a tight labor market right now. According

to the latest CB—I mean the Bureau of Labor Statistics monthly jobs report, there are 6-1/2 million more jobs than people to fill them.

That is creating a lot of opportunities for workers to, you know, bargain higher wages with their employers. If they don't like their job now, they can go to—you know, if they don't like what Joe is paying them, they can go to Sally and get a pay raise. So those kinds of factors, I think, will lead to the kind of higher wages that we all would like to see.

**Chairman Paulsen.** I know that upward mobility is key, as you talked about a tight labor market. So of all 435 congressional districts, the district I represent has the lowest unemployment in the country at 1.9 percent.

Senator Heinrich, you are recognized for 5 minutes. Senator Heinrich.

**Senator Heinrich.** Mr. Chairman, I am an engineer by training, so I am a fan of data and I don't think we should ever shy away from the data. But let me suggest that maybe what we should have done here is to actually have a hearing with hourly workers to ask them how they are faring, rather than asking economists how workers are faring. And I think this hearing is an example of exactly why D.C. so often looks out of touch.

Mr. Moore, you stated that CBO estimates show that the tax cuts are paying for themselves, but this is precisely the opposite of what CBO is saying. They have directly stated that the tax cuts will cost \$1.9 trillion even after factoring in additional growth.

Why misrepresent CBO's findings? Why not just say, I disagree with CBO's findings?

**Mr. Moore.** Well, look, Mr. Chairman—I mean, Mr. Ranking Member, it is simply a fact that they have increased their economic growth estimate from before the tax cut to today by—

**Senator Heinrich.** Agree, they did increase their estimate for growth, but then they said that \$1.9 trillion in costs would occur even with the additional—

**Mr. Moore.** So let me explain why that is. So what they are saying—I mean, this is static analysis on steroids. So what they are saying is that none of the increase in economic growth is attributable to the tax cut, but the reason we did the tax cut was to get the economic growth rate up. So—

**Senator Heinrich.** Well, let's take the tax cut aside. The cost is the cost.

**Mr. Moore.** The cost of the tax bill is higher, according to—in other words, what they are saying is incomes are higher and you are getting a bigger economy and, therefore, you have lower tax rates, so you are going to generate less revenue. But that is—the reason we have the \$6 trillion higher growth—

**Senator Heinrich.** Clearly, you and the CBO disagree on how to model this. So let's move on to GDP.

I think GDP is useful. It is certainly the most commonly used indicator to measure the growth of the economy, but it certainly also doesn't tell the whole truth, and it certainly doesn't tell the truth about how costs and growth are shared across the economy.

So, as I mentioned in my previous statement, I would like to see the government measure how economic growth is distributed across

households at different levels in the economy. And I would be curious from all of you, actually, and we will just start with Dr. Boushey and go across the panel. A simple yes-or-no question: Do you agree that having more detailed data on who is benefiting from growth would allow us to better evaluate the long-term impacts of something like the tax cuts?

**Dr. Boushey.** My simple answer to that is yes. And I think my question to those who don't agree that the answer is yes is why you wouldn't want to know where GDP growth goes. It is a really fundamental question for our economy, our society, our democracy. Where does that growth grow and why? What are the reasons that we should not do this? And I think the bar should be very high.

**Senator Heinrich.** Mr. Moore.

**Mr. Moore.** I don't know the specifics about your bill, but certainly when we measure economic policy, economic growth is not everything, right? And we do want to measure how these policies are affecting the middle class and the least among us. So, you know, I would like to see the particulars of your bill, but absolutely, we should look at how the middle class and low-income people are being affected.

**Senator Heinrich.** Thank you.

Dr. Roberts.

**Dr. Roberts.** I totally agree with you. I think GDP is useful, but it, of course, hides what is going on underneath, and we care deeply about how it is distributed. The studies that I mentioned are studies that actually do see how growth has affected people at different parts of the income distribution, and they all contradict the narrative that is based on a different kind of data, which I think is the wrong kind of data.

The studies that follow people over time at different parts of the income distribution find that the largest gains go to the poor, the middle class does very well, and the rich gain nothing or lose money, lose ground.

**Senator Heinrich.** I am still looking for those poor who feel like they have really done great in the last 20 years, but I do appreciate your point.

Dr. Mulligan.

**Dr. Mulligan.** As I quoted, when you cannot measure, your knowledge is meager and unsatisfactory. So, please, let's have the data. I would also say, please, let's not do the misguided economic theory that the economy is a zero-sum game. It is not a zero-sum game. Everybody can benefit at the same time. So more income at the top doesn't mean less income at the bottom. But sure, please, let's measure.

**Senator Heinrich.** In your statement, Dr. Mulligan, you highlighted that if we include benefits, then wage growth is higher. And that is true. Not much, but a little bit higher, certainly. But there are tens of millions of Americans that receive very few benefits from their employers. There are a lot of workers who receive none. Low-wage workers are the least likely to receive benefits. Is there some substantial value in looking at wage growth, in and of itself, without fringe benefits?

**Dr. Mulligan.** Again, when I put it in a market context, Adam Smith talked about this is compensating difference. So, yes, there

are jobs that don't offer benefits, health insurance benefits, let's say, or sick leave. But they would tend to offer other things; maybe a nice schedule or a good location or what have you. And I would want to look at the full picture.

In the CEA's analysis, we included all the Americans, to the extent that the Census Bureau measures them, with our sample of hundreds of thousands of people. So all kinds of people were included in there, including the ones that you mentioned.

**Chairman Paulsen.** Thank you.

Representative Schweikert, you are recognized for 5 minutes.

**Representative Schweikert.** Thank you, Mr. Chairman.

And, look, this is one of those hearings you sort of look to, but I am hoping we can sort of geek out for a moment. And just quick comments on some of the other testimony we have had.

Our baseline before the tax reform was what in the next decade or two decades, about what, 1.8, 2 percent was the baseline GDP growth. The baseline math I think that came out of joint tax was if over the next 10 years we could have a .4 percent growth additional on top of that 1.8, the tax reform paid for itself.

Well, GDP now, right now—now, I know it is just a snapshot—has us at 4.4. So I am sort of heartbroken. There does seem to be this left-right divide on wanting to sort of talk down what should be sort of a joyous opportunity for, particularly, when we actually start to look at what is happening with blue-collar, those without a high school education. And we are only, what, 9 months or 8 months into actually datasets of post-tax reform and a lot of other things going on.

I think I have a more elegant question to go across. If what I am seeing in Arizona right now with my unemployment statistics, with people actually recruiting workers from the homeless campus because they are so desperate for labor, what do we as policymakers, whether you be on the left or the right, what do we do to continue it? As you know, Arizona I think in the first quarter had some of the fastest growing wage growth. What do we do policy-wise to continue that?

Doctor, for you, when we see the benefits that have happened so far this year, how do we create this sort of growth stability? Because we are out of the growth recession. How do we maximize this curve for as long as possible?

**Dr. Mulligan.** I should preface by saying the CEA, we are the geeks, we run the numbers. We do not make the policy. We are aware of the President's agenda and we are studying that.

So one of the things that I think people haven't appreciated yet, and we are going to roll some measures out, is about regulation and deregulation. Regulation is a big problem for business and for the labor market, and steps toward streamlining how businesses run would be very helpful for productivity and wages.

**Representative Schweikert.** Dr. Roberts.

**Dr. Roberts.** There is an infinite number of things you could do to make the economy more effective. Many of them are not under your direct authority. Many of them are State and local regulations that I think make life very difficult for the poorest among us. I mentioned occupational licensing, State minimum wages—or local minimum wages that I think keep people from getting into the

labor market, and particularly real estate housing and land use regulations and restrictions that help rich Americans and make it much harder for poor Americans to come to the cities where the best opportunities are.

And I think, Ranking Member Heinrich, I think that is an area that I think to the extent that you can do something about that. The ability to move to where the jobs are is, I think, greatly restricted by the current real estate market and the rental market for especially young people, and it is a tragedy.

**Representative Schweikert.** Mr. Moore. Could you do your mike button?

**Mr. Moore.** There was an article in—I think it was in The Wall Street Journal a week or two ago about that truckers in Texas are now getting \$25,000 and \$50,000 signing bonuses, you know, like they are Derek Jeter or something like that, I mean.

So, I mean, employers are really hungry to get workers. And I do anticipate that they are going to—if we continue to see this strong demand for workers, you are going to see increases in wages, which is exactly what we want.

The one thing I would just add to this, I think one of the biggest problems, in terms of when you just look at wages why they aren't growing, is the healthcare costs. And I think this is something we kind of all would agree on. We may have very different prescriptions about what to do about the healthcare cost.

**Representative Schweikert.** Was that a pun?

**Mr. Moore.** Sorry?

**Representative Schweikert.** Never mind.

**Mr. Moore.** No, I am just saying, you know, that that—as Casey Mulligan was just saying, that, you know, when you have employers that face higher and higher healthcare costs, that comes out of the wages of the workers. If we can do something to lower health insurance costs for employers—ObamaCare was supposed to do it, it obviously didn't work—you will help drive up wages.

**Representative Schweikert.** Dr. Boushey.

**Dr. Boushey.** So growth happens when you see increases in productivity and increases in people participating in the labor force. Keeping this recovery going, I think one of the things that we should be focusing on—a number of my colleagues have talked about labor force participation. There are a number of policies that could pull those folks who are still not back in the labor force back in if the employment rate continues to be lower than it was. So things like addressing the challenges that families face between work and care, policies like universal childcare, paid family leave, paid sick days and the like could go a long way.

**Representative Schweikert.** I think you are brilliant on labor force participation, because whether it be those things, the ability to access work, but also our incentives not to work that are often built into our social entitlement systems.

Look, we never really get around to the honest conversation of velocity of our brothers and sisters being able to move from poverty statistics and up. We know we just spent a couple decades where velocity had seemed to shrink. I am desperately hoping we are back to a time where there is opportunity, because that is the most honest, fair thing for all of us. And, hopefully, it is all of our goal.

And with that, I yield back, Mr. Chairman.

**Chairman Paulsen.** Representative Delaney, you are recognized for 5 minutes.

**Representative Delaney.** Thank you, Mr. Chairman.

Mr. Moore, I just wanted to follow up on the Senator's question about your view of the tax cuts. You had said that the economic growth projections were updated by \$6 trillion, based on the stimulative effect of the tax cuts, which I agree they have been stimulative and they have driven the economy to higher levels. And then you said that will likely produce a trillion dollars of additional revenues, which already pays for two-thirds of the tax cut.

But isn't "already" not the right word there? Because if they actually take the stimulative effect and they projected it out for 10 years, isn't really the thing to say that that is the most it can ever do is pay for two-thirds, unless the rate of growth were, in fact, to accelerate above what the rate of growth is now?

So isn't that the right way to think about it? It has already been modeled for 10 years, based on what you said. Unless economic growth rates continue to accelerate at an increasingly faster rate, the tax cuts will never pay for themselves.

**Mr. Moore.** What they have basically done is they have looked at the economic growth that has happened just in the last 6 to 9 months.

**Representative Delaney.** Yes.

**Mr. Moore.** And they are saying, wow, this is a lot higher than we thought it would be. And when you get—

**Representative Delaney.** And they projected it out 10 years.

**Mr. Moore.** Right. Yes.

**Representative Delaney.** And you are saying that is another trillion dollars.

**Mr. Moore.** Right.

**Representative Delaney.** So that is all we will ever get is my point.

**Mr. Moore.** What they are saying is we have had this bump up in growth, right?

**Representative Delaney.** Yes.

**Mr. Moore.** And that even if we revert back to the low growth rate we have had over the last decade of like 1.8 percent, so you get like the 4 percent bump up and so everything in the future is higher, right? And so they are assuming that you revert back to the low growth rate.

Now, look, I think you are going to have—we can all disagree about what growth will be in the future, but the point is, just based on what has already happened, they say you are going to get this extra \$6 trillion.

**Representative Delaney.** Let me just switch for a second. Dr. Roberts, I just have a question about kind of averages and what has happened. I mean, just to frame the question, like if you, me, and my favorite recording artist, Bruce Springsteen, were to go to lunch, someone would accurately say that that table, on average, has 17 Grammys. Well, in reality, he would have 50, and I don't know, you may have a Grammy, I don't. Neither of us.

So are you familiar with the work of Ray Dalio, who is a very successful investor? He recently deconstructed all the economic

data since 1980 and basically broke the country down into the top 40 percent and the bottom 60 percent. And he said the top 40 percent used to make two and a half times more than the bottom 60; now they make four times more. They used to have six times the wealth; now they have ten times the wealth. They used to spend twice on their education of their kids; now they spend four times.

And his point is, there is really no average American anymore, that there is the average of the top 40 and the bottom 60, and those groups are kind of stunningly disconnecting, which, in my judgment, is because the world has changed profoundly, because of globalization and technological innovation. And we haven't done the basic things we should have done to update the social compact, if you will, to prepare our workers for this change. So they have been left behind.

Do you dispute that that is actually happening?

**Dr. Roberts.** Well, I haven't seen—you asked me if I was familiar with his work. I have seen many things he has written. I haven't seen that particular analysis. Many of those analyses rely on household income. And, of course, there has been an extraordinary transformation of household structure in the United States since 1980, since late 1970s.

There has been a huge increase in divorce, a reduction in the proportion that is married, and a large increase in the number of households that are headed by a single person. The delay in marriage rate, the increase in divorce, and then the reduction in remarriage has caused there to be a lot more people living on their own. Now—

**Representative Delaney.** But wouldn't, in fact, what has happened actually cause that? So I would agree that that has been an accelerant of the change.

**Dr. Roberts.** It could.

**Representative Delaney.** But that phenomena that you are talking about, the rate—because in the instance of marriage, for example, it has never been healthier in the top third of this country and it has never been worse in the bottom two-thirds. So those are accelerants, but isn't the disconnection the underlying cause of those accelerants?

**Dr. Roberts.** Well, they could be a factor, and the causation could run in both directions. What is certainly true, though, is that when we try to measure what has happened to the groups of people in a different part of the income distribution—which is a good idea because the average is not representative. So we go to median, then we go to the middle quintile, we go to the bottom quintile. What we do is, if we don't correct for those changes in structure, we get a distorted measure of how those people are doing.

One way to solve that is to follow the same people over time. And when you do that—

**Representative Delaney.** Do you think those changes account for those dramatic differences, actually, though?

**Dr. Roberts.** Well, when you look at the same people over time, you see that the story is reversed from the one we usually hear. The poorest and the middle class get more of the gains than the rich, and that the income distribution is actually shifting toward—

the reason that the bottom is not doing so well is that people are doing better moving into the middle and the upper class.

**Representative Delaney.** This reminds me of the—and I don't mean this disrespectfully at all—the Mark Twain expression, “lies, damned lies, and statistics,” right? And that is kind of part of our problem—

**Dr. Roberts.** Oh, yeah.

**Representative Delaney** [continuing]. Which is really trying to agree on the facts here.

So, anyway, I yield back, Mr. Chairman.

**Chairman Paulsen.** Representative Maloney, you are recognized for five minutes.

**Representative Maloney.** Thank you, Mr. Chairman and Ranking Member. And I thank all of the panelists.

And I would particularly like to thank Dr. Boushey for your kind words about the legislation that the Ranking Member and I put forward. And I want to give you credit for the research that you did that provided the intellectual foundation for the bill.

And I really urge my colleagues here to read her report on disaggregating growth and measuring who prospers when the economy grows, and ask unanimous consent to put it in the record.

[The report titled “Disaggregating growth: Who prospers when the economy grows” appears in the Submissions for the Record on page 67.]

**Representative Maloney.** So I would like to ask you, Dr. Boushey, why is wage and jobs data alone not sufficient to understand the economic status of most Americans? And how does a single estimate of GDP fail to represent the economic health of our families and our Nation?

**Dr. Boushey.** Thank you. Thank you, Congresswoman Maloney, and thank you for your support of this idea. We think it is an important one for the American people.

And one of the things that we see and we kind of—we see in this conversation today, we often have this conversation about what is happening in terms of growth separate from how that is actually benefiting the American people. And it is time that we actually merge those conversations together. So when we talk about economic performance, we are actually talking about who benefits up and down the income spectrum, not this abstract notion of growth being one thing and what is happening to American families being a separate issue, with data delivered on different months and days. So we are not having that conversation together. I think it is imperative that we start talking about them together.

And I think that once you do, you see this different trend emerge, which is that the economy can grow, but only the people at the top benefit. And I take very seriously many of the comments of my colleagues up here that, you know, that we need good data, that we need to look at what happens to people over time and look at mobility. But one thing that we need to make sure of and that this data would allow us to do is to look at what younger people are experiencing in the economy, cohorts of people over time, different demographic groups.

And one of the things that we know is that people who have come up since the 1980s are actually seeing worse outcomes than

their parents at similar ages. That is probably one of the most important metrics for American economic success.

So it is not enough to just follow people over time or to look at the aggregates, but to look at how cohorts have been faring over time and to see that actually younger and younger cohorts are not seeing the benefit of the American Dream, the benefit of economic growth, and that that underpins, I think, a lot of the frustration that American families are feeling.

**Representative Maloney.** Well, can you give us an explanation of why wage growth is slow despite what is otherwise a strong economy?

**Dr. Boushey.** Well, there has been a lot of debate among economists on these issues. And, you know, some argue that it is continued ongoing slack in the labor market; that although we are at full employment measured by the unemployment rate, the share of Americans with a job remains lower than it had been in other recoveries. That may be playing a factor. But I think there is more consensus on the fact that it is because of the slow productivity growth, that that has been—that the pace of that has slowed and so you are not seeing the foundation for wage growth.

However, the big issue does appear to be that even when we see productivity growth, even when we see those gains, even when we are at full employment, workers aren't benefiting. So that comes down to their bargaining power, the declining unions. And increasingly, economists are showing evidence that the rise in the concentration of capital, that the rise in what economists call monopsony power, which is a mouthful, but it basically means that in a lot of communities workers have few or maybe only one potential employer. Certainly, you know, healthcare is a perfect example. If you are a nurse and you work at a hospital, almost any hospital you work at is owned by the same person. These all drag down wages.

**Representative Maloney.** My time is almost up, but I would like to mention, as you know, the tax cuts were sold to the American people on the basis of three primary claims: that they would be fair, not tilted towards the wealthy; that they would create jobs; and that they would increase wages.

In the interest of time, I just want to flip to the third point: wages. I would like to really go to a chart that was produced by your organization. And this graph shows various projections of the impact of the first round of the tax cuts on wages. And can you help us understand this slide? Why is there such a large disparity between various estimates of wages growth? I mean, it is probably—

**Dr. Boushey.** Well, and I think in many ways, unfortunately, the CEA report that was talked about today actually sort of demonstrates the case that we actually haven't seen the kind of wage growth that we would expect after these tax cuts, based on the arguments that were presented in advance and the estimates.

That if that tax cut was successful, we should have seen sharply rising wages and, instead, we have seen wages that have—they have been increasing sort of on par with what they were doing before. They should have increased sharply relative to trend. That is

not what we have seen. That is what was predicted. The American people were lied to or we didn't get what we deserved.

And then second, you know, what we have seen is most of the money has been going to stock buybacks. We are now back to where we were at the record-breaking level in 2007. What happened in 2008, right? This was not a good economic indicator. So the tax cuts have created growth. They should have. It was a lot of money pumped into the U.S. economy. It would have been ridiculous if growth hadn't gone up. But it has not delivered the wage gains that they said it would. Wages should have increased sharply, they should have spiked. They didn't. And instead, that has all gone disproportionately to share buybacks, benefiting the richest Americans, and not leading to the productivity gains that we need to see to grow our economy over the long term.

**Representative Maloney.** Thank you. My time is up.

**Chairman Paulsen.** Thank you, Dr. Boushey. I think our other witnesses may disagree with that.

But, Senator Lee, you are recognized for 5 minutes.

**Senator Lee.** Thank you, Mr. Chairman. Thanks to all of you for being here. It is good to see you.

Dr. Roberts, I would like to start with you. Could you explain something to us, just in a minute or so, called Simpson's paradox?

**Dr. Roberts.** Only a minute? Could I—

**Senator Lee.** You have a great vendor online that does it in a couple minutes.

**Dr. Roberts.** Simpson's paradox is the phenomenon that composition changes can affect how people in trends are measured over time. To take an example, there is a study done of poverty rates from 1967 to 2003 by Hilary Hoynes, Marianne Page and Ann Huff Stevens in the Journal of Economic Perspectives. Every type of family had a dramatic drop of at least 20 percent in the poverty rate, except for one group which was 10 percent. That group was very small. That was, I think, single men without children. But women with children, their poverty rate fell by more than 20 percent. Married couples, their poverty rate fell by more than 20 percent.

So when you look across all six groups, you would think that the average poverty rate should have dropped by about 20-something percent. One group had a 29 percent drop. A huge decrease, wonderfully, in the poverty rate among single women with children.

But the poverty rate barely budged. How could that be? Shouldn't it be a weighted average of the different groups? And the answer is it is not because the proportions of the groups change. And over that time period, we got an enormous increase, almost a doubling, in the group with the highest poverty rate, which was single women with children. So as a result, the measured poverty rate didn't change.

The question is, when you are looking at how growth affects poverty, you probably want to take into account the fact that, at the same time, demography, the demographic structure of the United States was changing, and you wouldn't want to say that the economic growth over that time period had no effect on poverty if at the same time there was something else going on.

How did I do?

**Senator Lee.** So they don't all weigh the same and they shake down differently.

**Dr. Roberts.** And the weights change over time.

**Senator Lee.** I have got a graph in front of you that I think tends to show some of this. So—

**Dr. Roberts.** Simpson's paradox.

**Senator Lee.** Yes, exactly. So between 1969 and 2016, as this chart indicates, median household income rose by 37 percent, but the increase would have been much larger if there had not been significant changes in family formation, family structure, and family dissolution. And among households that are headed by married parents, median income nearly doubled. And among households headed by single mothers, it rose by more than 60 percent. And yet, you see that the median household income rose by 37 percent, which is significantly lower than this lowest performing cohort that I described.

So would you say this is an example of Simpson's paradox being played out?

**Dr. Roberts.** It is. And it is an example of how challenging it is to assess the effect of the economy on different groups when other things are happening in the background. It is really a lesson in the complexity of economics and how often Mark Twain was right, because sometimes it is very hard to know what statistics are actually measuring.

**Senator Lee.** As the studies done by my Social Capital Project have shown, families today are twice as likely to be headed by a single parent as they were at the end of the sixties.

So I would like to ask you, is there anything that we can look to in terms of Federal policy that might either be pushing this trend or that could alleviate it, could improve it? In other words, people tend to perform better if they have two-parent households. What Federal policies, if any, can you think of that might help that?

**Dr. Roberts.** Well, I will leave my other panelists to respond more to that, but I would simply say that I don't think we fully understand the causal relationship between family structure and income.

I don't think the Federal Government should be necessarily in the business of particularly trying to design the American family, but they should get rid of any barriers that make it expensive to be married. I would certainly agree with that.

**Senator Lee.** Sure. And I agree with you on both points. It is not the Federal Government's business to coerce, cajole, or lead people into any particular family structure. If, on the other hand, it is doing something to actively discourage people from getting married, if it is punishing them for doing so, that could be a problem and it could be a problem that leads to less favorable economic outcomes.

Mr. Moore, in the time I have left, would you have anything to add in terms of Federal policy that might be affecting this?

**Mr. Moore.** You mean with respect to—

**Senator Lee.** Family formation, dissolution.

**Mr. Moore.** Welfare policy. I mean, you really have to look at whether our welfare policies are encouraging out-of-wedlock births

and whether it is leading to higher divorce rates. And there is some evidence that it is. So we ought to have policies on welfare that encourage work and discourage nonmarriage.

**Mr. Moore.** Thank you very much. I see my time has expired, Mr. Chairman.

**Chairman Paulsen.** Thank you.

Senator Heinrich has another question.

**Senator Heinrich.** Dr. Roberts, I wanted to follow up on something you said and would even be curious to hear my colleagues' opinion on this. I don't want to misquote you, but I think you said one of the things we need to do is make sure that people can move to where the jobs are.

And I often hear this with regard to rural versus urban demographics, that people should just move to where the jobs are. We used to take the approach that we need to connect our economy and invest in rural areas as opposed to just say to rural people they should move to the cities.

What exactly do you mean? Because my approach would be to say, we need to connect those economies. We need to have broadband in rural communities, for example, so that they can access that economy. But I think to suggest to rural communities that their solution is just to pick up and move to the cities seems to be a little myopic.

**Dr. Roberts.** Well, that has been the trend of world history for the last, I don't know, few hundred years. It is true in China. It is true in the United States. People have chosen to move to urban areas.

I didn't mean to suggest that we ought to encourage them to move. I was suggesting that the barriers to that natural movement, which is where the most dynamic parts of the economy are right now, the barriers that are there because of the high cost of housing and the high cost of real estate, those barriers are artificially high due to restrictions on zoning and other regulations.

As to connecting the rural to the urban, I think it would be great if rural areas were thriving. I care more about the people than the areas. I don't see any reason to invest specifically in rural areas, per se. They should certainly have the benefits that all Americans have that the Federal Government's activity leads to. But I don't think we should focus on the fact that those areas are struggling. I am worried about the people that are there. We certainly should help them invest in the skills they need. And if they want to stay in those rural areas, which many people do, because it is a different lifestyle and pleasant for a thousand other reasons than high wages. I would never want to suggest that money is the only thing that matters.

**Chairman Paulsen.** Thank you. Dr. Roberts, let me follow up with one additional question before we close out. There are increasing numbers in our population now that are retired or going to be retiring soon. And that means you are going to have fewer people with measurable income, though a lot of those folks now will be drawing down their savings that they have had accumulated over a lifetime.

So is income equality a very useful metric to measure welfare or will this sort of demographic—it is a combination—will this sort of demographic change affect our median household income statistics?

**Dr. Roberts.** Well, it is incredibly complicated. Obviously, we care. We have talked I think exclusively today about wages and nonmonetary forms of compensation. Wealth, of course, also matters. It points out to how complicated it is to assess well-being. Some of the richest people today are very poor right now. They are students. They are going to have successful lives. We capture them in our data as poor, most of them, and, of course, many of them will go on to be extremely successful financially.

In terms of measurement, retirement and the increasing numbers of people who are retired have distorted a number of studies that have been done of well-being and the median and trying to assess how people have done over time, because we have, my generation—I am 64. I was born in 1954. I don't plan to retire soon. I hope that is okay. I like working a lot. I love my job.

But as that bulge of baby boomers goes out into the—went out into the economy and now is leaving the economy, that is causing all kinds of measurement changes.

**Chairman Paulsen.** Is there some other metrics that might be better to help gauge—

**Dr. Roberts.** Say again.

**Chairman Paulsen.** Is there another metric we might use to measure overall well-being?

**Dr. Roberts.** Well, I certainly would never want to use—as I mentioned earlier, I would never want to use just money, but we do want to at least see how people are doing financially.

And I am very—I like the idea of trying to measure how people have done over time. I think it will show that the American economy benefits a lot of people more than people tend to think, because it is very dynamic. And its dynamism is hidden by the fact that these underlying demographic changes—we haven't talked about immigration, the large number of people—you alluded to it earlier.

Poor people are desperate to come here for the opportunity to be poor. They don't come here for welfare payments. They come here for the opportunity to work. And they thrive. They do much better than they did where they came from in their home countries. But they really come here to improve the lives of their children.

And, again, I think if we take a longer perspective, which I think we should do with almost all economic policies, and look across generations when we can, we should take account of the fact that the longer run impact is tremendously larger than the short run impact.

**Chairman Paulsen.** Dr. Mulligan, Representative Maloney had put up the chart earlier about the CEA estimates earlier I think on wage levels being higher. Any comments you may have to refute that? I mean, you offered some of that in your testimony. But, obviously, whether it is stock buybacks, that is just not a dollar that disappears in the economy, that goes somewhere else. But any other thoughts, in terms of your analysis?

**Dr. Mulligan.** Yes. Thank you. I appreciate having the opportunity. It was asserted that the CEA forecast for the year 2027

was, number one, out of bounds from the experts; and, number two, that it was proven incorrect, okay?

Number one, it is not out of bounds from the experts. Two experts wrote a paper together for Brookings. Professor Barro, who was one of my teachers, and Jason Furman, who was one of the main advisers in the Obama Administration, together they wrote a paper, came up with a very similar estimate that CEA did. That wasn't shown on that chart. Professor Kotlikoff did an analysis, similar estimate. It wasn't shown on the chart. So that was a cherry-picked chart in terms of CEA being out of bounds.

The second thing is no decent statistician would use 5 months of data into the policy to refute a 120-month forecast. And that is what was done here today, and that is absolutely wrong. No econometrician or no statistician would advise doing that, and I don't advise doing that. We have been 5 months through. But if you want to play that game, then you should take 1/24th of what was promised, because we are 1/24th of the way there. And CEA's wage report clearly shows that people have gotten way more than 1/24th of the way to the 10-year goal.

Thank you.

**Chairman Paulsen.** Well, I would like to thank again all of you for being with us today and taking the time to provide your testimony before the Committee.

And I remind members, should they wish to submit questions for the record as well, the hearing will remain open for 3 business days.

And, with that, our hearing is adjourned.

[Whereupon, at 12:00 p.m., the committee was adjourned.]

## **SUBMISSIONS FOR THE RECORD**



I call this hearing to order.

America is a beacon to the world. It is the land of opportunity, where everyone has a shot at the American dream.

Our Nation isn't perfect, of course, and not everyone gets to start from the same position. Many Americans face tremendous adversity.

As lawmakers, we must avoid standing in the way of Americans being able to enter the workforce, or switching to jobs that pay more, offer better benefits, or provide greater flexibility.

Since commonsense pro-growth policies have been implemented, we have seen a groundswell in opportunity. The so-called "quit rate" as measured by the Bureau of Labor Statistics is at its highest since 2001. Workers are more confident to leave their old jobs for new ones.

The Atlanta Federal Reserve Bank's monthly Wage Growth Tracker, which is derived from Census Bureau data, reports that wage growth among job switchers was 3.3 percent higher than one year ago. Job satisfaction is its highest since 2005 according to a survey by the Conference Board.

These are positive signs as opportunities expand for everyday Americans.

And contrary to claims that economic growth is only benefiting the wealthy, the unemployment rates among those workers who normally face the greatest challenges in the job market have fallen drastically since pro-growth policies were initiated:

Among those without high school diplomas, the unemployment rates of blacks, Hispanics, and whites have fallen 8.1, 3.8, and 3.3 percentage points, respectively.

According to a Washington Post analysis, there's been a 3.3 percent increase in jobs for blue-collar workers in goods-producing jobs, the best rate since 1984.

A New York Times article states that "The number of Americans seeking Social Security disability benefits is plunging, a startling reversal of a decades-old trend." It cites a stronger economy as the cause.

This is how we look at the full picture of our economy: By looking at a variety of indicators.

While my friends on the other side of the aisle look at downward movements in measures of average and median worker earnings, they fail to see that the median worker today is not necessarily the same person as last month, or last year, or a decade ago. It is possible for these measures to decline, even when wage rates are rising!

Many critics fail to acknowledge that people move in and out of different income ranges over their lifetime.

Just because it is not easy to measure progress across a population of over 320 million people, we should not assume people are tethered to a given income percentile over their lifetime despite ample evidence to the contrary.

Millions of people from all over the world continue to relocate to the United States despite tremendous risks and numerous challenges. Clearly it is because America remains the land of opportunity.

We must take care in reading headline statistics otherwise we risk creating policies that destroy the potential for real progress.

If we allow people to thrive, they will thrive. If we allow American businesses to invest in their workers, they will invest in their workers. If we let Americans keep more of their money, they will put it to the best uses for their families and their own well-being, and our economy will thrive.

Our future will only be brighter if we follow the path of smart economic policy. Our prospects for a brighter future will be dimmed if we go back to the old ways. For instance, Democrats are threatening to increase taxes to where they were prior to the Tax Cuts and Jobs Act.

America's tax rate for doing business would surge back to the highest in the developed world, and would undo the growth-enhancing economic incentives that have powered increased private domestic investment and economic growth in less than two years. American workers will not have as much of the capital investment to work with that is critical to raise productivity, and that would be bad news for future wage growth.

The success of recent economic policy is clear. We are again relying on the ability of people to climb up the economic ladder, to grow, and thrive.

Our star panel of witnesses will help explain the progress made to date and how and why, with pro-growth policies, we can continue to prosper as the great Nation we know America to be.

Before I introduce our witnesses, I now yield to Ranking Member Heinrich for his opening statement.

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PREPARED STATEMENT OF HON. MARTIN HEINRICH, RANKING MEMBER, JOINT  
ECONOMIC COMMITTEE

Thank you Mr. Chairman.

I have a sense of déjà vu—another hearing on the Republican tax law that passed nine months ago. Another attempt by Republicans to convince their constituents that they are better off because of that law.

But there's a problem. Despite White House promises, working families aren't better off, and another hearing won't change that.

Wages are stuck. The typical worker's hourly wages, after adjusting for inflation, were lower in August than a year ago.

What has increased is the cost of this tax giveaway. When Republicans passed the bill last December, the estimated cost was \$1.5 trillion. Today, it stands at \$1.9 trillion.

It was a massive waste of resources when workers could least afford it and when we should have been investing in our people and communities.

Most working Americans have been treading water, with middle-class earnings stalled for years. The typical man working full time year round earned less in 2017, after adjusting for inflation, than in 1973.

While earnings have been stagnant or shrinking, the costs of child care, housing and education have climbed higher, with student loan debt exploding in the past decade.

We'll hear today that we just need to look at a different inflation measure or use a different survey, and then everything looks great.

But telling people across New Mexico, don't worry, you are doing better than you realize won't make it easier for them to pay for their kids' college. It won't help them get health insurance or treatment for addiction.

Even as those in the middle work harder and harder to make ends meet, those at the top continue to reap large income gains.

Between 1980 and 2014, the top 1 percent saw their pre-tax incomes grow by 204 percent while incomes for the bottom 50 percent remained virtually flat.

And, with passage of the Republican tax bill, the gap between those at the top and everyone else is likely to grow significantly wider.

Part of the challenge we face is that we need better, more timely economic data to help us craft smart, forward-looking policies.

Knowing in real time who is benefiting from economic growth—and who is not—is key to designing new policies that generate growth which benefits everyone.

Along with Leader Schumer and some of my JEC colleagues, I have introduced legislation that instructs the Bureau of Economic Analysis to start reporting on new Income Growth Indicators.

These measures would show how incomes are growing at different levels of income—painting a clear picture of who the economy is working for.

We also need a sustained effort to lift the living standards of working families and to help workers chart a brighter course for themselves and their families.

We should invest in programs that reward work and help Americans prepare for 21st century jobs.

Increasing the value of Pell Grants so that a college education is within reach for more students is a good place to start.

I have a proposal to expand Pell Grants for students across the country—in New Mexico, the increased Grant would cover the full cost of tuition at all of New Mexico's in-state colleges and universities.

Let's expand the Earned Income Tax Credit so that work pays better and more families are able to afford the basic necessities. We should have done that in the Republican tax bill.

Rather than turning the clock back and again allowing insurance companies to deny coverage to those with pre-existing conditions, as the Trump administration is trying to do, we need to build on recent gains to make health care more accessible and affordable.

We also need to be smarter about how we use our Nation's fiscal resources.

After squandering \$1.9 trillion on the tax bill, the House is preparing to vote on the Republicans' Tax Plan 2.0. This legislation would add \$3.2 trillion to deficits from 2029 to 2038, bringing the total cost of their tax bills above \$5 trillion.

And remember, the majority of these costly tax breaks go to the richest among us.

I don't think we can have a hearing on living standards without asking ourselves—what will happen to the quality of life for tens of millions of Americans who count on Social Security, Medicare and Medicaid if Republicans add literally trillions to deficits and then turn to these programs as their piggy bank.

The consequences would be disastrous.

I look forward to our witnesses' testimony.

**Testimony before the Joint Economic Committee**

**Hearing on "Examining the Rise of American  
Earnings and Living Standards"**

216 Hart Senate Office Building  
September 26, 2018

by

Casey B. Mulligan

Chief Economist, Council of Economic Advisers

**Measures of Compensation as Indicators of Economic Performance**

Good morning Chairman Paulsen, Ranking Member Heinrich and Members of the Committee. Thank you for this opportunity to comment on wages and labor market performance.<sup>1</sup>

The American economy is growing again, but many in the media, policy circles, and academia have been puzzled by what appear to be stagnating real wages.<sup>2</sup> The hourly amount that workers are paid can be an important indicator of economic performance and economic policies. But how wages are measured turns out to greatly affect estimates of their level and trend over time.

Several features of the available wage data provide an incomplete picture. Most national measures of wages focus on a ratio that has cash earnings in the numerator and a denominator of either time worked or time paid, measured in hours or weeks. Wage changes are then calculated as the difference between the current value of such a measure and what this measure was in a previous month or year. But because cash earnings do not include the important fringe benefits available in many jobs, and the usual measures neither net out payroll and income taxes owed as a consequence of working, this approach misses an important part of the economic value of work for the worker and his or her family. Moreover, cash earnings are naturally measured in dollars and are thus affected by changes in the value of a dollar over time due to inflation.

In addition to the difficulty with focusing on cash earnings in the numerator, the denominator in the calculation poses additional challenges for an accurate assessment of wage changes. Although not all wage data do so, it is important to distinguish between hours paid and hours worked, because a number of employers pay their employees while they are not at work—on vacation, sick leave, or parental leave. As is recognized in the Bureau of Labor Statistics (BLS) productivity statistics, hours worked rather than hours paid is the proper denominator for measuring either productivity or what a worker received per hour worked (BLS 2015).

All the current data measures begin with a sample of individuals who happen to be employed at the time of the survey (or a sample of jobs held by those individuals). But the people employed today make up a somewhat different group than those who were employed last year, and a quite different group than those who were employed a decade ago (Jeong, Kim, and Manovskii 2015). Movements of people in and out of the workforce systematically bias

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<sup>1</sup> My testimony is based on a recent report issued by the Council of Economic Advisers entitled “How Much Are Workers Getting Paid? A Primer on Wage Measurement” available at <https://www.whitehouse.gov/wp-content/uploads/2018/09/How-Much-Are-Workers-Getting-Paid-A-Primer-on-Wage-Measurement-Sept-2018.pdf>.

<sup>2</sup> See Long (2018), OECD (2018), Chetty et al. (2014), and Guvenen et al. (2017), respectively.

the usual wage growth measures away from being reliable indicators of individuals' experiences.<sup>3</sup> Every year young, inexperienced people enter the workforce, and thereby they are included for the first time in the national average, at wages below those of more experienced workers.<sup>4</sup> And every year, some of the most experienced, and highly paid, workers retire and thus cease to be included in the national average. Both these life cycle events substantially reduce the national average wage, especially now that Baby Boomers are retiring. All these issues can be addressed, and valid inferences can be obtained, by properly using the various publicly available wage data.

The recent BLS fringe-benefit data show how workers have been receiving bonuses, which contribute to the growth of their compensation but are not included in the headline wage measures. The data also show how employers have been providing more paid time off, which means that earnings per hour worked is increasing more than earnings per hour paid. Health insurance, on the other hand, has not significantly added or subtracted from recent compensation growth rates.

Holding the composition of the workforce constant, the annual growth rate of real compensation over the past year (2017:Q2–2018:Q2) has been almost 1 percentage point higher than the usual wage measures deflated with the Consumer Price Index (specifically, the Consumer Price Index for Urban Consumers, CPI-U). In other words, real wages grew 1.0 percent rather than the 0.1 percent that is usually reported from the monthly “Real Earnings” release.

Moreover, taking into account the personal income part of tax reform (the Tax Cuts and Jobs Act of 2017), after-tax real (after inflation) compensation grew 1.4 percent over the past year, well above the near-zero real wage change suggested by headline measures.

I want to be clear that this analysis is not a critique of the Federal bureaus that provide us such excellent data. The Federal agencies are providing a number of data products that address each of the things I mentioned today. The problem is that these additional products get too little attention when it comes to assessing how the labor market is performing.

When the average real household income grows at 1.4 percent per year, that means an additional \$1,000 every year, beyond what is required to keep up with inflation. The additional income is even greater when we recognize that the average household now has more members with jobs and that each worker is accumulating work experience over time that translates in to yet higher pay. None of this is a surprise given that recent Federal policies have been encouraging business formation and removing disincentives to work.

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<sup>3</sup> Similar approaches are sometimes used to measure labor productivity or employer cost: taking output or compensation per hour worked without any adjustment for changes in the composition of the workforce. Much of the discussion that follows therefore applies to the measurement of labor productivity and employer cost.

<sup>4</sup> “Workforce” refers to the set of people employed (although not necessarily at work, because they could be on paid leave), which differs from the labor force in that the workforce excludes the unemployed.

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**EXAMINING THE RISE OF AMERICAN EARNINGS AND LIVING STANDARDS**

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**Joint Economic Committee**  
September, 26, 2018

Chairman Paulsen, Ranking Member Heinrich, Vice Chairman Lee, Distinguished Members of the Committee—thank you for the opportunity to testify today on the crucial issue of American earnings and living standards.

Adjusted for inflation, the US economy has more than doubled in real terms since 1975.

How much of that growth has gone to the average person? According to many economists, the answer is close to zero.

In a recent gloomy study of the American economy, Thomas Piketty, Emmanuel Saez, and Gabriel Zucman find that almost none of the gains from economic growth accrued to the bottom half of the population. They write, "Looking first at income before taxes and transfers, income stagnated for bottom 50% earners: for this group, average pre-tax income was \$16,000 in 1980—expressed in 2014 dollars, using the national income deflator—and still is \$16,200 in 2014."<sup>1</sup> Piketty, Saez, and Zucman also found that incomes of the top 1% tripled over the same time period.

New York Times columnist David Leonhardt, reacting to this work, concluded "the very affluent, and only the very affluent, have received significant raises in recent decades."

Most people believe that the middle class and the poor are stagnating, treading water, while the rich get all the goodies. Nobel Laureate Paul Krugman writes that "Wages for ordinary workers have in fact been stagnant since the 1970s."<sup>2</sup> Jared Bernstein writes in the New York Times, "for middle-income households earnings have declined in real terms 7 percent from 1979 to 2010."<sup>3</sup>

But these depressing conclusions rely on studies and data that are incomplete or flawed. They understate economic growth for the poor and the middle class because they use measures of prices that mis-measure inflation. They leave out important components of compensation such as fringe benefits which have become increasingly important in recent years. Some studies include the elderly which lowers measured progress because the elderly are an increasing share of the population and they are less likely to be working full-time if at all.

And many of the most pessimistic studies about the fate of the American middle class ignore the breakdown in marriage among the poorest Americans and the effects that demographic change has had on the way we measure changes in household income.

But the biggest problem with the pessimistic studies is that they never follow the same people to see how they do over time. Instead, they rely on a snapshot at two points in time. So for example, researchers look at the median income of the middle quintile in 1975 and compare that to the median income of the median quintile in 2014, say. When they find little or no change, they conclude that the average American is making no progress.

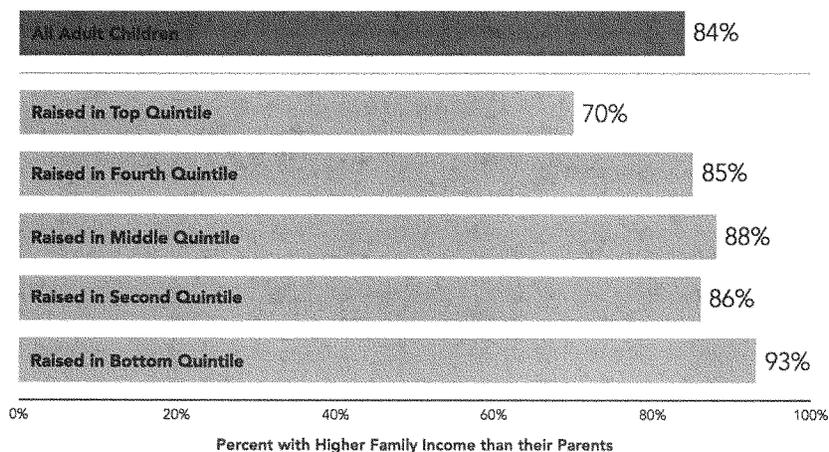
But the people in the snapshots are not the same people. These snapshots fail to correct for changes in the composition of workers and changes in household structure that distort the measurement of economic progress. There is immigration. There are large changes in the marriage rate over the period being examined. And there is economic mobility as people move up and down the economic ladder as their luck and opportunities fluctuate.

When you follow the same people over time, you get very different results about the impact of the economy on the poor, the middle, and the rich.

Studies that use panel data—data that is generated from following the same people over time—consistently find that the largest gains over time accrue to the poorest workers and that the richest workers get very little of the gains. This is true in survey data. It is true in data gathered from tax returns.

Here are some of the studies that find a very different picture of the impact of the American economy on the economic well-being of the poor, middle, and the rich.

**Eighty-four Percent of Americans Exceed their Parents' Family Income**  
 Percent with family income above their parents, by parents' quintile

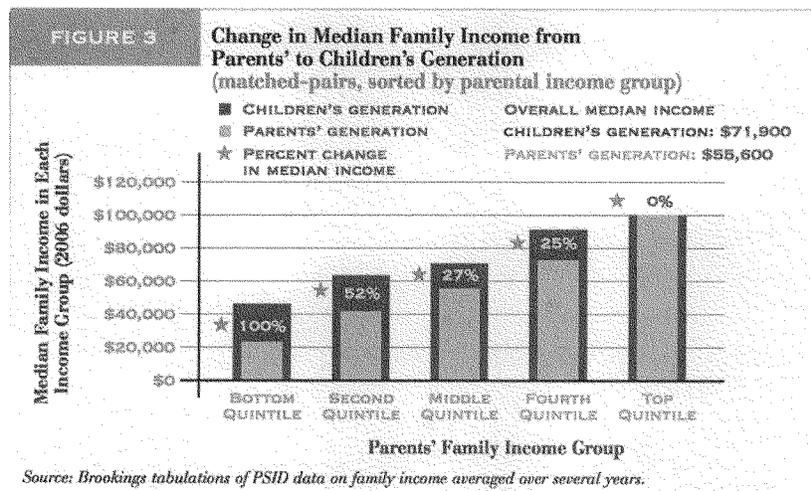


Note: Income is adjusted for family size.

This first study, from the Pew Charitable Trusts, conducted by Leonard Lopoo and Thomas DeLeire uses the Panel Study of Income Dynamics (PSID) and compares the family incomes of children to the income of their parents.<sup>4</sup> Parents income is taken from a series of years in the 1960s. Children's income is taken from a series of years in the early 2000s. As shown in Figure 1, 84% earned more than their parents, corrected for inflation. But 93% of the children in the poorest households, the bottom 20% surpassed their parents. Only 70% of those raised in the top quintile exceeded their parent's income.

Chetty et al find a similar pattern.<sup>5</sup> In an otherwise gloomy assessment of American progress, they find that 70% of children born in 1980 into the bottom decile exceed their parents' income in 2014. For those born in the top 10%, only 33% exceed their parents' income.

The poor may find it easier to do better than their parents. But how much better off do they end up? Julia Isaacs's study for the Pew Charitable Trusts finds that children raised in the poorest families made the largest gains as adults relative to children born into richer families.<sup>6</sup>



The children from the poorest families ended up twice as well-off as their parents. People in the top quintile did no better or worse than their parents. One explanation of these findings is there is regression to the mean—if your parents are particularly unlucky, they may find themselves at the bottom of the economy. You, on the other hand, can expect to have average luck and will find it easier to do better than your parents. At the other end of the income distribution, one reason you might have very rich parents is that they have especially good luck. You are unlikely to repeat their good fortune, so you will struggle to do better than they did.

But that doesn't change what actually happened in the last three decades of the 20<sup>th</sup> century in the Isaacs study: the children from the poorest families added more to their income than children from the richest families. That reality isn't consistent with the standard pessimistic story that only the richest Americans have benefited from economic growth over the last 30-40 years. Or that only the richest Americans have gotten raises. The pessimistic story based on comparing snapshots of the economy at two different points in time misses the underlying dynamism of the American economy and does not accurately measure how workers at different places in the income distribution are doing over time.

Gerald Auten, Geoffrey Gee, and Nicholas Turner of the Office of Tax Analysis in the Treasury Department used tax returns to see how rich and poor did between 1987 and 2007. They find the same encouraging pattern: poorer people had the largest percentage gains in income over time.<sup>7</sup> Here is an excerpt from Table 3 of their paper:

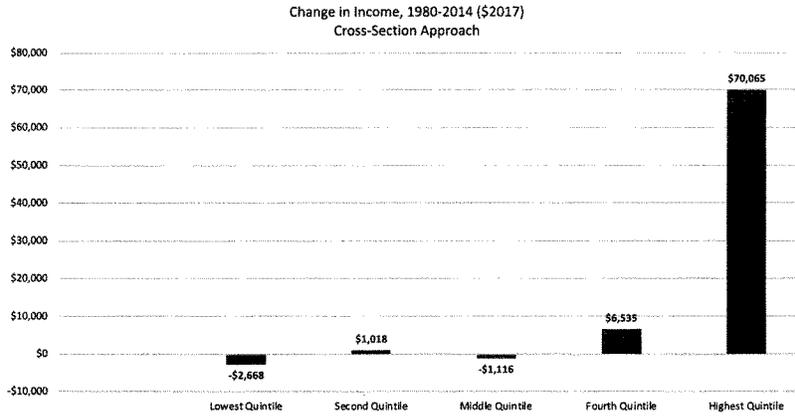
**Table 3**  
**Change in Real Income of Taxpayers Age 35–40 in 1987**  
**from 1987 to 2007**

Percent Changes in Real Income from 1987 to 2007	1987 Income Quintile or Top Centile Class								
	Income Quintiles							Top Centiles	
	Negative	Lowest	Second	Middle	Fourth	Highest	Total	10%	1%
<i>Percent change in:</i>									
Median income	n.m.	100	42	27	11	-5	19	-14	-29
Mean income	n.m.	226	69	46	35	51	59	61	70

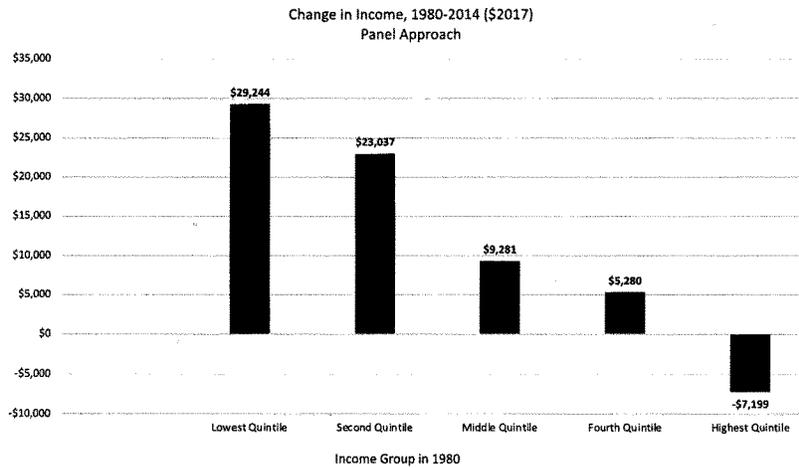
Notes: Centiles in 1987 are based on taxpayers age 35–40. Taxpayers with negative incomes in 1987 are shown separately from other taxpayers in the lowest income quintile. Taxpayers with negative incomes in 2007 are shown in the row labeled negative. The percentage changes sum to 100 percent for each income quintile and top centile. Taxpayers not found in 2007 are omitted (see discussion in Appendix A).

They are looking at people who were 35–40 in 1987 and seeing how they end up 20 years later, when they are 55–60. The median income of the people in the top 20% in 1987 ended up 5% lower twenty years later. The people in the middle 20% ended up with median income that was 27% higher. And if you started in the bottom 20%, your income doubled. If you were in the top 1% in 1987, 20 years later, median income was 29% lower.

A recent study by David Splinter of the Joint Committee on Taxation looks at a narrower definition of income using tax data.<sup>8</sup> Splinter has an estimate of the impact on growth on the different parts of the income distribution where, like many other estimates, he takes a snapshot of the income distribution in an early period, in this case, 1980, and compares it to the distribution at a later time, 2014. That is, he follows the quintiles over time, rather than the people, the standard approach of the pessimistic studies. And he finds that the bottom quintile in 2014 has less income than the bottom in 1980. Like Piketty, Saez, and Zucman, he finds essentially no gain for the bottom half of the income distribution.



Only the people at the top gain much of anything between 1980 and 2014. The average income of the top 1% (not shown in the figure) went from \$189,000 to \$843,000, which seems to confirm the view that most of the gains from economic growth go to the richest of the rich while people in the middle or the bottom make no progress at all. But the people in the top 1% in 2014 are not the same people in 1980. What happens when you follow the same people? Splinter makes that calculation as well:



As in the previous studies mentioned above, when you follow the same people, the biggest gains go to the poorest people. The richest people in 1980 actually ended up poorer, on average, in 2014. Like the top 20%, the top 1% in 1980 were also poorer on average 34 years later in 2014. The gloomiest picture of the American economy is not accurate. The rich don't get all the gains. The poor and middle class are not stagnating. Splinter reminds readers that the pattern here is more important than the size of the changes—he points out that tax returns grossly understate actual income, capturing only about 60% of the total in recent decades. And some of what he is capturing may be life-cycle effects that differ by quintile. But his findings are a dramatic example of the potential of cross-sections—two snapshots in time—to mislead compared to a panel approach where the same people are followed over time.

What remains true from the pessimistic stories is that the richest people in 2014 are much richer than the richest people in 1980. But they're not the same people. It's also true that there is a limited amount of relative mobility—while rich people in 1980 actually lost ground 34 years later on average, they still have a much higher income on average than the people who were poor in 1980. But the income gap between the actual people in 1980 actually got smaller over time. One of the lessons of Splinter's work is that income in any one year is not necessarily representative of your economic status in the future.

All of these studies show that the economic growth of the last 30-40 years has been shared much more widely than is generally found in the cross-section studies that compare snapshots over time. No one of these studies is decisive. They each make different assumptions about income, what people to include, how to handle inflation. Together they suggest the glass isn't as empty as we've been led to believe. It's at least half-full.

This does not mean that everything is fine in the American economy. There are special privileges reserved for the rich that help them reduce their risk of downward mobility—financial bailouts are the most egregious example. There are too many barriers like occupational licensing and the minimum wage that handicap the disadvantaged desperately trying to succeed in the workplace. And the American public school system is an utter failure for too many children who need to acquire the skills needed for the 21<sup>st</sup> century. But the glass is at least half-full. If we want to give all Americans a chance to thrive, we should understand that the standard story is more complicated than we've been hearing.

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<sup>1</sup> "Distributional National Accounts: Methods and Estimates for the United States," by Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, *Quarterly Journal of Economics*, December 2016: <https://eml.berkeley.edu/~saez/PSZ2018QJE>.

<sup>2</sup> "On Income Stagnation," by Paul Krugman, *New York Times*, November 12, 2014. <https://krugman.blogs.nytimes.com/2014/11/12/on-income-stagnation/>

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<sup>3</sup> "Piketty's Arguments Still Holds Up, After Taxes," by Jared Bernstein, May 9, 2014: <https://www.nytimes.com/2014/05/10/upshot/piketys-arguments-still-hold-up-after-taxes.html>

<sup>4</sup> "Pursuing the American Dream: Economic Mobility Across Generations," by Leonard Lopoo and Thomas DeLeire, Pew Charitable Trusts, July 2012. The study defines income "as the total income derived from the taxable income (such as earnings, interest, and dividends) and cash transfers (such as Social Security and welfare) of the head, spouse, and other family members. The PSID definition of family used in this analysis includes single-person families and unmarried cohabiting couples who share resources, in addition to families related by blood, marriage, or adoption. Family income does not include the value of non-cash compensation such as employer contributions to health insurance and retirement benefits, nor does it include the effect of taxes or non-cash benefits such as food stamps. More information here: [https://www.pewtrusts.org/~media/legacy/uploadedfiles/pes\\_assets/2012/pursuingamericandream.pdf](https://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2012/pursuingamericandream.pdf)

<sup>5</sup> "The Fading American Dream: Trends in Absolute Income Mobility Since 1940" by Raj Chetty, David Grusky, Maximilian Hell, Nathaniel Hendren, Robert Manduca, Jimmy Narang, *Science* 356(6336): 398-406, 2017. [http://www.equality-of-opportunity.org/papers/abs\\_mobility\\_paper.pdf](http://www.equality-of-opportunity.org/papers/abs_mobility_paper.pdf)

<sup>6</sup> "Economic Mobility of Families Across Generations," by Julia Isaacs, Economic Mobility Project, Pew Charitable Trusts. Parents income is from 1967-1971. Children's income as adults is taken from 1995-2002. Isaacs writes: "Family cash income is the focus of the analysis, including taxable income (such as earnings, interest and dividends) and cash transfers (such as Social Security and welfare) of the head, spouse and other family members... As discussed in Appendix B, family cash income does not include the value of non-cash compensation such as employer contributions to health insurance and retirement benefits, nor does it include the effect of taxes or non-cash benefits such as food stamps. All incomes are reported in 2006 dollars, using the CPI-U-RS to adjust for inflation." [https://www.brookings.edu/wp-content/uploads/2016/06/11\\_generations\\_isaacs.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/11_generations_isaacs.pdf)

<sup>7</sup> "New Perspectives on Income Mobility and Inequality," by Gerald Auten, Geoffrey Gee, and Nicholas Turner, *National Tax Journal*, December 2013. "The measure of cash income used in this paper starts with total income as reported on individual income tax returns and then adds known sources of non-taxable income and adjusts for several items where the tax treatment differs from what might be considered a better measure of the current income realized by a taxpayer. In particular, tax exempt interest, non-taxable Social Security benefits, non-taxed unemployment compensation (2009 only), excluded foreign wages and housing benefits, excluded capital gains on small business stock, and net operating loss carryovers reflecting prior year losses are added. State tax refunds, alimony paid, the itemized deduction for gambling losses (up to the amount of gambling income reported), and disallowed current year passive losses are deducted." <https://www.ntanet.org/NTJ/66/4/ntj-v66n04p893-912-new-perspectives-income-mobility.pdf>

<sup>8</sup> "Income Mobility and Inequality in the United States: Evidence from Tax Data since 1979," by David Splinter September 13, 2018. "The first income definition is fiscal income including capital gains. This is defined the same as tax return-based market income in Piketty and Saez (2003)—adjusted gross income (AGI), plus adjustments and excluded Schedule D capital gains before 1987, less government transfers in AGI (unemployment and taxable Social Security benefits)—but capital losses reported on Form 1040 are replaced with losses before limitations. Unfortunately, fiscal income is limited to income reported on tax returns, and therefore only captures 60 percent of national income in recent decades (Auten and Splinter, 2018; Piketty, Saez, and Zucman, 2018). . . For absolute mobility estimates, fiscal income excluding capital gains is used to limit sensitivity to business cycles." [http://www.davidsplinter.com/Splinter-Mobility\\_and\\_Inequality.pdf](http://www.davidsplinter.com/Splinter-Mobility_and_Inequality.pdf). The results shown in the charts are taken from his online spreadsheet: [http://davidsplinter.com/Splinter-Mobility\\_and\\_Inequality.xlsx](http://davidsplinter.com/Splinter-Mobility_and_Inequality.xlsx)



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*CONGRESSIONAL TESTIMONY*

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**Examining the Rise of American  
Earnings and Living Standards**

**Joint Economic Committee of Congress**

**September 26, 2018**

**Stephen Moore**

**Distinguished Visiting Fellow**

**The Heritage Foundation**

Chairman Paulsen, Vice Chairman Lee, Ranking Member Heinrich, and distinguished members of the committee, thank you for the opportunity to submit testimony on the rise of American earnings and living standards.

My name is Stephen Moore and I am the Distinguished Visiting Fellow in the Project for Economic Growth at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

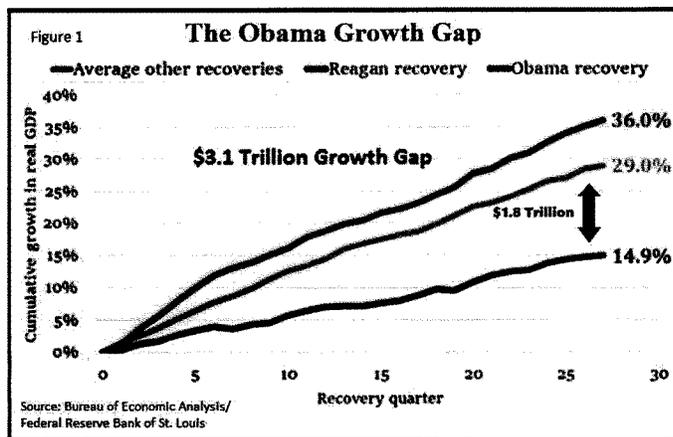
The great economic challenge of our time is how to maintain strong and persistent economic growth with rising living standards for all. Some economists on the left believe that an advanced industrial nation, such as the United States, can only hope to grow at about a maximum of 2 percent per year. This is called the "new normal," or what former Obama chief economist calls "secular stagnation."

As a senior economic advisor to Donald Trump during the presidential campaign, I can assure you that we flatly rejected this view - and no one more than Donald Trump himself.

One of the central tenets of Trumponomics is that there is no "limit to growth," and that nearly all of our socio-economic problems - from the budget deficit, to stagnant wages, to poverty alleviation, to funding Social Security and Medicare, to improving our schools and infrastructure - are more easy to solve when the economy grows at a faster pace. So fast growth is one of the primary goals of Trump's administration.

One reason that economists became convinced that faster growth was not achievable was that it hadn't happened for a decade. The defective thinking, as we saw it, wasn't that persistent growth of 3 to 4 percent was impossible, it was that the wrong-headed policies under Bush and then Obama after the financial crisis hit, inhibited growth and led to stagnation of middle incomes.

In particular, the Keynesian experiment of massive deficit spending, stimulus plans, minimum wage increases, Obamacare, more generous welfare benefits, and Fed policies of very low interest rates and \$3 trillion of asset purchases, yielded the worst economic recovery from a recession since the Great Depression. **Figure 1** shows the widening cost of this "growth deficit" over time. GDP fell \$2 trillion below the trend of an average recovery and \$3 trillion below the trend of the Reagan recovery. This Committee issued a report in 2014 which found that per capita income would have been roughly \$3,200 higher if the recovery had only been average. This was a significant blow to the living standards of middle and low income families.

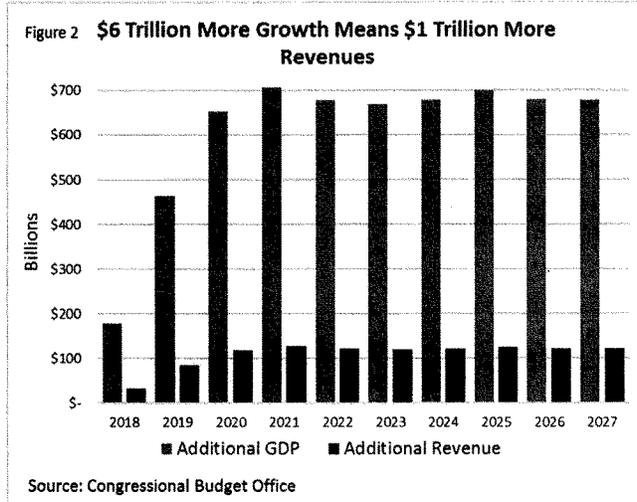


It is noteworthy that the biggest declines in family incomes in the Obama years (2009-15) was experienced by black households, Hispanics, and single women. It is also noteworthy that the standard liberal measure of income inequality - the Gini Coefficient - indicated a growing divide between rich and poor under the Obama presidency. The income redistribution policies not only failed to generate growth, they hurt minorities and the poor the most.

To his credit, Obama gave us a long and resilient recovery. What has happened over the last eighteen months is that this slow recovery that was running out of gas at the end of Obama's presidency in 2016, has now surged into an all-out economic boom.

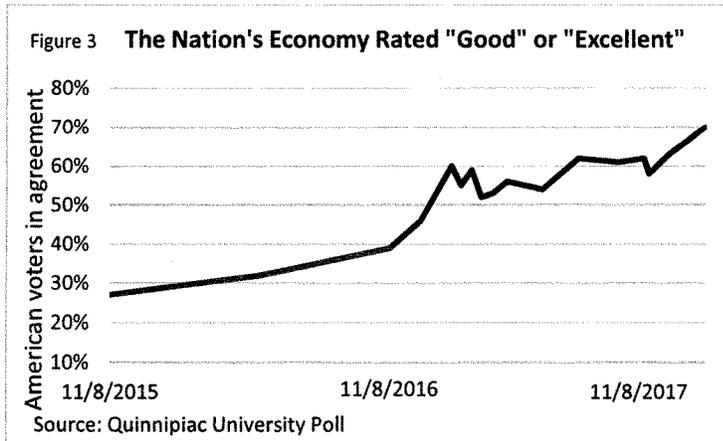
As one of the senior economic advisers to the Trump campaign, and with Larry Kudlow, one of the architects of the Trump tax plan, I can tell you that the growth revival has been larger than we expected in the wake of the tax cuts, deregulation, and energy production policies. Trump inherited an economy growing at 1.6 percent and now for the last five quarters we have 3 percent growth and for the past two quarters (Q2 and latest estimate for Q3) we have achieved over 4 percent growth. Again, this was something that many of the Obama economists believed was an impossibility.

Since the tax cut's passage in December 2017, as shown in **Figure 2**, the total increase in economic output, according to the Congressional Budget Office is \$6.1 trillion higher over the 2018-27 ten year window. This will generate roughly \$1.1 trillion more federal revenue and nearly \$500 billion more windfall revenues for states and cities. The tax cut is getting pretty close to paying for itself already, if the CBO is correct.



It is worth noting that, by contrast, over the eight year Obama period, economic growth was *over-estimated* to the tune of roughly \$2 trillion.

One remarkable indicator of how the American people have been impacted by the Trump policies is to examine how voters view the economy. Throughout the Obama years, at most about three of ten Americans rated the US economy as good or great. Today that number has rocketed to 7 of 10. See **Figure 3**. Americans can feel the improvement in their financial situation. Black and Hispanic unemployment rates have hit all-time lows.



How has this Trump boom affected the incomes of middle and lower income Americans? These numbers are harder to measure - in part because of the lag measurements from the Census Bureau - but we do know that in 2017 median real family income rose to above \$60,000. A study by Sentier Research using the preliminary 2018 data indicates continued rises in median family income through the first half of the year.

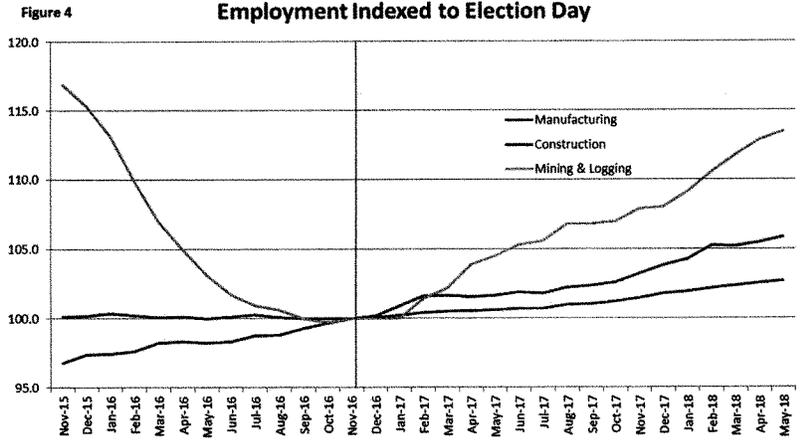
When counting bonuses, increased hours worked and overtime (due to the tight labor market), and increased fringe benefits, after-tax take home pay is rising for the middle class. The preliminary indications are that this 2017-18 rising tide really is lifting all boats. We also see this in very healthy consumer spending numbers. Americans are earning more, so they are clearly spending more.

The latest Bureau of Labor Statistics data show 6.5 million unfilled jobs and a shortage of workers to fill them. This is the very definition of a "tight labor market" and will likely lead to higher wages to come and bonuses to workers.

In some parts of the country, employers are now paying signing bonuses of up to \$25,000 for welders, pipefitters, engineers and truck drivers. "We've probably never had a situation like we have today, where the demand [for workers] is strong and capacity is constrained," notes Bob Costello, chief economist of the American Trucking Associations (ATA).

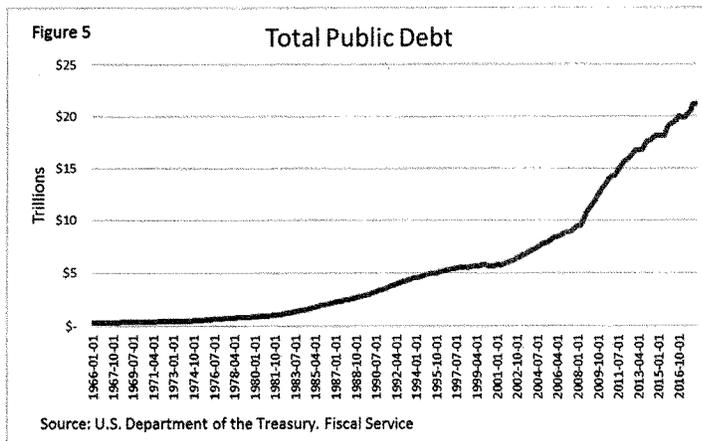
Americans are also wealthier. The increase in the stock market under Obama since 2009 continues to rocket forward under Trump. Since the Trump election the value of all US stock holdings has risen by an estimated \$8 trillion. Yes, this benefits the wealthy, but more than half of Americans own stock through their retirement plans, IRAs, and 401k plans. Most union pension plans and most state and local pension plans are also invested in the U.S. stock market.

Americans in the bottom 50 percent of income have also benefited from the surge in job openings. Since the end of 2016 through September of 2018, the American economy has created nearly one million blue-collar construction, manufacturing and mining jobs. See **Figure 4**. These are the desirable working class jobs that had been dwindling in the previous decade and that many economists thought would never come back to these shores. They are back. America is now in one of the greatest capital construction booms from coast to coast in American history. America is "making things" again.



Source: Bureau of Labor Statistics

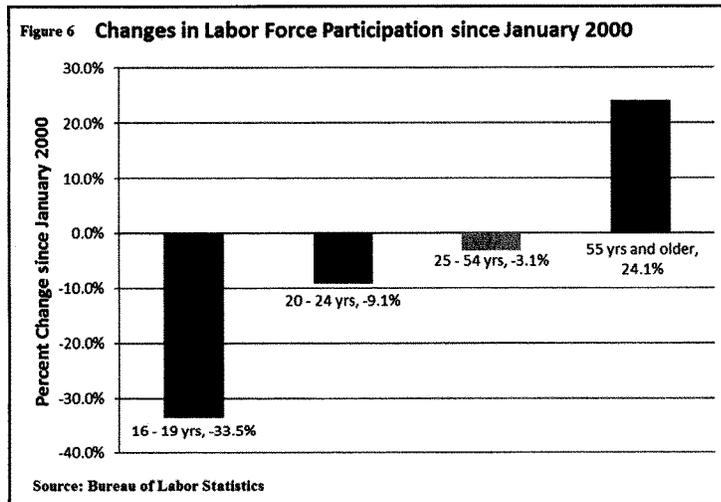
So what is the lesson for this Committee and all Congress from the failure of Obamanomics and the early success of the Trump policies? Once again, we have learned the hard way the lesson that standard demand-side/Keynesian stimulus plans do not work. In the wake of the recession we spent hundreds of billions of dollars on unemployment insurance expansions, food stamps, Obamacare, solar energy subsidies, transit grants, tax credits, housing bail outs, and so on, but even according to the Obama administration's own numbers, unemployment was higher than if we had not spent the money at all. The only lasting effect has been the doubling of the national debt. See **Figure 5**



Trump borrowed from the Reagan supply-side formula of incentivizing business investment, startups, capital importation, work, and risk-taking through tax cuts and deregulation. We will have future economic downturns and stagnation, and hopefully Congress will have learned what works and what doesn't. As Milton Friedman taught us, when the government spends a dollar it has to come from the private market place and the cost to the economy of raising that dollar in most cases exceeds the benefit of the government spending.

Finally, I would like to address the issue of what can Congress do now to keep this expansion going strong with a special emphasis on incentivizing higher income gains for the middle class and poor.

As for the economic boom, to keep it going we will need more Americans working. The labor force participation rate for those 16+ dropped from 65.8 percent at the start of the Obama presidency to just 62.9 percent at the end of the Obama presidency and is now just creeping up again. **Figure 6** below shows that the biggest challenge is getting young people into the work force.



Older people are working more, and young people are working less. What is wrong with this picture? We need to get the younger than 25 Americans working full or at least part time.

A related point: the Fed has to stop believing that faster growth and higher wages are inflationary. When output rises, prices fall. As I look at the best measure of inflation, commodity prices, I don't see worrisome signs of inflation. Let's not let the Fed take away the punch bowl from this party just as it is starting to benefit the middle class.

So how do we make an overall great labor market picture even brighter? Here are six reforms that would help workers and grow the economy faster:

- 1) Reinstate the work for welfare requirements of 1996 that helped pull Americans out of welfare dependency and into the workforce. These helped reduce welfare caseloads in the late 1990s by half and those who moved into work. A seminal study by welfare expert Ron Haskins of the Brookings Institute, tracked down these welfare recipients who were moved in to work and found that most moved up the economic ladder. Welfare reform was one of the great bipartisan successes of the last 50 years, and now that we have a surplus of jobs, this is a very good time to require able-bodied Americans to work for benefits.
- 2) Lower the federal minimum wage for teenagers. This will encourage young workers to get job experience. One of the best predictors of future wages is the age at which people start working. Those who learn work skills early do better in life.
- 3) Encourage apprenticeship programs that would give young Americans a “college degree equivalent” for successfully learning a useful trade. This is something Presidents Obama and Trump agree on.
- 4) Make the Trump tax cuts permanent, especially the immediate expensing provisions that encourage business capital spending.
- 5) Allow employers to “opt out” of Obamacare mandates and requirements if they provide lower-cost health insurance coverage to their workers. Obamacare has corresponded to about a \$3,000 rise in health insurance premium costs with more escalations expected in 2019 and 2020. These higher insurance costs to employers are crowding out pay raises for workers and thus reducing work incentives.
- 6) To help the lowest-income families, allow federally funded programs for children in the 20 percent worst performing school districts, so that poor parents can send their kids to public, private, or religious schools that work. These programs in cities like Washington, D.C. have increased test scores and parental satisfaction. More than 90 percent of the children’s families helped are black or Hispanic. A mind really is a terrible thing to waste.

If we combine these policy changes with the course corrections that Donald Trump has already made, I believe that two to three more years of 3 to 4 percent growth is highly realistic.

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Heather Boushey  
Washington Center for Equitable Growth  
Testimony Before the Joint Economic Committee  
Hearing on “Examining the Rise of American Earnings and Living Standards”  
September 26, 2018

Thank you, Chairman Paulsen, Vice Chairman Lee, and Ranking Member Heinrich for inviting me to speak here today. It’s an honor to be here.

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

I’m here today to talk about how we can improve economic outcomes for American workers. Over the past four decades, the typical American worker has been left behind. While incomes and wealth surge at the top, earnings for low- and middle- income Americans have stagnated.

Unfortunately, the recently passed Tax Cuts and Jobs Act will, according to all credible observers, contribute to inequality in the United States. And, because it limits our ability to bring in revenue, it will also hinder our ability to finance infrastructure, social insurance, education, and other spending priorities that strengthen our economy and support workers and families.

High levels of inequality have real consequences. The “American Dream,” an article of pride and faith for Americans, is being undermined by policies like the Tax Cuts and Jobs Act. Income mobility in the United States has fallen precipitously since the middle of the 20<sup>th</sup> century. It was once the case that all Americans enjoyed the fruits of economic prosperity, but as the economy works for fewer and fewer people, it is more difficult than ever for children to exceed the reach of their parents.

Policies that have benefits primarily for the rich are often justified by the promise of economic growth. But “growth” doesn’t automatically benefit everyone. And if growth does materialize, the pattern of our modern economy is to reward it to those who need it least.

These realities are given little attention in part because we do not always know who benefits when the economy grows. Our statistical agencies report aggregate growth and in an era of rising inequality, average and aggregate measures are becoming less informative about the experience of most Americans. While the administration was touting the 4.1 percent growth in GDP in the second quarter as evidence of the success of the tax cuts, the question we need to ask is who benefitted from that growth? Did it mostly go to those at the top of the income ladder – just like the tax benefits themselves?

Because we don’t know the answer to these questions, policymakers like you have a limited view of how our economy is performing. This lack of data hinders our ability to diagnose problems in the economy and preempt them with appropriate policy. Our economy has changed fundamentally, and, in many ways, we are flying blind when it comes to responding appropriately.

The Measuring Real Income Growth Act of 2018, which was introduced by Senator Schumer and Ranking Member Heinrich this month, and an identical bill that was just introduced by Representative Maloney, would help us to understand more about what is happening to our friends and family in your districts and across the United States. This legislation would add distributional measures of economic growth to our policymaking toolbelt. These measures are already the subject of a major academic project that dozens of economists at universities and within the OECD are participating in. They break down growth at the national level to report growth for workers up and down the income spectrum and give us new insights into how the economy has changed and where it might be going.

Implementing Distributional National Accounts here in the United States would provide policymakers with a new tool to track the progress of the economy, evaluate how past policy is changing our economic fortunes, and guide future economic decision-making. It is especially important to implement now as the American economy continues to exhibit increasing inequality, returning us to levels of inequity that we have not seen for nearly a century.

Implementing these measures is critical to the wellbeing of Americans across the country. Present policies may be exacerbating the rise of inequality, but the currently available data requires us to assemble this story piecemeal, sometimes with lags of several years, and we still do not have a complete picture. If we want to build an economy that benefits all Americans, we need to add these distributional statistics to our arsenal now so that policymakers, pundits, and the public can assess where we are and plan for more broad-based, stable economic growth.

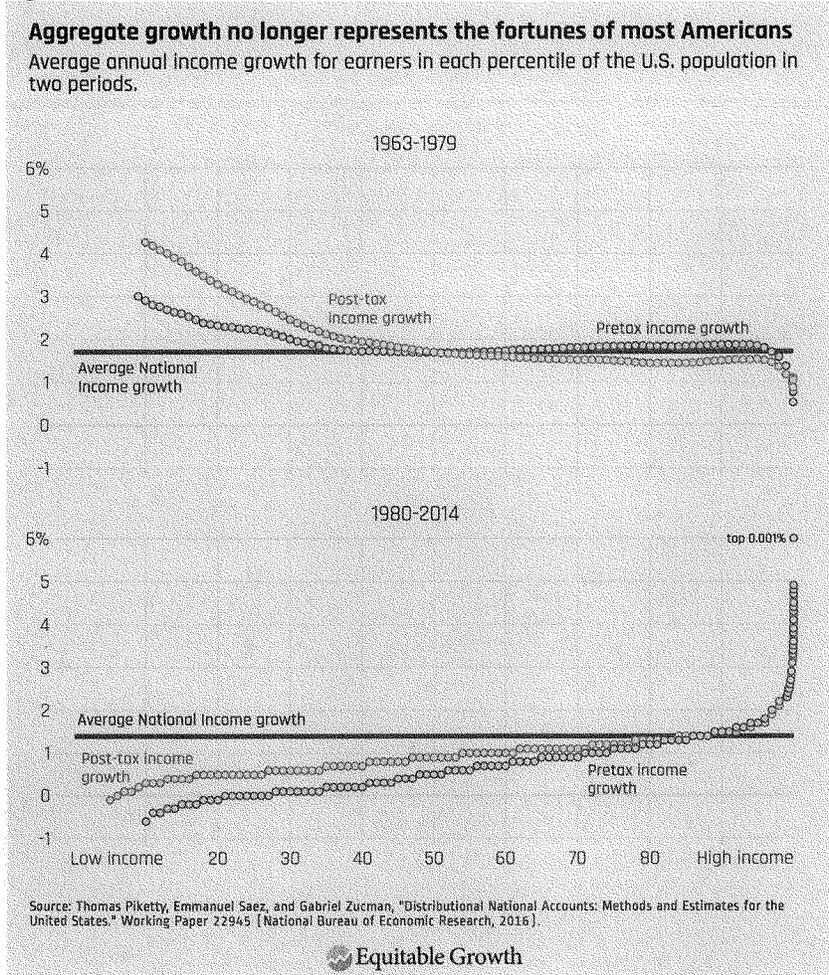
**Distributional National Accounts: Measuring the right things**

Distributional national accounts refers to adding subpopulation estimates of income growth to our existing National Income and Product Accounts reports. Currently, the U.S. Bureau of Economic Analysis releases a new estimate of quarterly or annual GDP growth every month. Distributional national accounts would add to this release 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 so-called DINA dataset constructed by economists Thomas Piketty, Emmanuel Saez, and Gabriel Zucman disaggregates National Income growth from 1962 to 2014.<sup>1</sup> 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. (See Figure 1.)

Over the period from 1980 to 2014, average growth was about 1.4 percent annually. However, the bottom 90 percent of all adults saw income below this. Only those in the top ten percent experienced better than average growth.

Figure 1



This is a new phenomenon. The DINA dataset shows that prior to this period, there was little need to disaggregate national growth because the headline GDP growth statistic was broadly representative of 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 pre- and post-tax income growth for each percentile of income show. Most Americans saw income growth at or above that average. (See Figure 1.)

GDP growth, in effect, is now 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. It is because of this divergence that the Income Growth Indicators proposed by Senator Schumer, Ranking Member Heinrich, and Representative Maloney must be added to our monthly GDP reports so we can understand how the economy is performing for Americans up and down the income ladder.

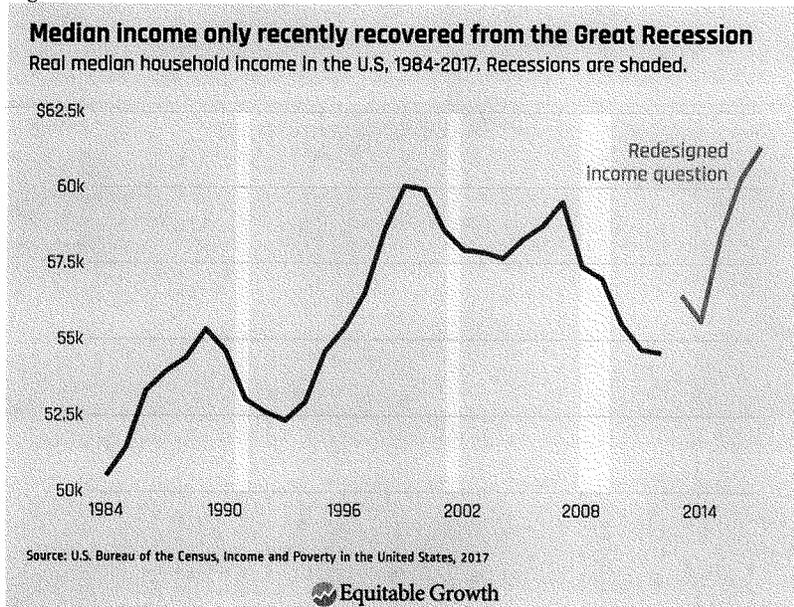
GDP growth has been treated for decades by pundits and policymakers alike as synonymous with prosperity, but this is no longer a useful indicator of well-being. President Kennedy famously alluded to it when he said that “a rising tide lifts all boats.” In the decades since, economists and commentators 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 GDP is a first and foremost a tool for thinking about total output and how different sectors of the economy are faring. It was never really intended to be a measure of the wellbeing of individuals in the economy, as it is now sometimes used. Simon Kuznets, the economist who assembled the first report to Congress on national income back in the 1930s, warned against interpreting GDP as indicative of the welfare of the nation’s families. He wrote that “The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income.” Robert Kennedy was more explicit when he said that GDP “measures everything... except that which makes life worthwhile.”

**Rising inequality means less informative aggregate statistics**

Over the past four decades, the U.S. economy has undergone a significant transition. Prior to the 1980s, economic growth was equitably shared between most Americans. But we are now in a new economy, where it is growing slower than in the past and where most 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.

There is now ample evidence for this seismic shift in the fundamentals of the economy. Just two weeks ago a new U.S. Census Bureau report on Income and Poverty in the United States showed that median income for all households has only just now recovered from the Great Recession. Before the Great Recession, income had only just recovered from the collapse of the dotcom bubble. As a result, there has been no rise in median incomes since around the turn of the century<sup>2</sup> (although the recent Census report shows higher median income, it is based on a revised survey question that led to higher reported incomes and the report states that this new estimate is not statistically different from incomes in 2007 and 1999). (See Figure 3.)

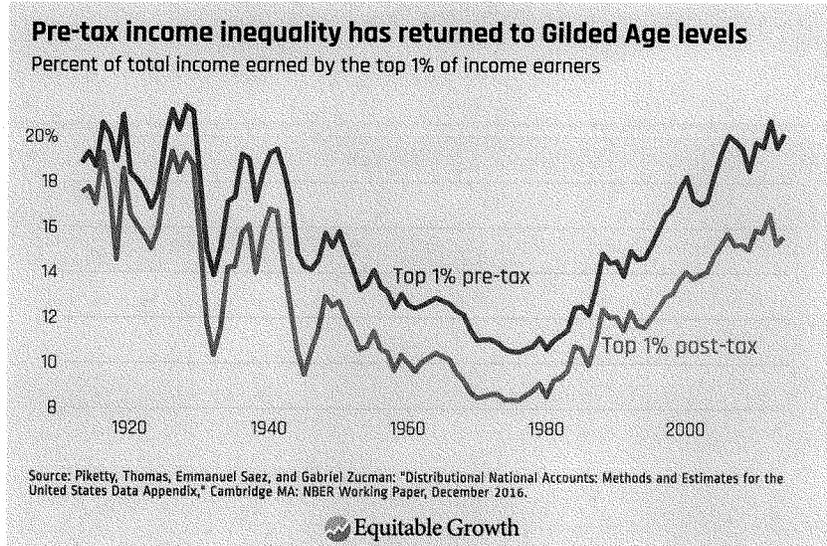
**Figure 3**

Distributional national accounts tell the same story. The economists Piketty, Saez, and Zucman find that between 1980 and 2014 the bottom half of Americans by income saw average annual income growth of just 0.6 percent. The richest ten percent of Americans, by contrast, enjoyed annual income growth of 2.2 percent, adding up to a total after-tax increase of 113 percent over the 35-year period. But even they were left behind by the top one percent, who saw their income triple over the same period.

The result is that the pre-tax 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 4.)

We see these same divergent trends across multiple measures of economic wellbeing: 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.

**Figure 4**

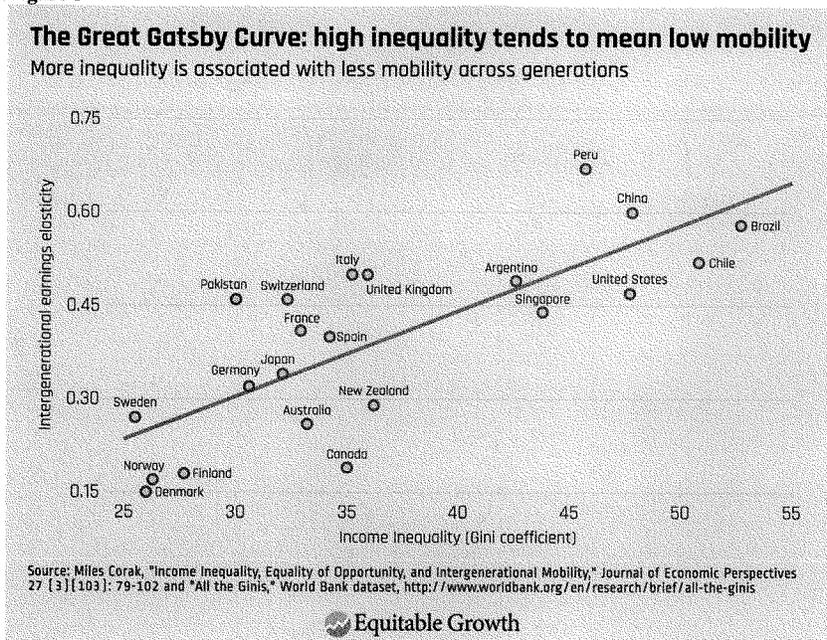


#### Tracking growth all along the income curve will inform policy

Distributional national accounts would be an important tool for crafting policy today in our unequal economy. Economic inequality has a number of detrimental effects on society that researchers are still working to understand. Inequality has been linked, for example, to both high crime and poor health outcomes. I am going to focus on two important ways in which inequality may hinder the economy and in which distributional national accounts could therefore improve our stewardship of the economy. First, it has now been conclusively shown that unequal patterns of growth are reducing economic mobility in America. Second, evidence suggests that the economy depends critically on the fortunes of lower-income consumers who have higher propensities to consume.

It is intuitively unsurprising that societies with higher inequality are also societies with low economic mobility. Economist Miles Corak created what former CEA chair Alan Krueger has 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 5 shows one version of this curve.

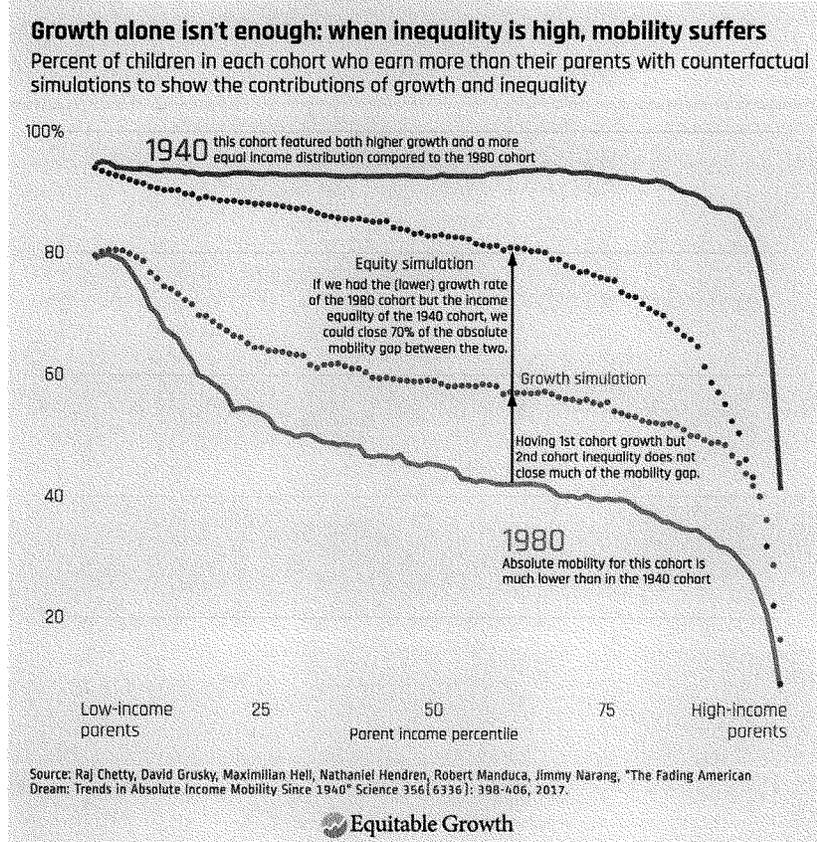
Figure 5



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. Generation Xers born in 1980, when income inequality was high and growth was low, however, have just a 50 percent chance of surpassing their parents' income.<sup>3</sup>

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 6 illustrates rates of absolute mobility by parent income percentile and shows these counterfactuals.

Figure 6



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.

Distributed national accounts would also give us important insights into the future performance of the economy. One of the lessons of the Great Recession, as economists Atif Mian and Amir Sufi document in their book "House of Debt," was that robust consumption in the 2000s was being financed in large part by borrowing. Homeowners who had relied on withdrawing equity

from their mortgages suddenly found themselves deeply indebted when housing prices began to collapse. The result was a collapse in consumption as these low- and middle-income households, sensitive to changes in their income, reined in spending.

In their most basic form, distributional national accounts could help us spot phenomena like this by alerting us when incomes are declining in households at the bottom of the income distribution with a high marginal propensity to consume. But we could potentially do much better by disaggregating some of the components of national output measures to also report savings rates by income quantile. These kinds of statistics are more difficult to develop and may require us to improve some of our existing economic surveys. But they promise an important advance over current statistics. Because of the rapid rise of inequality, it is hard to say when we look at the national savings rate whether savings will be a hedge against recession because we don't know if all households have strong savings or if these savings are concentrated at the top of the income distribution. It is entirely possible that aggregate household savings measured in the aggregate is good yet obscures weaknesses in the balance sheets of many households—weaknesses that suggest stormy economic weather ahead.

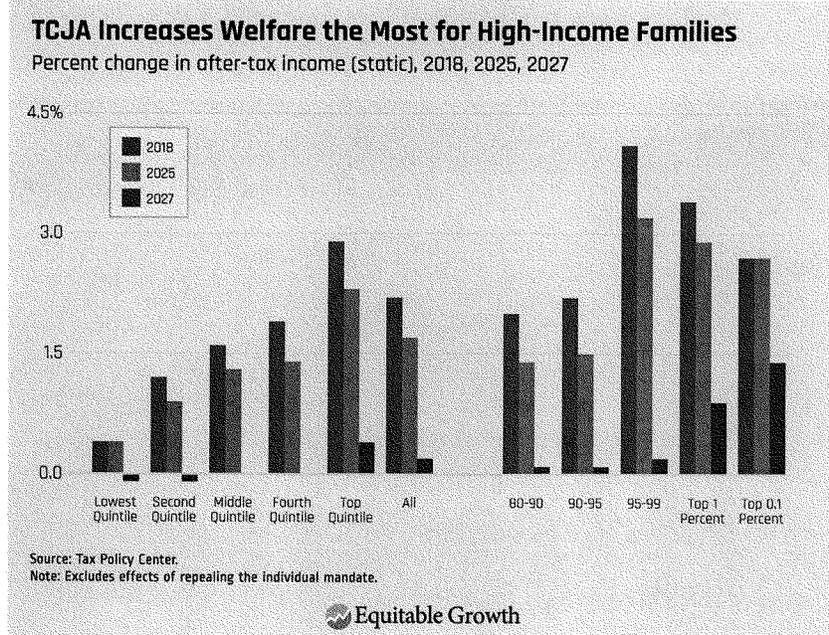
#### **Recent policy changes may be exacerbating the problem**

We have little information today about the current state of inequality in our nation. Some commentators believe that inequality may have peaked, but we have little data to support such a pronouncement. The best government-produced report on inequality, CBO's "Distribution of Household Income" report, is published on a four-year lag, with the most recent estimates covering 2014. Since then, a number of important policy changes have been made that could increase inequality across the United States. Because there is no standard report of how growth is distributed, we may not know how these policies affect families for several years.

Most notably, the Tax Policy Center estimates that the Tax Cuts and Jobs Act of 2017 will have a sharply regressive effect, with high-income families enjoying larger income gains in both the short- and long-term than low- and middle-income families. Because of sunsets on most personal tax provisions in the act, only families in the top quintile see gains after ten years while those in the lowest two quintiles will actually see declines in their income.<sup>4</sup> (See Figure 7.)

The purpose of the tax system, as with public policy in general, is to support the living standards of American families. Core to this purpose is raising the revenues necessary to finance the investments in children and families, the social insurance programs, and the many other basic governmental functions that support our quality of life. The Tax Cuts and Jobs Act cut taxes for those at the top in the long run, while leaving us with decreased revenue to fund the things that matter for the well-being of the typical American family.

Figure 7



These are regressive policy changes that are likely to increase inequality in the United States, but we will not know how they affect incomes for years and currently have no way of knowing how they will affect the distribution of economic growth in the years to come as these changes take effect. Smart stewardship of our economy in an era of high inequality requires us to start to disaggregate our topline statistics and report on economic prosperity for all Americans. Distributional national accounts are a critically important step in that direction.

<sup>1</sup> Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States." *Quarterly Journal of Economics*, 2018, 133.

<sup>2</sup> Kayla Fontenot, Jessica Semega, and Melissa Kollar, "Income and Poverty in the United States: 2017." (Department of Commerce, 2018).

<sup>3</sup> Raj Chetty, David Grusky, Maximilian Hell, Nathaniel Hendren, Robert Manduca, Jimmy Narang, "The Fading American Dream: Trends in Absolute Income Mobility Since 1940." *Science* 2017, 356.

<sup>4</sup> Tax Policy Center, "Distributional Analysis of the Conference Agreement for the Tax Cuts and Jobs Act," Available online at <https://www.taxpolicycenter.org/publications/distributional-analysis-conference-agreement-tax-cuts-and-jobs-act/full>

RESPONSE FROM DR. MULLIGAN TO QUESTIONS FOR THE RECORD SUBMITTED BY  
CHAIRMAN PAULSEN

**A frequently cited San Francisco Federal Reserve Bank paper suggests that the Tax Cuts and Jobs Act may have little effect on economic growth, but seems to equate the Tax Cuts and Jobs Act with a Keynesian-style stimulus package.**

**Could you comment on the report's validity?**

**Does this study's results hold if the Tax Cuts and Jobs Act raises the economy's potential as the Congressional Budget Office is projecting?**

**The paper can be found at this link: <https://www.frbsf.org/economic-research/publications/economic-letter/2018/july/procyclical-fiscal-policy-tax-cuts-jobs-act/>**

The San Francisco Fed report is concerned with empirical estimates of government purchases multipliers, which is an entirely different question from the GDP effects of cutting marginal tax rates on capital and labor income, as TCJA did.<sup>1</sup> Moreover, in practice many of the changes in government purchases are lasting only a few years, whereas the cut in the statutory corporate tax rate is permanent and expected to permanently increase the Nation's capital stock and the productivity of its workers.

The best approach for assessing the long-run GDP effects of a permanent change in the business tax rate is to look at the effect of the rate change on the cost of capital, and the responsiveness of demand for capital services to a change in the cost of capital. TCJA permanently reduced the cost of capital. A higher equilibrium capital-labor ratio implies higher productivity, and thus higher output. In other words, this approach shows how the business tax cuts permanently increase the economy's potential.

An analogous approach could be used for the temporary individual-income tax cuts. Alternatively, the large and growing time series literature on the effects of exogenous tax shocks can be used because these studies at least distinguish taxes from government purchases even if they do little to distinguish temporary from permanent.

As noted in the 2018 Economic Report of the President, the fundamental challenge to estimating the effects of changes in tax rates on economic growth is that the timing of tax changes are generally not random—historically, legislators tend to raise rates during periods of expansion and lower them during periods of contraction. This can negatively bias estimates of the effect of tax cuts on investment and output.

As noted in the Economic Report of the President, there have been a battery of peer-reviewed articles on this in top-5 economics journals over the past two decades:

One is the approach called structural vector autoregression, following Blanchard and Perotti (2002), in which the identification of causal effects relies on institutional information about tax and transfer systems and the timing of tax collections to construct automatic fiscal policy responses to economic activity. In their original study, Blanchard and Perotti (2002) find an initial tax multiplier of 0.7 on impact, with a peak impact of 1.33 after seven quarters. In contrast, using sign restrictions to identify tax shocks, Mountford and Uhlig (2009) find a peak-to-impact multiplier that is substantially larger.

A second technique, originating with Romer and Romer (2010), uses narrative history from Presidential speeches and Congressional reports to identify exogenous tax changes with political or philosophical, as opposed to economic, motivations. These changes are unlikely to be correlated with other factors affecting output. Tax changes unrelated to the business cycle can be used as a quasi-natural experiment to estimate the effect on economic output; this matters because if tax cuts are a response to deteriorating economic conditions, the data will show a spurious negative correlation between taxes and growth. Romer and Romer estimate that a 1-percentage-point increase in the total tax share of GDP decreases GDP by 1 percent in the first year and up to 3 percent by the third year. They further find that a 1-percentage-point increase in the total tax share of GDP decreases

<sup>1</sup>The report refers to "government spending," which is the sum of transfers, government purchases, and interest, but it is actually referring to studies of government purchases such as military and highway spending. The distinction is important because transfers can reduce employment and GDP even while purchases increase them (e.g., my 2012 book on The Redistribution Recession). If nothing else, we must recognize that government purchases are part of GDP whereas transfers are not.

investment by 1.5 percent in the first year and up to 11.2 percent by the third year.

Using Romer and Romer's (2010) series as an external instrument for changes in average individual marginal tax rates, Barro and Redlick (2011) similarly find that a permanent 1-percentage-point reduction in the average marginal tax rate raises real GDP per capita by 0.5 percent in the subsequent year, corresponding to a conventional tax multiplier of 1.1. Applying the narrative approach to U.K. data, Cloyne (2013) finds that a 1-percentage-point reduction in the total tax share of GDP increases GDP by 0.6 percent on impact and by 2.5 percent over three years, and raises investment by 1.2 percent immediately and by 4.6 percent by the third year. Hayo and Uhl (2014), using German output data, estimate a maximum response to a 1-percentage-point drop in total tax liability (as a percentage of GDP) of 2.4 percent. Applying a similar approach to fiscal consolidations (tax revenue increases) across the OECD countries, Leigh, Pescatori, and Guajardo (2011) find that a tax-based fiscal consolidation of 1 percentage point of GDP reduces GDP by 1.29 percent.

Mertens and Ravn (2013) develop a hybrid approach that combines both methods. Because narratively identified shocks may be prone to measurement error, and identification in a structural vector autoregression framework can require questionable parameter restrictions, Mertens and Ravn develop an estimation strategy that utilizes Romer and Romer's (2010) narrative tax shock series as an external instrument to identify structural tax shocks, avoiding the need to impose parameter restrictions. Utilizing this hybrid approach to analyze U.S. data, they estimate that a 1-percentage-point cut in the average corporate income tax rate raises real GDP per capita by 0.4 percent in the first quarter and by 0.6 percent after a full year, with the effect persisting through 20 quarters. Mertens and Ravn additionally estimate that a 1-percentage-point cut in the average corporate income tax rate generates an increase in nonresidential investment of 0.5 percent on impact, with a peak increase of 2.3 percent after six quarters. Also employing a hybrid approach, Mertens and Montiel-Olea (2017) find that in the first two years following a tax decrease of 1 percentage point, real GDP is expected to be higher by about 1 percentage point.

On the individual side, meanwhile, Mertens and Ravn estimate that a 1-percentage-point cut in the average personal income tax rate raises real GDP per capita by 1.4 percent on impact and by a peak of 1.8 percent after three quarters. Though they find that a 1-percentage-point reduction in the average personal income tax rate has a negligible impact on inflation, short-term nominal interest rates, and government debt, they do find significant positive effects on employment, hours worked, consumption, and durable goods purchases and nonresidential fixed investment. In particular, they observe that a 1-percentage-point decrease in the average personal income tax rate results in a peak employment response of 0.8 percent after 5 quarters, and peak durable goods and nonresidential investment effects of 5 and 4 percent, respectively, beyond one year.

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RESPONSE FROM DR. MULLIGAN TO QUESTIONS FOR THE RECORD SUBMITTED BY  
REPRESENTATIVE KAREN HANDEL

**Wage stagnation among men with no college degree receives more attention than the tens of millions of women who have gained jobs and advanced from entry-level wages over time.**

- **Can you comment on female wage growth? (U.S. Census Bureau data show that the 2017 inflation-adjusted median income for women was 82.4 percent higher than in 1980 versus 13.5 percent for men.)**

**Prime-age labor force participation has recently risen slightly, but remains well below the pre-recession level.**

- **Why is it so low?**
- **What can draw those who are able bodied back to work?**

From Q1 2017 through Q2 2018, the nominal median weekly wage among women working full-time as wage and salary workers has increased by 2.6 percent. This slightly outpaces the 2.3 percent increase among men working full-time as wage and salary workers. Similarly, among women working part-time, nominal median weekly

wages increased by 5 percent since the start of 2017, compared to an increase of 3.6 percent among similarly employed men during this period.<sup>1</sup>

For historical context, the wage growth of female full-time workers has substantially outpaced that of men over the past 38 years since 1980. From Q1 1980 through Q2 2018 the average weekly wages of women has increased by 27.5 percent in real terms, while the average weekly wages of men has been roughly flat (as reported by BLS using the CPI-U as an inflation measure; each of these would exhibit faster growth using the PCE inflation measure).

The faster growth in wages among women from these official statistics does not tell the whole story though, as more women are now working and more women are now working full-time than was the case in early 2017. There were 2.1 million more women working full-time in August 2018 than in January 2017, and 300 thousand fewer women working part-time.<sup>2</sup> As women are moving from part-time to full-time work, this will also result in further increases in wages that are not reflected in the BLS computations described above.

In the Council of Economic Advisers' September report on wage growth we outlined several adjustments to traditional wage statistics reported by the Bureau of Labor Statistics which result in those figures understating the actual growth in compensation that workers are experiencing. These include an increase in the share of compensation coming in the form of benefits, shifts in the composition of the workforce as workers who were on the sidelines join or rejoin the labor force, and counting after-tax compensation to include the direct benefits of the Tax Cuts and Jobs Act. While we do not have a specific break-out of these effects by gender, these effects are relevant for considering women's wage growth in addition to being relevant for wage growth among the entire population.<sup>3</sup>

Regarding your second question on prime-age labor force participation rates, you are correct that prime-age labor force participation remains below the pre-recession level (although the prime-age labor force participation rate of has now recovered to its 2010 level and the 79.5 percent prime-age employment to population ratio in July 2018 was the highest it has been since May 2008). It remains low, in part, because there are workers who left the labor force during the recession and its aftermath. These workers could be incentivized to rejoin the labor market—potentially after years of not working. In July, the Council of Economic Advisers released a report on expanding work requirements in non-cash welfare programs, which discusses policies to increase the incentives for able bodied prime-age workers to reenter the labor market. These include expanding work requirements, similar to those in place in TANF, to Medicaid, SNAP, and housing assistance. As we note in that report, “expanded work requirements would increase the incentive for individuals to work without exacerbating the high marginal tax rates faced by some current low-wage, part-time workers” adding that “the evidence on welfare programs suggests that work-conditioned programs are uniquely able to both increase adult employment and improve child outcomes.”

The Affordable Care Act's employer mandate and premium tax credit rules also penalize both earnings and full-time employment.<sup>4</sup> A repeal of the law would remove those disincentives and thereby increase full-time-equivalent employment. Even with the law in place, allowing families to pursue unsubsidized coverage options would increase incentives to work and earn. The Trump administration has taken some of these steps, such as expanding the range of (unsubsidized) short-term limited-duration insurance plans that are permitted on the market (83 FR 38212).

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RESPONSE FROM DR. ROBERTS TO QUESTIONS FOR THE RECORD SUBMITTED BY  
REPRESENTATIVE KAREN HANDEL

**Wage stagnation among men with no college degree receives more attention than the tens of millions of women who have gained jobs and advanced from entry-level wages over time.**

<sup>1</sup>These data are from Bureau of Labor Statistics calculations using Current Population Survey data. The part-time results are not seasonally adjusted.

<sup>2</sup>There also has been a long-run increase in full-time work among employed women. In January 1980, 73.1 percent of working women worked full-time. By August 2018, this share had increased to 76.1 percent.

<sup>3</sup>Mulligan and Rubinstein. “Selection, Investment, and Women's Relative Wages over Time.” *Quarterly Journal of Economics*. August 2008.

<sup>4</sup>See my 2015 Side Effects and Complications, or my June 2015 Testimony to the Joint Economic Committee on this subject.

- **Can you comment on female wage growth? (U.S. Census Bureau data show that the 2017 inflation-adjusted median income for women was 82.4 percent higher than in 1980 versus 13.5 percent for men.)**

Female wage growth has indeed been very impressive. And since I believe that inflation since 1980 has been overstated, I think the growth of female wages in real terms is even higher than the numbers suggest. Equally important is that millions of women joined the labor market over this time period. In 1980, there were a little over 20 million women who worked full-time and year-round. By 2015, that number had more than doubled to 47 million. So the economy has created jobs for millions of women at much higher pay than in the past.

**Prime-age labor force participation has recently risen slightly, but remains well below the pre-recession level.**

- **Why is it so low?**
- **What can draw those who are able bodied back to work?**

I don't think we understand this phenomenon fully. There has been a lot of interesting speculation about both cultural causes as well as changes in disability law and other regulations. But I don't think a clear consensus has emerged that is convincing.

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RESPONSE FROM MR. MOORE TO QUESTIONS FOR THE RECORD SUBMITTED BY  
CHAIRMAN PAULSEN

**A frequently cited San Francisco Federal Reserve Bank paper suggests that the Tax Cuts and Jobs Act may have little effect on economic growth, but seems to equate the Tax Cuts and Jobs Act with a Keynesian-style stimulus package.**

**Could you comment on the report's validity?**

**Does this study's results hold if the Tax Cuts and Jobs Act raises the economy's potential as the Congressional Budget Office is projecting?**

**The paper can be found at this link: <https://www.frbsf.org/economic-research/publications/economic-letter/2018/july/procyclical-fiscal-policy-tax-cuts-jobs-act/>**

The San Francisco Federal Reserve Bank study is a purely Keynesian analysis of fiscal policy. It concludes that "thanks in large part to recently enacted tax cuts, U.S. fiscal policy has taken a decidedly procyclical turn—providing stimulus when the economy is growing. In fact, the projected increase in the Federal deficit over the next few years would represent the most procyclical fiscal policy stance since the Vietnam War."

If there is any lesson to be learned from the last two presidencies and the economic performance it is that standard demand-side economic policies as tried by President Obama were failures. Government spending does not create jobs, it reduces private sector growth and employment. This is why the Obama Administration's own numbers found that the economy would have recovered from the Bush recession more quickly and more powerfully if the government had NOT spent and borrowed the \$830 billion on the "fiscal stimulus" plan. The Keynesian playbook gave America the worst recovery from a recession since the Great Depression.

The Trump tax cuts are SUPPLY SIDE policy moves. They shift the supply curve out by increasing incentives for businesses to invest, hire and innovate. Already they have expanded the 10 year window for the economy 2018–27 by just over \$6 trillion. It is hard to conceive of a more positive result—so far. This means that about two-thirds of the debt impact of the Trump tax cuts has already been erased thanks to the phenomenal 3 to 4% growth path of the economy over the past twelve months.

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RESPONSE FROM MR. MOORE TO QUESTIONS FOR THE RECORD SUBMITTED BY  
REPRESENTATIVE KAREN HANDEL

**Wage stagnation among men with no college degree receives more attention than the tens of millions of women who have gained jobs and advanced from entry-level wages over time.**

- **Can you comment on female wage growth? (U.S. Census Bureau data show that the 2017 inflation-adjusted median income for women was 82.4 percent higher than in 1980 versus 13.5 percent for men.)**

Wage growth over the last 30 years has been significantly higher for women than men. And the demographic group with the most economic progress has been black women.

The very good news on the economy and wages is that since the Trump tax cut, the largest wage gains went to low-income households and households headed by workers without a college degree. The bottom 10% in income saw wage gains of 5%. The top 10% of wage earners saw wage growth of just over 3%. This would seem to validate the Trump claim that the tax cuts were designed to help working class Americans. Retail sector pay rose by nearly 4% while professional business workers saw wage hikes of closer to 3%. This does not include bonuses. We have seen three major retailers, Amazon, Disney, and Walmart raise starting wages in the last year.

This is happening in part because we are seeing more capital investment by businesses—as a result of the lower business tax rate and expensing—which leads to greater worker productivity. It is also occurring because the tight labor market has created more job options for blue collar and lower skilled American workers. What is unique about this Trump boom is that the rising tide is lifting all boats. This was a tax cut for everyone—not just the rich.

**Prime-age labor force participation has recently risen slightly, but remains well below the pre-recession level.**

- Why is it so low?
- What can draw those who are able bodied back to work?

Low labor force participation can be combatted through work for welfare reforms, apprenticeship programs and higher wage rates to entice more Americans to tilt toward work over leisure. We also need a more robust work-based immigration system to get the best workers from around the world here in the United States.

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RESPONSE FROM DR. BOUSHEY TO QUESTIONS FOR THE RECORD SUBMITTED BY  
REPRESENTATIVE CAROLYN B. MALONEY

**1) The Measuring Real Income Growth Act (H.R. 6874) instructs the Bureau of Economic Analysis of the Department of Commerce to produce, as part of its quarterly analyses of Gross Domestic Product, estimates of economic growth by income level. How would such additional analyses improve our ability to shape public policy so that it better serves all Americans? For example, how would it improve our understanding of the economic status and the needs of Americans living in different cities, states and Congressional districts?**

The Measuring Real Income Growth Act would immediately require the Bureau of Economic Analysis of the Department of Commerce to disaggregate growth by income so Americans can see how income is growing, or not, for those at the top, bottom, and middle of the income distribution. These new measures will help policymakers track and respond to increases in income inequality that reduce economic mobility in the United States, and could help policymakers to trace the causes of inequality to a number of social ills. They will also provide information that can help us predict and plan for recessions. For example, if the Bureau of Economic Analysis additionally disaggregates consumption (as they have conducted preliminary research on), the results could help us understand the uneven distribution of savings and identify when consumption is being driven by debt, rather than income gains.

**This legislation also lays the groundwork for the possibility of a more extensive effort to disaggregate growth in the future. The same techniques could also give us growth disaggregated by geographic area. More detailed economic data by State, county, or other geographic region would help policymakers target place-based policies to address areas that have been left behind by the modern economy.**

**2) Why is legislation like the Measuring Real Income Growth Act (H.R. 6874) necessary when some prominent economists have been able to independently produce analyses of GDP growth by income? Is there support in the field of economics for disaggregating economic growth?**

Federal collection of these data is important for several reasons. First, federally produced distributional national accounts would be consistent and reliable over time. Academic economists have made great strides in pioneering these measures, but the production of important national economic statistics should not be left solely up to non-governmental sources. Academics' research priorities and available funding will change over time, but policymakers and the public should not be deprived of this data in the event that academics are unable to continue producing it.

Second, having the Bureau of Economic Analysis produce distributional national accounts would ensure this data is as current, prominent and widely accessible as possible. It will also complement for other Bureau products, such as on GDP, providing important context for news outlets and other consumers of those reports.

Finally, Federal statistics are seen as unbiased, credible, and valuable by most economic observers. The construction of economic statistics is transparently documented by the agency that produces them, allowing researchers to scrutinize the methodology themselves and ensure that they are error free and that the statistical methodology is sound.

There is significant support in the economics field for producing such a measure federally. The principal authors of the current estimates support the Federal production of these data. Two economists who have won the Nobel Memorial Prize in Economics have stated that they favor adding these measures to the national accounts: Robert Solow, in a column written for the Washington Center for Equitable Growth (“Improving the measurement and understanding of economic inequality in the United States” 07/12/2017), and Paul Krugman, in an opinion piece in the New York Times (“For Whom the Economy Tolls” 08/30/2018).

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#### WASHINGTON CENTER FOR EQUITABLE GROWTH

##### DISAGGREGATING GROWTH: WHO PROSPERS WHEN THE ECONOMY GROWS

*Heather Boushey and Austin Clemens*

*March 2018*

#### KEY TAKEAWAYS

1. The measurement of Gross Domestic Product has fostered a national fixation on “growing the pie” that ignores how growth is distributed. That conventional wisdom has become antiquated, as more and more of the Nation’s growth has benefited the top 1 percent.

2. Policymakers interested in combatting rising income inequality cannot evaluate the effectiveness of their policies without a consistent, high-quality measure of how economic growth is distributed.

3. Existing statistics on inequality and the distribution of economic gains produced by the Federal Government do not account for all income, vastly underestimate the income of top earners, or are not given the level of attention received by other major economic statistical products.

4. A distributional component could be added to the National Income and Product Accounts now, at least in part. The United States could include many of the most desirable features of such a system, although some others may require investments in new statistical infrastructure.

5. To create an accurate system of distributional accounts requires the Bureau of Economic Analysis to have expanded access to tax data held by the Statistics of Income division of the Internal Revenue Service.

#### OVERVIEW

The National Income and Product Accounts, or NIPA (also referred to as System of National Accounts, or SNA, outside of the United States), were a radical advance in economic measurement when they were instituted in the early 20th century. These accounts track aggregate output and income for the national economy. Most notably, they measure Gross Domestic Product and the quarterly fluctuations in GDP that tell us if the economy is growing or contracting. Before their advent, ascertaining the health of the economy was an inexact and patchwork procedure.

Great achievement though it was, even the creators of NIPA knew it had limitations. One of these is the lack of data on how income is distributed. In a section titled “Uses and Abuses of National Income Measurements,” the 1934 report to Congress that is the first official measurement of national income noted that “The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income.”<sup>1</sup> The author, future Nobel Laureate Simon Kuznets, was careful to differentiate between the idea of aggregate economic output and “economic welfare.”

The lack of data on how income is distributed is especially glaring now in the face of rapidly increasing economic inequality. Through much of the mid-20th century, economic growth was shared relatively equally by all income groups. Starting

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<sup>1</sup>Simon Kuznets, “National Income, 1929-32” (Washington: U.S. Government Printing Office, 1934).

around the 1980s, however, larger shares of economic growth flowed to the top of the income distribution, with the top 1 percent experiencing especially large gains. According to the economists Thomas Piketty at the Paris School of Economics and Emmanuel Saez and Gabriel Zucman at the University of California, Berkeley, pretax income growth for the top 1 percent of all earners between 1980 and 2014 was 204 percent in the United States, far above the national average of 61 percent.<sup>2</sup>

NIPA needs some renovations to update it for the 21st century. Other researchers have suggested a broad range of possible improvements. Most notably, former French President Nicolas Sarkozy commissioned Nobel Laureates Joseph Stiglitz and Amartya Sen of Harvard University and economist Jean-Paul Fitoussi at the Institut d'Études Politiques de Paris to suggest how GDP could be rethought to more accurately measure economic and social progress. The resulting report contains a long list of suggested improvements, with suggestions that address inequality as well as thoughts on how environmental quality and life satisfaction could be better accounted for in national economic statistics.

This report sets a more modest but equally important goal: Instead of revolutionizing GDP, U.S. policymakers should evolutionize it. The pages that follow explain why the United States needs to add an explicitly distributional component to GDP and discuss how that goal can be accomplished. Adding a measure of how income is distributed would allow us to quantify inequality in our economy, and, in its most advanced format, would let U.S. statistical agencies disaggregate economic growth to see how the economy is performing for subgroups of people according to their income, geographical location, gender, and more. Being able to do so would enable policymakers at Federal, State, and local levels to better understand the consequences of rising economic inequality and design policies that encourage more equitable and sustainable economic growth.

The time to make these improvements to NIPA is now. On a purely pragmatic level, methodological advances and increased availability of computational power make it practical to produce a more sophisticated NIPA. But even in the 1930s, economists understood that NIPA should eventually incorporate distributional data. Doing so responds to an emerging economic challenge: In recent years, the share of income that accrues to the top 1 percent has reached pre-Great Depression heights, creating a new class of super-rich individuals who enjoy much faster income growth than the “merely” rich and everyone else in society today.

This report proceeds in three parts. The first section describes the historical development of NIPA and recent efforts to update NIPA to reflect new economic realities. The second section explains why distributing national income is important. And the final section enumerates the desirable features that a distributional system of national accounts should have and discusses implementation of these features in the United States.

*<https://equitablegrowth.org/research-paper/disaggregating-growth/?longform=true>*




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<sup>2</sup>Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman, “Distributional National Accounts: Methods and Estimates for the United States.” *Quarterly Journal of Economics* (2018, forthcoming).