

**THE DECLINE OF ECONOMIC OPPORTUNITY
IN THE UNITED STATES: CAUSES
AND CONSEQUENCES**

HEARING

BEFORE THE

**JOINT ECONOMIC COMMITTEE
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WEDNESDAY, APRIL 5, 2017

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

The Committee met, pursuant to call, at 10:02 a.m., in Room 1100, Longworth House Office Building, Honorable Pat Tiberi, Chairman, presiding.

Representatives present: Tiberi, Paulsen, Schweikert, Comstock, LaHood, Rooney, Maloney, Delaney, Adams, and Beyer.

Senators present: Lee, Heinrich, Klobuchar, and Peters.

Staff present: Breann Almos, Theodore Boll, Doug Branch, Kim Corbin, Whitney Daffner, Connie Foster, Martha Gimbel, Colleen Healy, Adam Hersh, Karin Hope, Matt Kaido, Brooks Keefer, Christina King, John Kohler, Paul Lapointe, AJ McKeown, Thomas Nicholas, Victoria Park, Alexander Podczewinski, Russell Rhine, and Alex Schibuola.

**OPENING STATEMENT OF HON. PATRICK J. TIBERI,
CHAIRMAN, A U.S. REPRESENTATIVE FROM OHIO**

Representative Tiberi. Good morning, everybody. Welcome to our first Joint Economic Committee hearing of the year.

I want to especially welcome our ranking member, Senator Heinrich, and our vice chairman, Senator Lee, who is apparently on his way to a markup, as well as other members of this committee. And we are joined by a new member, Mr. Rooney from Florida, as well. I look forward to working with all of them to dive into some important issues facing our economy.

The U.S. economy did not surge back from the last recession, as it had every other recession since World War II, and we are paying a price for it. The drawn-out recovery and the meager growth rate we have settled into are exacerbating the country's many challenges.

The purpose of today's hearing is to gain insight into why the recovery, besides being slow, is also so uneven. Many parts of the country face problems more severe than national average economic growth and unemployment rates convey. Some areas effectively are still in a recession.

In my home State of Ohio, we have made strides in encouraging businesses to come to our State, and our unemployment rate has dropped at a steady pace over the past few years. However, that

hasn't been true for every part of our State. We can do better, especially for the communities where folks feel they have been left behind. In Ohio, that is in counties in Appalachia and in areas of urban centers of Ohio, where the dynamics of the rural and urban poor couldn't be more different.

Allow me to submit to you four perspectives.

First, accelerated national growth would lift many struggling regions. The familiar image of a tide lifting all boats is appropriate.

Second, innovation is integral to economic development, especially in an advanced economy. Innovation arises from entrepreneurship, which has been the hallmark of U.S. economic success. When entrepreneurial activity wanes, as it has recently, economic growth also slows.

Third, a large, complex economy, such as the U.S.'s economy, will always have parts that expand and parts that contract, largely related to different rates of technological change. However, government intervention, such as with respect to taxes, wage and employment benefit mandates, zoning, and licensing, can make this worse by restricting market entry, impairing new business formation, and limiting job creation.

Fourth, education and skill development are the key to a productive, adaptable labor force. I was struck by observations that Federal Reserve Chair Janet Yellen made in a speech last week in which she stressed the importance of entrepreneurship, the importance of vocational education and apprenticeships, and engaging employers in the training process, among other things.

Everyone is aware of the demographic change the country is undergoing right now. The baby boom generation is reaching retirement age, and that is affecting many aspects of our economy. One such effect is slowing entrepreneurial activity, as part of today's testimony will explain.

The challenge of an aging population makes it all the more important that the economy work efficiently and that government actions at both the State, local, and Federal levels not be prohibitive.

Unfortunately, this is not always the case. For example, laws and regulations for many years have been accumulating at a faster rate than the economy has grown. As a result, business expansion is discouraged and new projects are deferred or abandoned. U.S. worldwide ranking in the ease of starting a business has slipped from 45th out of 190 countries in 2016 to 51st today, according to the World Bank.

Members from both sides of the political aisle have frequently criticized the inefficiencies of the regulatory buildup, yet it continues. The effects are real, and they are holding the economy back.

One of the key areas of weakness in this recovery has been private business investment, which is sensitive to tax and regulatory regimes. The economy requires faster rates of private investment than the existing regimes have permitted. Regulatory and tax reform will create more jobs and opportunity.

A central aspect to the economy's functioning can be characterized as "dynamism," the rate at which the population starts new businesses, moves to another region, changes jobs or occupations. It refers to people's innovativeness, entrepreneurship, and motivation. Less dynamism means less of this is happening.

Many of our communities are hurting, and I believe that increased private investment, restoring economic dynamism, and the resulting accelerated economic growth can help them recover quicker.

We have an excellent panel of witnesses today, and I look forward to the insightful testimony they are going to provide on these challenges facing local and regional economies in the country.

In closing, let me observe that there are few periods in the country's history when America did not face serious challenges. We face many new challenges today, but I have full faith in the resourcefulness of the American people and the functioning of our market economy to overcome them, and, as in the past, I believe we will succeed.

It is now a great pleasure to introduce for an opening statement our new Ranking Member, Senator Heinrich.

[The prepared statement of Chairman Tiberi appears in the Submissions for the Record on page 46.]

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

Senator Heinrich. Thank you, Chairman Tiberi.

And to all our witnesses, thank you for joining us today for our first hearing of this Congress.

The United States has long been the global leader in opportunity and innovation. When I was growing up, both of my parents worked incredibly hard. Neither had a college degree. It wasn't easy, but I was able to get a college degree. And I am sitting here today with all of you because of the sacrifices that they made and because of the opportunities that this Nation afforded to them.

What seemed like a very attainable dream 30 or 40 or 50 years ago too often seems unattainable today. Across New Mexico and the Nation, working people feel that they can't get ahead, and, too often, parents don't believe that the future is as bright for their children as it was for them.

When we ask ourselves, what are the barriers to opportunities for me and my neighbors, many of my colleagues focus on the role of regulation and the Tax Code. That conversation is important, but I would caution us all to not conflate what is good for CEOs or what is good for investors with what is necessarily good for a working family living in rural New Mexico. It is a mistake to think that deregulation or tax reform alone will revive rural communities or create good-paying jobs in small towns or cities across America.

What our business leaders lack is certainty. Expiring tax credits are not good for planning. The constant threat of taking health care away from families does not instill certainty. Repealing rules that keep our air and our water clean don't give businesses the certainty and the quality of life that they need to create the good jobs of the future. Policies that are good for business and promote pragmatic public health goals, like the methane rule that Congress is trying to do away with, should be protected, not targeted.

We are about 80 days into this Administration, and what we have seen is a budget that would devastate rural America and make it harder for seniors and children to get the core services that keep them healthy and give them opportunities.

Too many people here in Washington think that if the stock market is on the rise, the economy is doing just fine. That is not the reality for most of America's working families, and it is certainly not the reality for many of my constituents. The way we should measure the success of the economy is if wages are going up, if parents can afford to send their kids to college, if entrepreneurs can start new businesses and workers are able to retire with some measure of peace of mind.

I believe that we have to get back to basics. Congress must take concrete action that focuses our limited resources on investing in hardworking families, the men and women in this Nation who are fighting to give their kids a better future, rather than on tax cuts for the wealthiest.

Comprehensive education and workforce training must be a top priority in the face of the global nature of the economy we see today. We need tax and labor policies that reward hard work. We ought to prioritize tax programs for families that are proven to reduce poverty and incentivize work, things like the Earned Income Tax Credit and the Child Tax Credit.

Public-private partnerships alone cannot create the modern infrastructure that works for all communities, especially those in rural areas. Congress must be making a substantial investment in roads, in water projects, and high-speed broadband that connect people and communities to financial and educational opportunity.

The renewable energy sector is just one example of a place where jobs are growing rapidly and not just in metro areas but also in rural communities. Congress' work to encourage this market through tax credits has helped get that industry off the ground. The success of the future of our economy will be tied to whether Congress today takes the bold steps necessary to connect people with the opportunities that will exist tomorrow.

A great deal of work remains to be done to ensure that all Americans get a shot at getting ahead. I look forward to starting this conversation with you all today, and I especially look forward to hearing from our witnesses.

[The prepared statement of Senator Heinrich appears in the Submissions for the Record on page 47.]

Representative Tiberi. Thank you, Senator.

Let's go on to the witnesses.

Our first witness, from right to left, I would like to introduce Dr. Tim Kane, an economist and research fellow at the Hoover Institution at Stanford University. In addition to his senior research roles at the Kauffman Foundation and the Heritage Foundation, Dr. Kane has served twice as a senior economist here at the Joint Economic Committee.

He has published a number of books on a variety of topics and has provided commentary for many national news outlets. Dr. Kane cofounded multiple software firms, and his startup *enonymous.com* was awarded Software Startup of the Year in 1999. Dr. Kane earned a Ph.D. in economics from U.C.-San Diego. He is also a graduate of the United States Air Force Academy.

Dr. Kane will be presenting the testimony of his colleague Dr. Ed Lazear, who is unable to be with us today.

And what is not in your resume, which I should have started out with, Dr. Kane is a native of Columbus, Ohio, a graduate of Westland High School.

Me, as a graduate of Northland High School and a native of Columbus, Ohio: Go Bucks.

STATEMENT OF TIMOTHY KANE, Ph.D., J.P. CONTE FELLOW IN IMMIGRATION STUDIES, THE HOOVER INSTITUTION, WASHINGTON, DC, ON BEHALF OF HON. EDWARD LAZEAR, PROFESSOR OF ECONOMICS, GRADUATE SCHOOL OF BUSINESS, STANFORD UNIVERSITY, MORRIS ARNOLD AND NONA JEAN COX SENIOR FELLOW, THE HOOVER INSTITUTION, FORMER CHAIRMAN OF THE PRESIDENT'S COUNCIL OF ECONOMIC ADVISERS, STANFORD, CA

Dr. Kane. Yes, sir.

Well, Chairman Tiberi, Ranking Member——

Senator Heinrich. Hit your mike, if you would.

Dr. Kane. Got it.

So, Chairman Tiberi, Ranking Member Heinrich, Vice Chairman Lee, and members of the committee, thank you for giving me this opportunity to address you once again.

And I come to you today as an Air Force veteran with some humility. This is my first time to wear glasses in public. That is hard for an Air Force man to admit.

So I would like to make four points.

First, there is regional variation in economic success. There always has been variation in economic experience among states. The last recession and recovery were not exceptions. Typically, those areas that were hit hardest during the recession have the most robust recoveries.

Second, although states differ in their experiences and outcomes, some adverse factors are common. Most important is an aging population, which affects both employment and business formation.

Third, states vary in their performance partly because they opt for different tax and labor market policies. State-based policy changes can be helpful to growth, but it is important to encourage genuine growth rather than mere transfers of prosperity from one region to another.

Fourth, the most important remedy for local ills is a growing national economy. A rising tide may not lift all boats equally, but draining the ocean will not help those with the least forward momentum.

So my focus is primarily on the period since 2000. Special attention is given to the 2007 and 2009 recession and recovery since it is the most relevant to the situation that exists today.

So, first, State experiences differ before, during, and after recession, any recession, in part because education, average ages, and the proportion of new immigrants vary across states. Perhaps most importantly, the industrial composition varies. Corn, for example, is important in Nebraska, not so much in New Mexico.

Because states have differing industrial makeups and because industries rise and fall somewhat idiosyncratically, it would not be surprising to see states' economic conditions be out of sync with one another. For example, Texas is more sensitive to oil price move-

ments than is Tennessee. The dot-com crash, for example, in the early 2000s affected Silicon Valley pretty severely but other parts of the country to a lesser extent.

And the housing bust in 2000 was felt strongly in a number of areas, including central California, Florida, Arizona, and Nevada, whereas states like North Dakota barely experienced increased unemployment, with the peak rate never climbing more than 1 percentage point higher than the rate that prevailed in 2006. By contrast, Nevada's labor market was massacred during the recession, with the unemployment rate rising almost 10 percentage points. California wasn't far behind.

Although these specific cases are vivid and suggest important State differences, a more systematic approach is useful to put things in the proper perspective for policy analysis.

So, considering unemployment—oh, pardon me. I am going to ramble beyond my time unless I am not careful, so forgive me for just a second. Here we go.

Okay. So it is important to point out that the State rebounds are different. Let's look at Michigan. Michigan's unemployment peaked at 13.9 percent in 2009, but by 2016 it had fallen almost 9 percentage points, down to 5.1 percent. Michigan is a very interesting case study. The rebound phenomenon is pervasive and a positive aspect of our economy.

So it is well known that the workforce is aging, primarily because the large cohort of baby boomers is entering its senior years. The employment-to-population ratio, which is defined as the ratio of those 16 and older with jobs relative to the overall population 16 and older, now at 60 percent, was at 63.4 percent before the recession began, despite unemployment rates that are down at 4.7 percent.

About half of the difference between the current rate and the prior peak is a result of an aging population, but the other half isn't explained by the fact that we have an older workforce. It is more problematic. It reflects lower employment rates, particularly among less educated young men.

So another, subtler effect of aging is the slowing of entrepreneurial activities. This is a little tricky. But recent research on 82 countries from 2000 to 2010 shows that younger countries have higher rates of business formation. This has a profound implication for our country as it ages. One solution is an immigration policy that encourages young, entrepreneurial individuals to come to the United States.

Now, studies on cross-State performances just within the U.S. demonstrate the importance of policy choices on growth and employment outcomes. Those states that adopt more flexible labor market and low tax policies are the ones experiencing the best growth in employment but also in their State GDP.

Data from 2000 to 2015—and this is research that Dr. Lazear has worked on personally—revealed that states with most positive business climates grow fastest. On average, employment growth is twice as high in states that have, quote/unquote, market-oriented labor policy, defined as being right-to-work states and having minimum wages that are below the average across states. Similarly, GDP grows about one and a half times faster over this period in

those states with more free labor policies, let's call them. That is what Abe Lincoln called them.

Generally, positive economic policies are the best way to achieve growth throughout the country. It is difficult to predict which areas will grow and which will decline, and by the time the policies are implemented, the problem may have already passed.

So one final point. Just as states differ in the benefits that they derive from growth, so, too, do individuals benefit differently, or differentially, from growth. It is well known, for example, that the disparity in incomes between the rich and the poor has grown over time as the value of education has grown. The remedy is to enhance the skills of those who are benefiting the least from our economic growth.

A comparison between wages in the U.S. and Germany is striking. Most Germans without a college training are enrolled in strong vocational training programs and earn 92 percent of the average wage in Germany. In the U.S., high school graduates earn only 70 percent of the average wage in the U.S.

The most effective way to enhance opportunity for all Americans is to ensure that we have a vibrant, growing economy built on flexibility, with minimal impediments, with opportunity that is available to all.

Thank you.

[The prepared statement of Dr. Lazear appears in the Submissions for the Record on page 49.]

Representative Tiberi. Thank you, Dr. Kane.

Our next witness is John Lettieri, Co-founder of the Economic Innovation Group. Mr. Lettieri serves as Senior Director for Policy and Strategy and leads their policy development, economic research, and legislative affairs efforts. He has worked in both the public and private sectors with policymakers, entrepreneurs and investors, and global business leaders.

Prior to EIG, Mr. Lettieri was the Vice President of Public Policy and Government Affairs for the Organization for International Investment. Additionally, he served as the foreign policy aide to former U.S. Senator Chuck Hagel during his time as a senior member of the United States Senate Foreign Relations Committee.

Mr. Lettieri is a graduate of Wake Forest University, where he studied political science and global commerce.

Thank you. Your testimony may begin.

STATEMENT OF JOHN LETTIERI, CO-FOUNDER AND SENIOR DIRECTOR FOR POLICY AND STRATEGY, ECONOMIC INNOVATION GROUP, WASHINGTON, DC

Mr. Lettieri. Thank you.

Chairman Tiberi, Ranking Member Heinrich, members of the committee, good morning, and I appreciate the opportunity to testify today.

While there are many ways to approach this discussion, I want to start by posing a question; namely, are people today suffering from too much change in the economy or from too little?

This question matters, because if we believe our problem is too much changed, it follows that our policy agenda should be oriented around mitigating disruptions and hedging against risk. On the

other hand, if we believe the economy has grown too static, too inflexible, and too risk-averse, our policy agenda will look quite different.

So what is the answer? Well, in this supposed age of the gig economy, automation, and artificial intelligence, conventional wisdom would certainly have us believe people are suffering from too much and too rapid change across the economic landscape. But I disagree. In fact, I believe our economy features far too little change and churn in critical areas. In short, economic dynamism is fading rapidly, and the cycle of creative destruction seems broken.

Now, I realize these are provocative claims, so let's look at the facts.

First, what exactly is dynamism? Dynamism can be understood, in essence, as the rate and scale of churn in the economy.

Historically, the high-churn nature of the U.S. economy has spurred innovation and acted as a kind of shock absorber in times of economic trauma. But the post-Great Recession economy bears little resemblance to its dynamic past. So let's start by looking at the startup rate, the job turnover rate, and domestic migration.

First, we see the startup rate has collapsed. At the core of the broader decline in economic dynamism is a steep drop in new firm formation. And this holds across all industries and all regions of the country.

The startup rate fell rapidly during the Great Recession to its lowest point on record. But even as the broader economy rebounded, the startup rate has barely budged and remains mired at 8 percent, which is roughly half of what it was in the late 1970s.

This is a deeply troubling development because new firms are the creative part of creative destruction. They help keep the economy in a constant state of rebirth by replacing dying industries, fostering competition, and producing new and higher-wage jobs. When they disappear, the cycle of creative destruction is thrown out of balance.

Next, we see that job turnover has plummeted. Job turnover is an important sign of labor market flexibility. High turnover was once a key feature of the U.S. economy but has declined substantially since the early 2000s. In 2015, only 1 out of every 14 positions in the economy turned over. And this hurts disadvantaged workers the most. They are the ones most acutely impacted by low turnover rates because without churn in the labor market it is simply more difficult to find an unoccupied rung on the career ladder. For the broader economy, there is evidence, thanks to Ed Lazear, that slower rates of churn reduce GDP growth in the early stages of the economic recovery.

Third, we see that people are staying put in record numbers. Americans are far less geographically mobile than they once were. High rates of internal migration historically served as an important adjustment mechanism for the economy, mitigating downturns as workers moved to areas more rich in opportunity. But domestic migration has fallen by roughly half since the 1990s, settling into a historic low of only 1.5 percent. And I will add, demographic trends are exacerbating this dynamism problem dramatically, as

we are now at the slowest period of population growth since the Great Recession.

The consequences of declining dynamism are profound. For workers, it means fewer labor market opportunities and fewer pathways to achieving the American Dream. For markets, it has corresponded with an era of declining competition and increased concentration among elite firms. And for regions, it means shrinking industrial bases and more profound geographic disparities.

Nevertheless, this low-churn, startup-less recovery has been quite good for one constituency, and that is large incumbent businesses. Indeed, large older firms are enjoying something of a golden age. They have never been more dominant within their industries or responsible for a larger share of the U.S. workforce. And, unchecked by normal competitive pressures, they are also enjoying a sustained period of near-record profitability. What should be temporary rewards in a competitive economy now resemble perpetual awards to incumbency.

In light of these findings, I believe the decline of economic dynamism to be the central organizing challenge of our time. Our solution should not fundamentally be aimed at making the economy look more like the past but, rather, at ensuring the benefits of tomorrow's economy are more broadly shared.

In closing, I will briefly highlight five guideposts for a future-oriented opportunity agenda.

First, we need a radical new focus on business creation and increased competition. We simply can't reverse the decline of dynamism without reviving American entrepreneurship. We must lower barriers to entry and place greater emphasis on the unique needs of new companies, not just the incumbents.

Second, we must work to enhance geographic mobility and labor market flexibility. Central to any opportunity agenda should be empowering people to move to places of opportunity and to more efficiently develop and deploy their skills in the marketplace.

Third, we must do more to invest in the future through renewed commitment to funding infrastructure and basic research. Such investments are critical to private-sector innovation and dynamism.

Fourth, a broad pro-growth agenda is needed, but we should also be bold in incorporating ideas aimed at helping struggling regions regain their footing.

And, fifth, we need to be far more data-driven and experimental in our policymaking, because, indeed, these challenges are new, and they place our policymaking efforts in uncharted waters.

While the decline of dynamism poses a threat to the American Dream for future generations, the good news is we retain enormous advantages and resources as a Nation, more than enough to meet this challenge if we choose.

So thank you, and I look forward to taking your questions.

[The prepared statement of Mr. Lettieri appears in the Submissions for the Record on page 68.]

Representative Tiberi. Thank you.

And our last witness, Dr. Jared Bernstein, joined the Center for Budget and Policy Priorities in May of 2011 as a senior fellow. From 2009 to 2011, Dr. Bernstein was the Chief Economist and Economic Adviser to Vice President Joe Biden, Executive Director

of the White House Task Force on the Middle Class, and a member of President Obama's economic team.

Prior to joining the Obama administration, Dr. Bernstein was a senior economist and the director of the Living Standards program at the Economic Policy Institute in Washington, D.C. Between 1995 and 1996, he held the post of Deputy Chief Economist at the U.S. Department of Labor.

Dr. Bernstein holds a Ph.D. in social welfare from Columbia University.

Welcome back, Dr. Bernstein.

**STATEMENT OF JARED BERNSTEIN, Ph.D., SENIOR FELLOW,
CENTER ON BUDGET AND POLICY PRIORITIES, WASHINGTON, DC**

Dr. Bernstein. Well, thank you for that nice introduction. Chairman Tiberi, Ranking Member Heinrich, members, thank you for holding this hearing and giving me the opportunity to be here.

I make five points in my testimony.

First, though the U.S. economy continues to grow steadily at moderate rates and the labor market closes in on full employment, many barriers to economic opportunity and mobility remain in place. Some Americans, of course, are doing great in today's economy, but many are not.

Point two: The opportunity barriers faced by those left behind include high levels of income inequality and low mobility, unequal access to educational opportunities, residential segregation by income, inadequate investments in children in certain areas, and a markedly slower employment recovery in rural relative to metro areas.

Over the current expansion, both employment and labor force have grown much more quickly in metro than they have in rural areas. The probability of attending a top-tier college is 50 times higher for those in the top 1 percent than for those in the bottom 20 percent. College debt has grown much more quickly for low-income students. Declining rates of mobility over time are closely associated with the rise of inequality.

And taking down these barriers is the key to the opportunity policy agenda.

Point three: Faster GDP growth, while obviously a critically important goal, should not be expected to solve opportunity deficits in America today. The reason is inequality. It is already the case that not enough GDP growth is reaching those who have been left behind. Why should we believe that more growth is the full answer, especially absent policies that more directly help connect left-behind people and places to that growth?

One highly authoritative study I cite underscores this point. Quote, "Increasing GDP growth rates alone cannot restore absolute mobility to the rates they have been. In contrast, changing the distribution of growth across income groups to the more equal distribution would reverse more than 70 percent of the decline in mobility."

Point four: Specific policy solutions targeting opportunity barriers include running tight labor markets; investing in infrastructure; direct job creation; helping small manufacturers; supporting

renewable energy investments; supporting work through healthcare, housing, and wage policies; and apprenticeships.

While mobility specialists often talk, with good reason, about moving people to opportunity, Congress must also discover ways to move opportunity to places that have too little of it. Historically, indirect measures, like tax incentives to invest in disadvantaged areas, have proved ineffective. More direct measures are needed, like direct job creation in places where employment is too scarce.

Helping small manufacturers compete is another way to bring good jobs to left-behind areas. The Commerce Department's Manufacturing Extension Partnership has a strong track record in helping such firms adopt new technology, integrate into global supply chains, strengthen regional partnerships, and connect with national labs researching advanced manufacturing. One recent study found that each dollar spent on the MEP pays for itself nine times over, quote, "as a result of the jobs, investment, and production it supports." Yet the Trump administration's budget defunds this initiative.

My final point suggests what not to do. Avoiding policies that keep opportunity barriers in place is just as important as the proactive agenda items I have just noted. Reducing the provision of public health care, regressive tax cuts, budget cuts to programs that help low- and moderate-income families reconnect to the growing economy would all reduce opportunity. I welcome the chance to explore those points in our further discussion.

Thank you.

[The prepared statement of Dr. Bernstein appears in the Submissions for the Record on page 81.]

Representative Tiberi. Thank you, Dr. Bernstein.

Mr. Lettieri, in my home State of Ohio, as I mentioned, we have seen areas not participate, I guess, in what you would call the recovery, particularly urban and rural.

A couple questions for you. I know you have gathered economic data across the country. Could you share with us some of the economic data specifically to Ohio? And can you offer, based upon the data that you have collected, some observations and conditions of Ohio's regions and the causes and consequences of why they may have been left behind?

Mr. Lettieri. Thanks for that question, Mr. Chairman.

So the story in Ohio is a regional story as well. The unfortunate reality is that, aside from Columbus, in your district, in particular, Ohio's economy is marked by extremely low rates of dynamism. So, if you look at the startup and closure rate, both are far below the national averages.

And that speaks to that broader regional challenge, which is that, where we see economies struggling to make the transition from legacy industry to the knowledge economy, it is not a high closure rate of businesses that is really plaguing these local economies; it is just low rates of churn across the board—too few births and not too many deaths. That is basically the right way to look at it.

And in Ohio, in particular, the State is underwater in its startup and closure rate, meaning that, over the course of the first 5 years of the recovery, they actually shed more businesses than it opened.

And that is obviously a very troubling sign for access to opportunity because of the things I mentioned in my testimony. New businesses, when they are born, set off a chain reaction in the economy that create labor market churn, bring innovation into industries, and a whole host of other things downstream that are beneficial to the local economy and help raise the national economy as well.

We see all of those things really moving in the wrong direction in certain parts of the country. Ohio is struggling with that, just like the rest of the Midwest generally is.

Representative Tiberi. So I was intrigued in your testimony because you allude to the apparent paradox of technological leaps in automation, artificial intelligence, and a gig economy on one hand and the decline of dynamism, as you define it, on the other.

Could you kind of further explain that? How are the advancements that you mention, which open up new types of job opportunities, occurring at the same time as declines in job switching and relocation?

Mr. Lettieri. Yes.

So we have obviously always had technological transformation in the economy. We have always had these great leaps that really redefine the economy overnight and open up new types of industries and opportunities.

The problem today is that, while we have those types of transformations occurring, they are not, A, spreading to the benefit of as wide an array of people as they once did, and B, we have policies and trends in place that actually mute those benefits in a really perverse way. So it is not that there isn't change occurring; it is that there is not enough coming in to replace that which is dying out.

So this is what I mention in terms of creative disruption. When you don't have the creative part of that equation in place, it feels to people like too much destruction, but it is really just the rate of creation has dramatically changed.

The rate of business closure has stayed remarkably steady over the last 30 or 40 years. It is actually right now near an all-time low. And that is really surprising, given how much we hear about disruption of industries and technological transformation.

I will just point out something like e-commerce. Everyone knows Amazon and online e-commerce, it is a huge driver of the economy and a lot of change. But in retail sales, it is still only 8.3 percent of total retail sales in the U.S. Even big, transformative changes take a long time to work their way through the system.

So I think sometimes we overstate the amount of challenge due to change, and not enough focus on what we are missing that we once had.

Representative Tiberi. Thank you.

One final question to Dr. Kane. I hear over and over complaints from entrepreneurs about uncertainty—uncertainty with the regulatory environment, uncertainty with respect to the Tax Code.

I found it intriguing that, in the testimony, your data said, from 2000 to 2015, it revealed that the states with the most positive business climate grow the fastest, and the employment growth, on

the average, is twice as high in states that have market-oriented labor policies.

Can you expand on a couple points? What are the key components that make for an attractive business climate? What policies are detrimental to expansion?

Dr. Kane. Yes, sir. Happy to.

Yeah, I think in Dr. Lazear's research, it is interesting, we are not saying that there is 7 percent more growth in these states, or 14 percent, or 36; it is 100 percent more employment growth in states with better labor policies.

So this is a policy issue. It is not that there are younger populations in these states or any of these other factors that are often explained. And those are—this is in the oral and the written testimony—minimum wage laws are one. So a State that raises its minimum wage or a city that raises its minimum wage to \$15 an hour is saying that if someone is earning \$14 an hour it is illegal for them to work. That is a really ridiculous, anti-work program. And I really appreciated the opening statements about hard work needs to be rewarded, not punished.

So I think the other thing is this right-to-work phenomenon. These three states that adopted right-to-work laws in the upper Midwest, Michigan being one, have experienced phenomenal employment growth.

So those are two that I would point to.

But I need to piggyback on the importance of entrepreneurship, because this isn't just Silicon Valley companies—and shout-out to CompuServe in central Ohio. So there is innovation there. But most companies and most startups aren't in the high-tech space.

And just the decline—to reinforce the testimony here, is that when Jimmy Carter was President, one out of six companies were startups, on average, in those years, meaning they were born that year. And those employed the bulk of new workers, almost all net workers. Today, the number of startups is 1 in 12. That is a national data point. So, you know, if we continue on that, 30 years from now we just won't have startups. We will have highly regulated big companies. And that is an incredibly dangerous trend.

And yet, in Ohio, if you want to start a company, you get charged, right? At least \$100 in every State. Not one Governor has said, "You know what? This is going to the Startup State." And some states are worse at it; some states are better. I can't tell you where Ohio is, but I can tell you they are not as good as they could be and should be.

Representative Tiberi. Thank you.

Senator Heinrich, you are recognized.

Senator Heinrich. Thank you, Chairman.

Dr. Bernstein, I want to ask you a little bit about the role of minimum wage laws. Would you characterize them as anti-work?

Dr. Bernstein. Oh, not at all. And, in fact, I am glad to have the opportunity, because I thought what we just heard from my friend Tim was really quite misleading, given the research that has been done, which is, in many ways, some of the highest-quality research we have, because, as Tim suggested, we have so many of these kinds of quasi-experiments across the country, where 30

states or something like that have raised their minimum wages in lots of cities, so we can actually do this kind of comparison.

And what we have found is that moderate increases in the minimum wage consistently have their intended effect. The idea that they are disemploying has just been consistently proven wrong by the literature.

Now, that doesn't mean you could set the minimum wage at \$15 an hour tomorrow in the Nation, although, with a long phase-in, that could possibly work. But cities that have done so, particularly those with a high wage or price base, have found that they have been able to do that and raise the living standards of low-wage workers.

That is one of the things that gets lost in this testimony that suggests, you know, right-to-work and get rid of minimum wage and undermine labor standards. You know, my research suggests that that doesn't correlate much at all with GDP and employment growth. I think there is some cherry-picking going on there. But, furthermore, as you said and I said in both of our opening statements, even if you do get GDP growth, you are not helping to lift the living standards to provide the opportunities for the workers who are missing out on it.

And so I welcome the opportunity to correct the record on that point.

Senator Heinrich. Thank you.

And in looking at some of the quality research that is out there, one of the things that research has shown is that investments in things like job training, things like early childhood education—early childhood ed is a good example. It returns approximately \$8.50 for every dollar spent on that. Meanwhile, if you look at high-income-earner tax cuts, there has been really little demonstrable effect on employment growth one way or another.

As we look at how to use the limited resources that we have right now, do you think that it would be misguided to prioritize tax cuts over things like job training and early childhood education and other investments that show a demonstrable return on investment?

Dr. Bernstein. Very much so.

And I guess the way I would frame that, Senator, is to point out that what we really want to do in this space, in terms of boosting the opportunity of those who have been left behind, taking down the opportunity barriers that are holding them back, is precisely that: direct investment in meeting the needs of this population.

Indirect approaches—you know, cutting taxes on high-end folks and crossing your fingers and hope that it trickles down through some investment channel—has proven time and again not to have the kind of bang for buck of some of the policies that you mentioned.

You mentioned the 8-plus-dollar return on investments in quality preschool. That is something we don't do in this country, and we are historically unique in that regard. Every other country in the OEC invests about five times as much we do in young children, precisely to tap those returns.

Yes, you know, I talked about the earned income tax credit, I talked about the child tax credit, direct investment in infrastructure, helping small firms—and I know, Chairman Tiberi, that you

have written about this as well—helping small firms and supply chain in places like rural Ohio connect with the global economy, that comes from direct intervention to actually help those firms connect. I mentioned the Manufacturing Extension Partnership, but there are other ways to go about that. Certainly, infrastructure investment is a key point as well.

Those direct investments make a difference. I think going this indirect route, essentially, you know, deregulating, cutting taxes for those at the top, and hoping that it trickles down, it just doesn't work.

Senator Heinrich. I want to jump to Mr. Lettieri, and then I will come back to the deregulation and tax cut point that, Dr. Bernstein, you were just mentioning.

But I wanted to ask you, Mr. Lettieri, you know, you are familiar with how this place works. You have worked here on the Hill, and you know that we play this tax extenders game every year.

And one of the things that a number of you talked about was certainty. So I wanted to ask you about the false equivalency of one plus one plus one not really adding up to three, where, because we are playing a budget game here on Capitol Hill that we know how it is going to turn out, we pretend like we are going to extend some of these credits a year at a time, knowing we are going to probably extend them for the next year and the next year, but inserting enough uncertainty into the economy because people can't plan for the next 3-year window or 10-year window because we are playing that rolling game.

For either you or Dr. Kane or both, does one plus one plus one equal three when it comes to tax certainty?

Mr. Lettieri. Well, thank you. I will start with that.

Tax certainty is certainly a huge issue for businesses in general. And I think something that gets lost in the mix is that tax and regulatory burdens for businesses don't always have to do with the fact of regulation or the top-line rate but to do with uncertainty. And this is particularly true on the new-business side.

If you don't know what you are going to face, in terms of the gauntlet of regulations or tax policy, when you are trying to start a business, in addition to the things that Dr. Kane mentioned about the actual cost of starting a business, it is going to be basically a soft impediment and an entrepreneurial tax that we are levying into the market for companies that are already fragile and trying to get off the ground in a tough marketplace.

And so the more that we can provide that certainty, obviously, the better. And I think that gets lost in the mix because we are so focused on this question of top-line rates or false binary choices between things that don't really need to be binary.

Senator Heinrich. Thank you.

Representative Tiberi. I would like to welcome our new Vice Chairman, Senator Lee.

You are recognized. Welcome.

Senator Lee. Thank you very much, Mr. Chairman. I look forward to working with you on this committee in my capacity as vice chair. And I am thankful to you for holding this important hearing.

I am grateful to each of you for coming to testify. This is an important issue.

I know that all three of you testified about many of the problems with economic opportunity in this country, including problems that we are seeing with labor force participation, with declining economic dynamism, and a whole host of other issues on the business side.

But what I would like to get at here is one of the problems that I think underlies a lot of the challenges that we face today. And I would like to hear from each of you about your brief responses to some of these questions. What are you seeing at the family level? Are there strong families in these communities where these problems are most pronounced?

Often, we see that success at a local level is built on strong families, is built on strong institutions of civil society, community institutions of one sort or another. But many of these areas have faced declines in recent years.

For instance, Stanford economist Raj Chetty, and others along with him, have identified that in many communities you have higher percentages of single parents being associated with lower overall economic mobility. Meanwhile, children with married parents are experiencing a greater degree of upward economic mobility, especially in those communities with fewer single parents.

I guess what I am getting at, are these communities simply economically distressed, or is there something deeper going on here? Is there something occurring at a more fundamental level that we need to have a look at? I would like each of you to respond to this one.

Dr. Kane. Yes. Thanks, Senator Lee. I think that is a valid point.

I think when we look back at U.S. history—and I am not an expert in this area, but I know we have had social policies that are often well-intentioned to support, for example, single mothers but not support them if they are married, right? So I don't know the state of that policy now, but I think, looking back on it—and this goes back to Senator Moynihan, and some of the research that he did shows that those could be destructive.

So sometimes we have well-intentioned policies, and while I wouldn't want to belabor the debate that Jared and I have had many times, you know, a friendly debate, I think some of these well-intentioned policies can be harmful. And so you would want to tread very carefully in trying to fix things.

For example, if you have welfare payments or disability payments or unemployment insurance payments in an area that is distressed, it says they can't get those payments if they actually are mobile and move to an area where there is work. So that does merit deeper scrutiny.

Senator Lee. Thank you.

Mr. Lettieri.

Mr. Lettieri. Thank you, Senator.

I think we make a mistake when we try to separate economy and culture and institutions. Those are all really deeply linked. And so, in a State like yours—you mentioned Raj Chetty's research, which I think is very compelling. Utah features really high social capital, and, as a result, it helps to offset things that maybe are not exportable to other states.

For instance, Utah spends the least per capita on student education, yet has really tremendous outcomes in terms of upper mobility and prosperity at the community level. And so, clearly, something else is going on there besides just rates of spending and government intervention.

But it is also notable for the fact that government tends to really work well in Utah. And I have looked at this quite a bit, and I have been out to Salt Lake City and Provo. It is an amazingly dynamic economy and one that, given its results, certainly holds lessons, I think, for the rest of the country and also policy examples that we should study more closely.

Senator Lee. Thank you.

Dr. Bernstein.

Dr. Bernstein. Yeah, I think it is a great question, and thank you for raising it. I think Dr. Chetty's work is extremely rigorous in this area.

One of the things they find, however, is that the communities with a large share of mother-only families, as you correctly point out, correlate with lower mobility, but you have to be careful not to conflate correlation with causation. They also find that two-parent families in those neighborhoods experience the same lower mobility rates, suggesting single-parenthood is probably more of a correlate than a cause.

So I think the thing that I try to articulate in my testimony that I commend to you is a set of investments in families like this that have a proved track record in improving employment, earnings, health status, nutrition. That has to do with things like the earned income credit, the child tax credit, nutritional support, housing support.

We now have longitudinal research that tracks the—this is what Chetty uses as well—that tracks these kids from birth to adulthood. And we find that the kinds of investments that we often think of as the safety net, kind of helping you today and not having much to do with tomorrow, are actually investments in these kids' futures.

Senator Lee. Thank you. A lot of issues there. There are things that I want to follow up with if we get a chance later. I want to stay on good terms with my Chairman here, so I see my time has expired. Thanks to each of you.

Thank you, Mr. Chairman.

Representative Tiberi. Thank you, Mr. Lee.

Mr. Rooney, you are recognized for 5 minutes.

Representative Rooney. Thank you, Mr. Chairman.

I would like to continue the Senator's slant here on an area that wasn't mentioned, as far as our workplace capability, and ask you, Mr. Lettieri, a little bit about workplace capability in terms of our failed so-called entitlement programs and whether or not they have disabled a large part of our potential working force in America right now.

Some Bureau of Labor Statistics surveys show that three 25- to 55-year-old males are not looking for work for every one unemployed, which gives us a 20-percent unemployment rate. And I know I don't have the statistics of all the big economists, but I am

an employer, and I have seen the stability in all parts of our country.

Fifty-three percent of these folks that aren't looking for work are on Medicaid, which is twice the number of all 25- to 55-year-old males. Three-fifths are on disability payments, which is another whole subject. And this is really interesting; the average, watching 2,000 hours of television a day, and half of them are on daily pain meds.

So, with all those things in there, what are we going to do about them as we try to figure out how to put Americans to work?

Mr. Lettieri. Thanks for the question.

We unambiguously have a crisis with prime age working men in this country and labor force participation, so I don't think there is any disagreement about that. It is also part of the population that is growing at an incredibly anemic rate. So, in terms of the top-line GDP growth targets that we would all like to see set, it is going to be really hard to meet those on the current trend line with labor force participation and population growth.

So your question is fundamentally about safety net, and I will first acknowledge I am not an expert on safety net programs, except to say this: There is broad agreement about things we can better. Things like the earned income tax credit, which Jared mentioned, this is an area that both is shown to be really effective at delivering people from the effects of poverty and incentivizing work and not generous enough with parts of our population that are really in need, which are the ones you just mentioned. And so I think that is low-hanging fruit for us to do much better.

And to Dr. Kane's point earlier, we can also reform the safety net programs that are well-intentioned and good if you stay in one place but really bad for encouraging mobility to higher-opportunity-rich areas.

Those are two things that we can do now that I think there would be broad, almost unanimous bipartisan support for.

Representative Rooney. Thank you.

If I might have time for one more here, I will ask Dr. Kane, you mentioned about the workforce dynamism and things like that in the service economy. Can you comment on the role of career technical education versus the elitist higher ed in creating the kind of workforce that can survive and prosper in the service economy?

Dr. Kane. Yes, sir.

First, I am not a big fan of training programs that are run by the government. I think training is important, and I think it is important to maintain their high skills, but I think it is more important to let the market work and empower people, perhaps with what I would call scholarships, to choose the training that is best for them.

So I think when you ask the government to figure out what the jobs of the future are going to be, they are almost always going to get it wrong. And I say that, again, with some limited level of expertise.

I do worry that, as we analyze this problem, you know, looking at it more broadly, displaced workers, disability programs which create perverse incentives—Austan Goolsbee, right, Austan Goolsbee we all know, President Obama's chief economist, his first

oped was about abuse of the disability program. So it is something that really screams out for attention.

I think, looking broadly, this isn't just an issue of lack of opportunity; it is a set of perverse incentives that have pulled people out of the labor force, to their long-term detriment.

Representative Rooney. Isn't it true that when Speaker Gingrich negotiated workfare with President Clinton that the number of people on welfare went down?

Dr. Kane. I think that was a great compromise, a great story in our history of two sides coming together and working on a program to restore positive work incentives. Yes, sir.

Representative Rooney. Thank you.

I yield.

Representative Tiberi. Thank you, Mr. Rooney.

Dr. Adams, you are recognized for 5 minutes.

Representative Adams. Thank you, Mr. Chairman, and thank you to vice ranking member, as well, for hosting such an important meeting.

North Carolina's 12th District—I represent that District—faces many barriers to economic opportunity and economic mobility. And, just recently, the Charlotte-Mecklenburg Opportunity Task Force released a report on intergenerational poverty, found that Charlotte-Mecklenburg faces many of the barriers that we have spoken about today.

There was a recent study on economic mobility of America's 50 largest cities, and it has been realized that children born into poverty, into the bottom 20 percent of the income, in Charlotte had a 4.4 percent chance of making it to the top. So, rather than making it into the middle class in Charlotte-Mecklenburg, poor children, who are majority African American, Latino, are likely to stay poor. That is something that we really need to work on.

Dr. Bernstein, can you elaborate on the importance of breaking the cycle of poverty and speak to specific ways to break this cycle?

Dr. Bernstein. Yes. And thank you for that important question.

You know, it takes me back to some of the comments I tried to underscore in my initial statement, which is that the best way to help poor people, poor families, and poor communities lift out of poverty is to directly invest in them.

The idea that we can somehow expand our GDP or tweak our Tax Code—by the way, expanding GDP is great, it is important. Having an efficient Tax Code, obviously critically important. But what we can't count on—and we have seen this time and again, because the data you are citing is historical data; this isn't just something that happened last week—is that through various different types of Tax Codes and regulation regimes, this problem has persisted. And the reason it has persisted is because we have inadequately invested in these places, in these families, in these kids, cradle through primary school, through high school, through college, through the workplace.

In my testimony, I try to lay out a really thorough agenda that starts with preschool, moves into educational years, helps people of the type who are facing the barriers we are talking about access higher education, and supports their job market when they are in places with insufficient labor demand. Those are the kind of direct

investments that I think would attack the cycle you are talking about.

Representative Adams. Thank you.

As a followup, you noted in your testimony that a much lower percentage of children of parents with lower incomes and educational levels pursue a higher education, and only 14 percent of them complete a bachelor of arts degree versus the 60 percent of children of parents with higher incomes.

So how can we reduce the burden that these students face in completing their education, ensure that they have the tools to break through the opportunity barriers?

Dr. Bernstein. First of all, without getting into details, let me just underscore my first set of comments, which is the low level of investment in young children, in my view, directly connects to the imbalance in accessing completion to higher ed.

This starts with early childhood education. There is probably no bigger policy mistake we make in this country than under-investing, or even hardly investing at all, in early childhood education. The return on this—this is not a conservative result or a liberal result. The return on that is, you know, eight, nine X to one.

I talked about primary school, but what I didn't get a chance to talk about is accessing completion to higher education, which directly applies to your question. Tuition assistance is important, but so is the ability to handle debt. I have numbers in my testimony about the disproportionate debt burden of middle- and low-income families. Income-based repayment ideas are helpful in that space. We also have to be mindful about affordable tuitions in public universities. There is a role to play there as well.

Now, particularly when some older persons are trying to complete college, they need work supports to be able to get through school often while working. And that takes us right back to the earned income credit, the child credit, help with housing, nutritional support.

We are not talking about, you know, helping people stay on welfare. We are talking about helping people get through college. So, to me, that is breaking down an opportunity barrier.

Representative Adams. All right.

Thank you very much, Mr. Chairman. I am out of time.

Representative Tiberi. Thank you.

Mr. LaHood, welcome to the Joint Economic Committee. You are recognized for 5 minutes.

Representative LaHood. Thank you, Mr. Chairman.

And I want to thank the witnesses for your valuable testimony here today.

Dr. Kane, I wanted to talk a little bit about the State of Illinois, my home State. And when I look at Illinois, I look at a State that 20 years ago led the Midwest in terms of innovation, in terms of jobs, in terms of opportunities. And as we sit here today, it is kind of the poster child for, I think, how things have been done in the wrong way when it comes to economics.

And you look at the fact that the State of Illinois has \$110 billion in unfunded pension liabilities for our public pensions. We have a \$12 billion deficit. We have a business climate that is very stag-

nant. We continue to hemorrhage jobs, people, and opportunities out of our State.

And Illinois is almost like an island in the Midwest when you look at other states around us, whether that is Wisconsin or Indiana or Iowa or Missouri, that have exercised fiscal restraint, improved their business climate, you know, made those tough decisions that needed to be done at the State level.

And I look at Illinois, with our high workers' compensation costs compared to the other states around us, obviously our pension debt, the systemic problem with corruption, mostly from Chicago, and it is very frustrating to see that.

And when we talk about the consequences of those things, when you look at our business climate, I guess, what suggestions would you have in terms of how we reverse that and the consequences if we don't?

Dr. Kane. Mr. LaHood, I think the words are cautionary tale, right? It has been fascinating to watch, coming from the Midwest and seeing that. What I hope the attitude will be of the Congress is to focus on the people of Illinois, but not the State of Illinois.

So a bailout, I think—there will be a debate sometime in our future about whether we should bail out these states that have gotten themselves in trouble. And that means they won't face the consequences of their actions, and we would collectivize the poor choices, whether it is pensions or budget deficits.

I would emphasize, I think I need to emphasize Jared's point earlier about early childhood education. Continuing to invest in the children of Illinois is really critical, and making sure you look out for that. But that means making tough choices about some government workers, teachers who have been dealt very generous programs, and also labor contracts for government workers where you can't fire the worst performers. That is what is really, I think, punishing poor students. And I think that is what is really going to hurt Illinois in the long term, is if we don't continue to invest and try to improve the quality of teachers in the schools. So it is a bit of a diversion. But then, you know, focus on budget deficits.

You all have challenges I can't imagine in dealing with trillions of dollars in deficits that are normalized even in the good times. Illinois has those in isolation. And so getting the books in order is priority number one. And not getting a bailout from Congress is a big part of that story.

Representative LaHood. Thank you.

Dr. Bernstein, I wanted to just talk a little bit about the migration to urban areas that we have seen. And when we look at particularly innovation technology and modernization and companies and businesses that have migrated to larger cities and what that means for rural areas, and really small and medium-sized cities. And are there examples of how to reverse that trend or where small- to medium-sized cities and rural areas have been successful in reversing that trend? And as we move forward, I think that we are going to continue to face this.

Dr. Bernstein. It is a great question. And I think you have teed it up in exactly the right way. Unfortunately, part of the answer is we don't yet have a lot of examples of what you are talking about, the smaller places figuring out how to make those linkages,

but we do have some. And one of the things we see—you are getting at a key kind of undercurrent of the discussion we are having today, because part of the solution to what we are talking about, move people to opportunity, move them to the—help them get to the cities. But part of it has to be, well, let's help them where they are as well, because the solution can't be everybody goes someplace else.

And so one of the things that I have stressed, and it is in my testimony, is particularly helping smaller businesses, and particularly small manufacturers, link up to supply chains. Some of those supply chains are going to link them up to the larger manufacturers in the cities, some of them are actually going to link them up to global supply chains. They can't always do them by themselves. It is one of the disadvantages that smaller producers have over larger ones. And there are public programs, I mentioned the Manufacturing Extension Partnership is one of them, but that is one of a number that help smaller firms do that. I think that is the key linkage.

Representative LaHood. Thank you.

Thank you, Mr. Chairman.

Representative Tiberi. Thank you, Mr. LaHood. Mr. Delaney, you are recognized for 5 minutes.

Representative Delaney. Thank you, Mr. Chairman. I want to thank the guests.

There is some chance here that we are having entirely the wrong conversation. And when I say we, I don't mean you, I mean elected officials and policymakers, because the argument historically has been we either need more government or less government to solve the problems of inequality, lack of opportunity, lack of mobility. Yet if you go to examples in both our country and around the world, where people have pursued very big government or very small government strategies, you see the same type of underlying performance. It may calibrate positively or negatively one way or another, but you can often find other reasons for that.

And so the question is are the problems just inherently different now, and do we need actually a different approach for addressing them? In other words, is automation, technological innovation, global interconnection creating such a different fact set as it relates to work in this country that the prescriptions and approach need to be different? Because I think it is somewhat unassailable, the point that we need greater investment in people and in our country to make a difference again. Yet it is also somewhat unassailable to say that government has been very inefficient and has failed to successfully make investments to the highest return on investment it could possibly have made historically.

So do we need kind of new thinking on this approach that actually does involve greater investment in kids, in communities, to try to make a difference against some of these problems and try to prepare them for a world that is changing rapidly? But do we need those investments to be made and applied and measured differently?

And there are some examples of this in the country. I mean, there is this emerging kind of world of social impact bonds and pay for success. And Salt Lake City is actually a good example of that,

where they have actually been able to deliver a material investment in prekindergarten education, but they have not done it with the government writing the checks. They have had philanthropists write the checks. And if those students show better performance over time, they will get a return on their investment.

So what is the new thinking on this, to the extent you think it exists, that allows us to get out of this ideological box, right? We need either much more government or much less government, neither of which have proven to be that successful, quite frankly, particularly in light of the changing kind of future, which I think is coming at us very fast. I mean, we talk about what trade has done to us, that seems to me to be a bit of a speed bump when you compare it to what automation might do to us. So what is some of the new thinking? And I will leave it to the panel, whoever has an idea they want to make. Otherwise, if not, we will start with Dr.—

Dr. Kane. Just with the short amount of time, sir, a great question. Let me—just for debate purposes I will say no, we don't need new thinking, yet we all should be innovative. But people have tremendous incentives to invest in themselves, right? And we have a free market economy. And it is very easy to get caught up in what we are doing wrong as a country and that this is a crisis. We are still an incredibly powerful, successful economy. People have the right incentives already aligned. I think where they don't have the power to make their choices, we are talking about kids who are 5 and 4 years old, then that is where I think you could do more, and states maybe could do more, not the Federal Government.

Representative Delaney. Because a 5-year-old doesn't have the power to invest in themselves.

Dr. Kane. Exactly.

Representative Delaney. Right? And a lot of people don't have the power to invest in themselves.

Dr. Kane. But I tell you what, 18-year-olds and 21-year-olds do. I don't think they need bailouts on their college loans. I would focus more on kids, not adults.

Mr. Lettieri. I will just add to that. I think it is a great question. One of the challenges is we are really bad at predicting the future, even when we have a lot of information. So I think the best thing we can do is to allow for a permissionless environment where people engage in productive ways, take healthy risks, deploy their skills in the marketplace in a way that carries a lot of downstream benefits for the broader economy and doesn't require government to try to keep pace with innovation and demographic changes.

Representative Delaney. Do you think they need more security to take that risk?

Mr. Lettieri. I think in some ways they certainly do. I also think they need fewer impediments.

Representative Delaney. Right.

Mr. Lettieri. And so we have to be doing both.

Representative Delaney. Less barriers, but maybe a slightly different social contract that allows them to be slightly more secure to be mobile and take risks.

Mr. Lettieri. Yes, and but the best security you can have, I think, in this economy is access to a healthy labor market and a

thriving jobs sector. And right now, we are seeing the heart of that getting hollowed out with declining dynamism.

Representative Delaney. Dr. Bernstein, very quickly.

Dr. Bernstein. I think the new thinking we need is to really appreciate the importance of public goods and the cost of ignoring them. For decades now——

Representative Delaney. The cost of doing nothing is not nothing, in other words.

Dr. Bernstein. For decades now, there has been this mythology that, you know, government bad, private sector good. Well, sometimes government bad, sometimes private sector good. The private sector cannot function without a government sector that invests deeply in public goods. And I am talking about not just human capital, which is critical, and we have been talking about that, but physical capital as well.

By the way, this is an answer to Mr. LaHood that I didn't quite finish, was infrastructure. The places that we are talking about are places that have been left behind, you know, water systems, transportation systems. A \$19 trillion economy cannot produce with an infrastructure that we continuously ignore. And if anyone doesn't believe me, go ride on the Washington Metro and see what happens when you ignore your infrastructure for 20 years. It breaks.

Representative Tiberi. Thank you.

Mr. Schweikert, you are recognized for 25 minutes based upon that coffee you got me.

Representative Schweikert. You see, if you can't make friends, buy them, Mr. Chairman.

Representative Tiberi. You are recognized for 5 minutes.

Representative Schweikert. Gentlemen, could we do a little bit of sort of speed dating here, at least conceptually. About a year ago, The Economist magazine had a lead article that sort of set off a series of interest in me, and basically was talking about have we hit a time of almost oligopoly in the country. And this sort of goes to your dynamism discussion of, because of the regulatory environment we have societally, that was one of the things, organizations, business organizations, concerns have gotten so big, so powerful to sort of amortize their rules, their costs, is that one of the things that is slowing down or shutting down much of the creative destruction that should be rolling through the economy? And they rattled off airlines, milk, I mean, a series of things industries-wise that if you actually look, they are this side of sort of a true oligopoly. Thoughts?

Dr. Kane. We should call out the EIG report that was, I think, produced either right before this or beforehand. I thought it was a fantastic deep dive on some of the dynamism issues. Speed dating, to respect what your request was, I would say yes. And this might be, you know, throwing a very big political hot potato out there, but I thought——

Representative Schweikert. Oh, it is uncomfortable to talk about, but that is why I am saying is it something——

Dr. Kane. Things like some of the major regulatory environments put on the financial industry and health care, requiring companies to provide certain benefits, that is very easy for a large company to provide. It is hard for an entrepreneur to provide those

things. But more importantly, the more generous benefits that are mandated by the government big firms can easily provide, that helps workers nest, that sort of locks them in and makes them less entrepreneurial.

Representative Schweikert. Okay. So your argument would be that structurally, regulatorily we have actually incentivized growing bigger and—

Dr. Kane. To put it in speed dating terms, I would say don't require employers to be paternalistic.

Representative Schweikert. Anyone off the top of your head want to give me a guess why my county, Maricopa County, now the fastest growing county in the country, last year, I had 81,360 people move to my county? Cook County lost over 21,000 people. What are we doing right? What are they doing wrong? Anyone willing to step up to that?

Dr. Bernstein. I don't know the answer. It is a very granular question. I suspect you may have an answer to that.

Representative Schweikert. No, actually, in some ways I don't, because I think it is like everything we all learn around here, it is complicated. It could be labor markets, it could be—

Dr. Bernstein. I mean, here is what I was going to say, to answer your question. Maybe this applies to the question you just asked, but if it doesn't, we will move on. Yes, the regulatory and tax environment obviously matter a ton. But what we hear a lot from businesses is that what also matters—and I just was talking about public goods—what also matters is the skills of the workforce, the quality of the schools, the quality of the environment, the parks.

Representative Schweikert. To your point, and then I want to bounce over to something else, if I actually look at my government spending per population, Cook County spends a hell of a lot more than my county does, yet my schools are better, my population growth is better.

Dr. Bernstein. Well, Cook County is a much more disadvantaged population.

Representative Schweikert. Okay. But I can go through some of the other counties also that are losing population around the country. So there is something out there in the ethos and the way things are delivered and the entrepreneurial spirit.

Also, you were talking about something, and this is another fixation of mine, business startups, just new businesses starting. I accept there is never—in this particular occasion there is probably not a good government solution. There often isn't. How do I get my demographics, my older population to be the entrepreneurs? How do I get my 50-plus to be the ones willing to take risks and start a business? Because if one of my dynamism problems in the economy is I don't have enough creative destruction, enough new startups, how do I get my entire spread of my demographic curve to be willing to be that new entrepreneur?

Mr. Lettieri. That is a great question. One, we can look at that a little more broadly and say—actually, first, older folks tend to be really entrepreneurial versus younger folks. This is one of the great myths of entrepreneurship. Peak age is 40 for starting a business. And the peak range is I think something like 40 to 55. So that is

really where you have both the knowledge, the skills, the network, all those things are starting to come together, and you have some startup capital. Because the number one sources of—top sources of startup capital are not external markets or venture capitalists or angel investors, it is home equity, it is personal savings, it is lines of credit, all things, by the way, that got wiped out by the Great Recession.

Representative Schweikert. And I know I am up against time. So what is happening out there that I am not seeing the number of startups?

Mr. Lettieri. We are voluntarily restricting the most entrepreneurial potential population that we have, which is high skill immigrants. We are voluntarily saying we don't want them in the building. So this is just what the data tell us. This is not a political point.

If you were trying to run government like a business, you wouldn't shut out your most productive workers and not let them in the building. And I think this is an area where we have tremendous chance to make improvements that have nothing to do with legacy costs or right versus left dynamics; it is just a choice. And it has historically been one of our strongest assets as a country.

Representative Schweikert. Thank you, Mr. Chairman, for your patience.

Representative Tiberi. Good questions. Just before I recognize the gentlelady from Minnesota, on John's last point, do all three of you agree?

Dr. Bernstein. I agree strongly.

Dr. Kane. Couldn't agree more strongly, sir. I think that is a great opportunity, actually, for this Congress to show the world how bipartisanship works. Now that it looks like comprehensive immigration reform is dead, thank goodness, you can move on to incremental piece by piece. And the things thing that make the most sense, opinion polls show Democrats, Republicans, independents all want is students that are here studying in our engineering schools, give them a green card. That would be a great piece of legislation. I think all three of us would love that.

Dr. Bernstein. Totally agree. I just can't resist saying that there are a lot of people here already in whom we seriously underinvest.

Representative Tiberi. Thank you. Very good points by all three of you.

On that note, Senator Klobuchar, you are recognized for 5 minutes.

Senator Klobuchar. Thank you very much.

I am going to focus a bit on rural areas, taking you away from the Washington Metro, as big of an issue as it is. And I guess I will start with immigration.

We have got a dairy in Minnesota that employs a couple hundred people. They are legal Mexican workers that have come over. They want to bring their spouses. They can, but then they can't work for 7 years. And while I am on the bill for green cards and H-1B visas, with Senator Hatch, and we're trying to fix that, I also believe we have other needs in this country, especially in rural areas and agriculture. And I am really concerned about not just the proposals out there, but also the rhetoric that I think is going to be a real hit

to the rural economy, to the heartland, if we continue on the path we are on, which is to have no comprehensive immigration reform.

Dr. Bernstein, could you talk about the need for immigrant workers in things like the dairy industry?

Dr. Bernstein. Well, yes. I mean, you have seen it on the ground, and I think we probably all have if we have looked for it. This is a critical workforce, a critical part of the workforce, and in fact an essential growing part of the workforce if we would allow it to grow. One of the reasons our macro economy is constrained—and I am using some of the language of the chairman, who has written about constrained potential in GDP—is because our labor supply is growing too slowly. Well, a lot of that, as Tim said, is demographic. One of the ways we have often dealt with that is being welcoming towards immigrants.

And so at the micro level, which you are describing, it is critical for employers to have that supply. But at the macro level it is also really important. So we are definitely shooting ourselves in the feet.

Senator Klobuchar. They are not just people with science degrees.

Dr. Bernstein. I am sorry?

Senator Klobuchar. They are not just people with Ph.D.s that we need.

Dr. Bernstein. Oh, no. I mean, I think that is a great point. And while I very much take and endorse John's point about entrepreneurs, that is not the only immigrants we are interested in.

Senator Klobuchar. Now, another way we can get at that, of course, and I appreciate all of your support for doing something on this front, but another way we can get at it is apprenticeships. It won't take care of everything, but we have a lot of kids that graduate with degrees, and then they can't get jobs, and then we have this huge need for welders and filling some of our health and technology jobs. And what do you think—I know you, I think, talked about this, Dr. Kane, would be the best thing we could do to further apprenticeships? It is this funny patchwork of State and Federal laws. And other countries, as you pointed out, do it better.

Dr. Kane. And I will second the point. When I was saying comprehensive reform, instead I mean trying to do everything with one giant bill. I absolutely agree, I think immigrants at all skill levels strengthen the U.S. economy.

Senator Klobuchar. Thank you.

Dr. Kane. I worry that we may be making it too hard for agricultural workers to come in, whether as guest workers or—

Senator Klobuchar. And that was part of comprehensive reform was agreeing with the immigrants—

Dr. Kane. Well, I like comprehensive meaning let's address all immigrants. Let's not try to do it with one bill and 15 years later we have got nothing. So building a working coalition is a key priority.

On your question of how to encourage more entrepreneurship, I am doing a study now, so I hope I can come back and tell you about it, about what the State differences in entrepreneurship are. We can identify truly what states are doing it well versus others. So not everything is known. But I can tell you that some states do

make it easier. Where I think no State is perfect, I think here in Virginia it is \$100 to start an LLC. So if my 14-year-old wants to start a company, just coming up with the name for the company, the State of Virginia is going to charge her a hundred bucks.

Senator Klobuchar. Okay.

Dr. Kane. That discourages it. But some states are worse. Virginia is one of the best. So I don't think anybody is doing it as well as they could.

Senator Klobuchar. Good. Export-Import Bank, something also important in rural America and in the Midwest, especially for some of our smaller businesses that can't access export financing in other ways. We know while that is continuing in place, we are missing a quorum because the Congress hasn't confirmed a person for that Board. And I would like to know what you think the effect of that will be, Dr. Bernstein, when we are competing against every other developed nation that has a similar entity that helps finance exports.

Dr. Bernstein. Well, that is where I was going to go. I mean, not every economist loves the idea of an Ex-Im Bank. And I remember when I worked in the White House, I kept running into people from Boeing around every corner. And so I do think it needs to be a diverse—much more diverse bank. But I will say where you land is exactly where I land. To unilaterally disarm on that would, again, be I think a very noncompetitive thing for our businesses to do.

Senator Klobuchar. Okay. Thank you. Last, infrastructure investment. We had a bridge collapse in the middle of Minnesota, as you all know, on a summer day, big interstate highway. Since then, we have invested in our bridges and our roads for positive effect. I think we got rated one year the best State to do business in by CNBC, in part because of that. Could you talk about the importance of that to the economy to get goods to market? Any of you. Mr. Lettieri.

Dr. Bernstein. I will just briefly say I have a section in my testimony where I try to go through both the productivity-enhancing aspects of infrastructure, which are notable, and I think missing from our economy right now. One of our biggest problems, the other part of our constrained potential, I talked about labor supply, is our very slow productivity growth. One way I really think we could help would be investing more in productivity-enhancing infrastructure. It is also a job creator in places where labor demand is insufficient.

Senator Klobuchar. Thank you.

Representative Tiberi. Thank you.

Staying in the State of Minnesota, Mr. Paulsen, you are recognized for 5 minutes.

Representative Paulsen. Thank you, Mr. Chairman. Thanks, everyone, for being here today.

Mr. Lettieri, I will follow up on some of the themes of what you started out with economic dynamism fading. It is interesting, because company startups, as you mentioned, have been on the decline. If you go back to 1977, they contributed 16 percent of total U.S. employment. I think you mentioned the 8 percent figure that we had in 2013 for that type of startup. Small businesses are the

engine of the economy. We always like to talk about how most of our jobs, and our economic growth comes from that sector.

The two time periods where those company startups rebounded or actually increased in this large 40-year period were during the mid-1980s, where it jumped up from 11.8 percent to 13 percent, and also in the early 2000s, when it jumped up from 9.7 percent to 10.8 percent. This chain reaction, I think, that was mentioned earlier, leads to other economic churn and opportunity and growth.

What was it about those two time periods, either related to public policy or technology or some other changes, that we should be looking for right now in terms of replicating or reproducing in some manner? Anything in those two timeframes in particular that stand out?

Mr. Lettieri. Well, we had major tax policy changes preceding both of those periods. I would just caution that I don't know that that is a perfect explanation for what followed, because I think one of the points that we can't underscore enough is that demographics play a huge, huge, huge role in rates of entrepreneurship, and that is both nationally and regionally. I haven't looked at those demographic changes during those time periods, but it may have also been providing tailwinds for those types of bumps.

I will just point out now that there is—and, actually, I think your legislation on employee stock ownership is a great example of things that are not intentional barriers to entrepreneurship or to the health of new companies, but are just in the background providing an advantage to larger incumbents and a disadvantage in the competition for talent among smaller private firms, which is particularly true for new firms. So there are things like that that we can do that on their own may not seem like massive changes in policy, but in the aggregate will have a tremendous and, I think, eventually transformative effect on leveling the playing field back towards competition and new entry.

Representative Paulsen. Sure. And you referenced the bipartisan legislation for helping those that may have stock options but don't have a market to sell those options in. That legislation is both in the Senate and in the House. We may be able to move that forward to promote new startups.

Let me follow up too, because you had five recommendations, one of which was enhancing geographic mobility. Are there any policy initiatives that any of you might have that would enhance geographic mobility? Obviously, immigration is one component. Anything else?

Mr. Lettieri. Yes. And this is about not doing something that we are doing now, which is this Kafkaesque patchwork of occupational licensing barriers around the country. This is mostly a State and local issue, but I think if I would urge you to do anything, it is to use the bully pulpit that you have in Congress to really point out and spotlight just how poisonous this is for the economy.

It really checks all the wrong boxes. It hurts people who are least advantaged the most. It inhibits geographic mobility, meaning that you can't transfer your skills. Even if you are highly licensed and highly skilled and highly trained, you can't transfer those from one State to another, in most cases, without having to go through that whole process again. So it is a tax on folks just moving to locations

with higher opportunity. And they create these bizarre and nonconforming standards that have proven over and over again in research to not bring any benefit to the consumer and to actually depress jobs.

I mean, Alan Krueger, former adviser to President Obama, has done great research on this that shows, to the tune of millions of jobs and hundreds of billions of dollars of costs, that these regulations play. So this is the—in an era of low dynamism, this is exactly the kind of thing we have to carve out of the system. And it is in every State.

And just with one more point, we have only had eight successful instances of delicensing an occupation in a State. Eight. And now 30 percent of U.S. jobs—

Dr. Bernstein. Just to be bipartisan, I want to be clear that I very much endorse those comments about occupational licensing.

Another piece of this that I think would be helpful, one of the real constraints, and we know this, is housing costs, especially going from rural areas, where housing can be extremely cheap relative to other areas. And so one of the problems we have with our housing vouchers program is they are not generous enough to help people move across areas where housing costs rise considerably. And a lot of those areas are areas with considerably more opportunity. And there are ways in which the program itself is constrained such that the voucher amount is set in too small a geographical space.

So if we simply open up that space, that will improve the ability of people to move to opportunity through the voucher program.

Representative Paulsen. Thank you, Mr. Chairman.

Representative Tiberi. Thank you. Good comments.

Senator Peters, welcome back. You are recognized for 5 minutes.

Senator Peters. Great. Great to be back here. Thank you to our panelists today.

I want to pick up on some of the comments that were just made related to regulation, taxation, other issues. And I want to preface this question first saying I do believe we have to have a more efficient Tax Code than we have right now. There are a lot of issues that need to be worked out. And hopefully, we will be able to find some common ground on tax reform. Also, we can do a lot better when it comes to regulation as well, also making that more efficient, understanding that there are some good relations, some that aren't, and how do we find middle ground.

But I just want to get your sense, obviously those are two factors that we have to be considering, but looking at the factual situation of some urban areas that are doing extremely well, and I think all three of you have cited places like San Francisco, Los Angeles, and New York. And I think most folks, with all due respect to my friends there, wouldn't say those are low regulation places, nor are they low tax places.

So it seems to me that there is something else going on here that we have to grapple with if we are going to be moving these kinds of Centers of Excellence not just in those three places, you know, continue to do it, we think that is wonderful, but how do we move it to places like Detroit and other places around the country? There is something else happening here. What else is happening in these

areas that we need to be thinking about beyond the regulatory space and the tax space?

Dr. Bernstein. Well, first, I just want to underscore the point that you are making, because I think it has gotten a little bit lost in our discussion today. Yes, the minimum wage I think in all three of those places is either at \$15 or headed to \$15 an hour. That doesn't mean you can do that in Mississippi, but it certainly means it is not the constraints that we have heard today in places like that.

Look, I will be brief, because I am just echoing things I said earlier. One of the things we see in each one of those places is significant investment in both human and physical capital through public policy, both in terms of education, in terms of infrastructure, in terms of transportation, in terms of housing, in terms of the safety net. I mean, we think of programs like the child tax credit or the earned income tax credit or nutritional support or even Medicaid, we think of these programs sort of helping people today.

The research I underscore in my testimony shows these are investments that improve people's ability to get into the job market. And if you couple them with appropriate skills training, you are going to enhance the productivity of your area. And that is going to help not only create jobs, better quality jobs.

Dr. Kane. Sir, I missed the third city. You said San Francisco, New York, and—

Senator Peters. Los Angeles.

Dr. Kane. Los Angeles. All right. So two of those cities are in California. California is experiencing a big population slowdown and even a pretty huge migration if you look underneath the dynamics. A lot of foreign immigrants come into California, but a lot of natives are moving. I think those places have been successful early and then boomed, and they are carrying on with momentum. Now, Hollywood and Silicon Valley may be different, but I don't think you want to look at the correlation of the high regulations they have now and their previous success as symptomatic of something to be replicated.

And Detroit is another example. Was a booming city, was a dominant city in America, but became a part of a very high regulatory environment, and then we see the consequences, which are pretty horrific.

There are places like New Mexico and Arizona surrounding California that are now booming and are changing their dynamics, becoming I think more oriented toward right to work, labor friendly policies that I think are successful.

Mr. Lettieri. I will just add, I do think we sometimes discount the benefits of legacy investments. And this is to Dr. Kane's point that places can coast for a long time based on the strength of—in Silicon Valley's case you had actually, again to the point I made in my testimony, a lot of public sector investment that got spun off into commercialization of the technology industry, and that became a hub there.

But I want to push back a little bit on the rosy outlook for those places, at least as it relates to business creation. We found in our recent research that five metro areas alone accounted for fully half of the national net increase in firms, five, over the course of the

recovery, 2010 to 2014. On the surface, that may look like those five places are doing better than ever. It is actually that they are just more resilient as dynamism is retreating. So the pie is getting smaller and those places are getting bigger relative slices than the rest of the country.

But New York, as an example, is relatively speaking doing worse on business formation than it has done in the last three recoveries. And so that speaks to even those places that are resilient are facing national headwinds that are going to start changing the equilibrium in the wrong direction.

Senator Peters. All right. Thank you.

Representative Tiberi. Go ahead.

Senator Heinrich. I just want to speak very briefly to Dr. Kane's comment about New Mexico. We actually share more, I think, in common with Ohio and some of the more rural parts of the Midwest than with other Western and certainly Pacific states, and have struggled coming out of this recession, which is one of the reasons why I find this particular hearing so interesting.

Representative Tiberi. Thank you.

The gentlelady from Virginia. Welcome to the Joint Economic Committee.

Representative Comstock. Thank you, Mr. Chairman. I wanted to associate myself with the comments of Dr. Kane on H-1B visas. Thank you for highlighting that and separating that out. Because while I have a high-tech, big industry in my district in Virginia, I also have agriculture in the western part of my District. So I am part of two of those coalitions. And I think what I say is they are different coalitions. And so if we can go at them separately, I think we could advance these kind of issues faster. So thank you for highlighting the need to maybe do that separately.

But what I wanted to talk a little bit about is venture capital and private sector investment there. I was fortunate to participate with one of my constituents, Steve Case, in the Rise of the Rest Summit that he had here last week. And one of the things I was happy he highlighted, I highlighted also, was the chairman's Investing in Opportunity Act, which can I think helps a lot of what we are talking about here.

One of the things that was highlighted, not just that 78 percent of the venture capital goes to just three states, California, Massachusetts, and New York, but one of the things that is not often highlighted is that 90 percent of it goes to men. And so there are a whole lot of women out there who are missing out on this in all 50 states, not just the rest of us who are—and I highlighted that woman piece.

So what can we do to create these startup ecosystems, not just on the Federal level, I think legislation like the chairman's, broadband, making sure, you know, doing better on that basis, but how can we help our State and local environments create that ecosystem that supports the startup culture all around the country? I mean, that is what Steve Case has been going traveling around, kind of bringing certainly the talent in all of these areas. So how can we help and what policy might we do here?

Dr. Kane. Thank you, Representative Comstock. I actually started a couple of software businesses when I was in San Diego, and

got venture capital, so I speak with a little bit of personal experience. What shocked me at the time was that I had to ask some friends and family to disinvest because they weren't what are called qualified investors. It was shocking to me. They had taken the biggest risks, and they got their money back with some small return.

I would applaud the Congress, I think it was called the JOBS Act that you all passed a few years ago, to make it easier for families in—and what is called the crowdsourcing types of investments. I don't think that story is—or I would say I don't think that chapter is over yet. I am not sure of the consequences. Maybe there is more to be done there. Definitely worth looking into. But I think you are right, access to financing is critical.

Even when interest rates on paper are zero, we know that people still have—are not able to walk into a bank and get a loan at a 0 percent interest rate. So there are real challenges for everyone, and especially outside of those big three areas.

Representative Comstock. And, Mr. Lettieri, did you want—

Mr. Lettieri. Yeah, I strongly agree. And I think the Investing in Opportunity Act is a great example of how we can do better. Jared mentioned that place-based incentive policies have been spot-ty at best in the past at delivering results. And I think there is a reason for that. They have really largely been poorly designed and poorly implemented, and don't match the needs that real entrepreneurs and businesses need.

The need that you are pointing out of access to capital, it is not sufficient, but it is necessary in scaling any business. So it is one of the few universal things you can say applies no matter what industry you are in, no matter what region of the country. And the regionalization of access to capital is growing more profound, not less. So we need things that from the policy standpoint, both at the Federal and the State and local levels, that can really help balance that playing field, because it is obviously artificial when 90 percent of venture capital goes to men versus women and to three states versus the rest of the country. That is a solvable problem. And public policy designed the right way can nudge it back in a more balanced direction.

Representative Comstock. One of the things that we also highlighted, I think Senator Warner, Mark Warner, who is from Virginia and highlighted too, and I think you all addressed this a little earlier, some of the workforce programs the government has, you know, and they are all over and they are disparate, really aren't serving the purposes. And the employers and those sort of in the states and localities might know better what they need for that.

How can we maybe redirect that money when we have a huge pot of money that is not very effective here on labor retraining? We know retraining and upgrading skills and lifelong learning is something we need. How can we partner with maybe our local universities, our State and local—our private sector companies and what incentives can we give them on that front?

Dr. Bernstein. So I think the answer to that is actually known and not deeply implemented, as you suggest, and it is called sectoral employment training, which sounds complicated, but really all

we are talking about is instead of training that is based on just providing people with a set of basic skills, it actually works in close association with employers, universities, and the students themselves, the trainees themselves. The idea is that you are training people for jobs, and not just jobs today, but jobs tomorrow. You are looking around the corner.

And to be very concrete and granular about this, an employer tells you guess what, we are going to set up an MRI lab in this neighborhood. We are going to need lab technicians who know how to keep an MRI running. And that becomes the sectoral employment emphasis of your training program. So I think that is key.

Apprenticeships, earning while you learn. Other countries do much more than that. Somebody mentioned Germany earlier. They have a lot of success with that. So I would also say that.

On your first question, just very quickly, because I didn't get to respond to that, a lot of what we focus on is sort of on the supply side, how can we provide enough credit for these folks. And I get that that is obviously critical. We also have to worry about the demand side. One place where you see more businesses flourishing is where lots of people have money to actually go into the door and buy the stuff they are selling. Because you can do all you want to free up credit for people, but if you don't have a customer base, you don't have demand, you are not going to get the economic activity. And I think some of the ideas I try to stress in my testimony about wage policies, about labor demand, about direct job creation are helpful in that regard.

Representative Tiberi. Thank you.

Representative Comstock. Thank you, Mr. Chairman.

Representative Tiberi. Thank you. Good questions. Mrs. Maloney, you are recognized for 5 minutes.

Representative Maloney. Thank you, Mr. Chairman. And thank you, ranking member and all of the panelists.

Really this topic of this hearing is one of the things that Democrats and the Republicans agree on wholeheartedly, is that the focus of this Congress should be the creation of economic conditions that produce more good-paying jobs, higher household incomes, and greater economic growth.

And I would like to ask Dr. Bernstein how investing in—or rather, empowering women might be one of the solutions for economic growth in our country. Yesterday was Equal Pay Day, the day that—this day marks the day when women's earnings from last year finally catch up to what their male peers were paid in 2016. And I guess in honor of that day, the Democratic staff of the Joint Economic Committee issued a report on the gender pay gap, not only that it was a gap of 79, 80 cents to the dollar, but they looked deeper into it on how it impacts over the lifetime of a woman, how it compounds, and the lower pay contributes to lower pensions, lower Social Security, lower savings, and contributes to women, older women being twice as likely as men to live in poverty.

Heidi Hartmann, a MacArthur scholar, has her own not-for-profit research foundation, did her own study that showed that if you just paid women equally, you would eradicate most of the poverty in this country. And I would like to ask Dr. Bernstein and others to comment on that. If we addressed the persistent opportunity deficit

for low-income Americans, and I would say particularly women, women are the sole or primary earner in 40 percent of households with children. That is an astonishing stat. And they are also at the bottom income level. Nearly 70 percent of mothers are their households' sole and only breadwinner. So could you comment, if we just paid women equally for the same work, what impact would that have on the economy and lifting families and children out of poverty?

Dr. Bernstein. Well, I am glad you mentioned Heidi Hartmann, because she is someone who I have worked with over the years and have written on this very topic with. A great scholar.

Obviously, this would help both on the family well-being and antipoverty, as well as on the broader macro economy, particularly if we are talking about folks in the bottom half of the pay scale. You know, they spend their earnings. So when you pay women 70, 75 cents on the dollar, that means there is less economic activity, less consumption.

I think the policy interventions here are all germane. Because much of what we have talked about we haven't really focused on through a gender lens enough this morning. So if you are thinking about the minimum wage, if you are thinking about unions in the retail sector, if you are thinking about the earned income credit, or the child tax credit, in many cases these disproportionately benefit women. I don't know if I have this number exactly right, but something like 60 percent of the beneficiaries of a higher minimum wage are women.

And so I think both through wage policies and through enforcement of gender parity laws that is absolutely the right way to go.

Representative Maloney. I also appreciate the comments of many of you on the focus of the need for infrastructure. And I almost think it is a national disgrace how far we have fallen behind the rest of the world. We don't have high-speed rail. But we did just open up a new subway in my District, the Second Avenue subway. It has been rated the best subway in the country. And already the economic activity that it has generated is astonishing. Our realtors are saying their income is up 30 percent. Property values are up. The next stage would attach this sort of business district with a very low income district, East Harlem in New York, and bring the same economic activity and support to it.

And so my question really, and I would like to ask Dr. Kane and Mr. Lettieri, since I haven't heard from you on that last question, should our policies prioritize projects like this one which connect economically distressed communities with regions of a high economic hub to help really address the income gap and opportunity gap and really with the infrastructure projects?

Mr. Lettieri. Thank you for the question. I think we should do more and be creative in ways that we connect high opportunity areas with areas that are struggling. And that helps to reinforce upward momentum and decrease the isolation that many of these communities are experiencing. Economic segregation is a big problem. And sometimes that is a physical segregation, sometimes that is a market segregation in terms of access to capital and other things, access to information, access to services. So connectivity is

key in today's economy. This is true in a city, it is also true in rural areas.

The difference today, I think, between a flourishing rural area and a struggling one has more than ever to do with how connected that place is. Is it connected to a population center? Does it have access to that through infrastructure? Is it connected to markets and population and things like that? So thinking about that as an underlying theme of all policy efforts I think is wise.

Representative Maloney. Thank you. My time has expired.

Representative Tiberi. Thank you.

Representative Maloney. And I just want to congratulate the staff of the Democratic JEC on their excellent report. Thank you.

Representative Tiberi. Thank you.

The gentleman from Virginia is recognized for 5 minutes.

Representative Beyer. Thank you, Mr. Chairman, very much. This is really fun and fascinating.

I want to add my voice as a small business person to the pushback on access occupational licensing. You know, I have been training automobile mechanics for more than 40 years, with no licensing in Virginia. And they do a very good job fixing cars. In fact, one of the challenges is we are trying to get everybody through the ASE tests. But it is amazing how often excellent mechanics, because of language difficulties or reading difficulties, can't get through the tests, which we will pay for again and again and again.

I have been impressed with how much, when we talk about robust competition policy, we come back again and again to the challenge of increased market concentration in a lot of industries. In the year I was born, 1950, there were 50,000 automobile dealers in America. Today there are 18,000. And many of them are grouped in big public groups or family groups. And yet, you know, when you do that, you get stifled innovation, the barriers to entry are very high, oligopolistic, monopolistic, lots of rent-seeking behavior, all the things that especially, Mr. Lettieri, you write about it on page after page here.

So I am really interested in knowing what you, and especially Dr. Bernstein, how would you go about reversing that market concentration? Much more aggressive antimerger activity, much stronger antitrust activity? How do you get the barriers to entry down?

Mr. Lettieri. It is a really important and very tough question, because you have to come at it from I think a lot of different angles. Certainly, I think given the trends, we should at least ask whether our antitrust policy is effective and right-sized for the market that we are seeing. But I would rather focus, if I was putting emphasis just one place, on the new business side, because that problem becomes worse if we don't reverse the decline in entrepreneurship and get the birth rate of firms higher than it is above the death rate of firms.

We are experiencing right now the first period of a contracting business sector in recorded history in this country. We have fewer firms in the economy as of 2014 than we did in 2007. The difference is something close to a million missing firms over that period. So if you think about the remarkable downstream effect that

that has on competition and market concentration, on innovation, on wages, it is hard to overstate how profound that effect would be.

So coming at it from that angle is going to, I think, be the longer term solution as we are looking at market and competition issues and antitrust, occupational licensing as well. I mean, that is part of what is diminishing competition is fewer independent businesses can start and compete with the incumbents in any given region due to regulatory capture and things like that. So I think you have got to come at it from both of those angles.

Representative Beyer. Let me shift just for time purposes to Dr. Bernstein. We spend a lot of time talking corporate tax reform. Chairman Brady from this committee is going around talking about everything that is coming. And yet, you know, it is worth pairing any rate reduction efforts to ensure that the increased capital that results actually increases economic opportunity in wages, investment, innovation. I know, Dr. Bernstein, you have read and written a lot about Bill Galston and Elaine Kamarck and the increase of financialization, you know, the growing financial shares, GDP, and short-termism. Ms. Comstock referred to Senator Warner's great work on how much corporate profits now are being used for buybacks and for dividends and relatively little, a huge falloff in R&D. How do we move away from short-termism and financialization?

Dr. Bernstein. It is a great question, because I view the problem you are talking about as one that is fundamental to something we have discussed at different times today, which is the slowdown in productivity growth. The slowdown in productivity growth is intimately related to weak investment. And in my own work, I believe that there is some misallocation going on, that we are misallocating too many of our resources to this kind of frothy financial activity at the top of the scale that really doesn't create much in terms of concrete investment or opportunity that actually filters down through the rest of the economy. It just allows folks in financial markets to trade with each other and generate lots of rents.

So I think, you know, one idea to help improve that allocation is to discourage a lot of the kind of noisy, high frequency trading through a very small financial transaction tax. I am talking about a basis point or two or three, nothing off the charts. And my research on this suggests that not only would that dampen noise trading, and helpfully allocate, I think, capital to more productive uses, but it would also raise revenue that we could use in other areas that, to get back to your first question, in trying to help smaller businesses find their way into concentrated markets.

Representative Beyer. Thank you.

Mr. Chairman, I yield back.

Representative Tiberi. Thank you. This has been great. You guys, can you stay a few more minutes to do a follow-up from each of us? Do you mind? This has been really, really great.

I am intrigued on the opposite ends of the panel here on your divergence on minimum wage in particular. And I want to give you an example, Dr. Bernstein, and just get your comments on it. This is a lesson learned as a 16-year-old in Columbus, Ohio. I was working at a McDonald's. And during the first year that I worked there in high school, the minimum wage was set to go up. And it did go

up. And at that point in time, most of the part-time workers were high school students at this McDonald's. And the owner, it was a franchisee, husband and wife owned one restaurant, that McDonald's. And so we were all excited, us high school kids, that we were going to get I think it was 25 cents more an hour at the beginning of the year.

What happened, which was phenomenal, was the manager came in and said, because of the minimum wage increase, some of you are going to have to work more hours because we are going to have to let a couple people at the bottom rung, who were hired the latest, let go. Thankfully, I made the cut and I stayed on at the restaurant. But that was a real life example of, oh, wow, it doesn't help everybody because two people, part-timers, lost their job. Can you comment on that? Because that is rarely talked about.

Dr. Bernstein. No, it is a fair question and a good question. And I don't want to create the misimpression that nobody ever experiences what you experienced when minimum wages go up. They do. The disemployment effect or the dampening kinds of employment effects that you have discussed aren't zero, but in lots of very careful studies they are pretty close to zero. So that even in cases where some workers have the experience you just cited, many, many more end up ahead.

And what is I think important, and maybe perhaps not quite germane to your story of numerous years ago, is the fact that today the minimum wage workforce is different than it used to be. It is much older. It is much more parents. It is people who are disproportionately working now full-time. And talk about anecdotes, my kid worked in a frozen yogurt store in Alexandria this summer. Working right next to her was a single mom, and, you know, earning something alarmingly close to the minimum wage. Now, with some of the wage subsidies I mentioned, that person maybe can get a bit of a leg up. But I think we have to be mindful about who earns the minimum wage these days, along with the fact that the disemployment effects, while not zero, are often found to be close to it.

Representative Tiberi. Thank you.

Any other comments before I yield?

Dr. Kane. I just absolutely disagree. I think the research, especially the newer, better research is showing that some of the older studies were wrong. Jonathan Meer, Dr. Jonathan Meer at Texas A&M has done some great work.

Let me point out in particular what happens to the individuals who get disemployed. So maybe nine people get a raise and one loses their job. They lose more than a job. If you are an 18-year-old or a 17-year-old or, God forbid, a single mother who is the one that loses their job, that has lifetime implications. Studies show that people that are displaced because of higher minimum wage laws have lifetime lower earnings. That is a huge disinvestment in people that desperately need it.

So when we talk about a lack of mobility and how to invest in the poor and what training programs we do to compensate for telling a person who wanted to work, this is a moral issue as well, you are not allowed to, the government won't allow you to work, and then 5, 10 years later, gee, we are going to come up with a training

program, they were involved in a training program. They were learning basic work skills, and they were then robbed of that opportunity by I think a terrible policy.

Representative Tiberi. Thank you both.

I am going to go yield to the gentleman, Ranking Member from New Mexico.

Senator Heinrich. I am going to shift gears here real quick, Chairman. And I want to go back to something, Dr. Bernstein, that you talked about that I thought was really on point, was just connecting small communities, rural communities, small towns to supply chains. And I think a lot of what we see, these disruptive trends have to do with the unequal connection to the marketplace, to many different resources that you see in geographically different parts of the country.

So I wanted to turn that towards infrastructure and talk about, you know, what—ask what is the role of infrastructure and how should we be prioritizing that to greater increase access, whether it is to a supply chain, whether it is to the marketplace, for the geographic parts of the country that have limited access to it? And maybe talk a little bit about the, you know, the places where public-private partnerships work in infrastructure, airports are a great example, and the places where we are just going to have to do direct investment, because for a water project in rural Wyoming, rural New Mexico, we are not going to be able to attract private capital at the return rates to make those kinds of things happen.

Dr. Bernstein. Well, I just wanted to start where you ended, which is that there is, I think, a growing kind of attention to an idea, and I know the Trump administration is pushing this, an infrastructure program that looks to me like it is wholly based on public-private partnerships, wherein you provide a pretty hefty, I would argue, wasteful tax credit in many cases to infrastructure that would have been built anyway. And the only investors that are going to come to that well are those who are investing in projects that spin off some kind of a return, ergo a user fee. And a lot of the places we are trying to focus on today, that is not going to be the case.

I thought Mrs. Maloney's example was a really interesting one. She talked about how a subway line generated more economic activity. Well, that is in New York City. The same thing happens when you build a cloverleaf off of an expressway in a rural area. You don't have to be in New York City. This generates connections and economic activity, but you are not going—that is going to have to be—that has got to be a public good, and that has got to be thought about, in my view, as a traditional infrastructure program. You are not going to be able to tap that through a tax credit public-private partnership.

Dr. Kane. Jared makes good points. I have been not able to comment on the infrastructure question. I would just approach it cautiously. I am probably less a fan, because I think it can be abused. And, you know, based at the Stanford University and being out in California for the last few years, I think the massive rail project out there that looks like a horrible boondoggle that probably will never come to fruition and will cost the people of Ohio money because Federal money, you know, has gone into that program as

well, I think often small communities, rural communities get left out of the infrastructure programs. Looks great, tends to go to bigger areas, better connected.

And so I would just be cautious about it. But I think Jared makes a really important point, in that some of the most important infrastructure we have are our national parks, for example. And we don't quantify those. And you know, we are guilty as economists, we don't quantify some of the intangible values in life. So it is not always that you need to build, you know, lay down some more asphalt as a way to invest in what is important to Americans.

Senator Heinrich. Thanks for that perspective, Dr. Kane.

Representative Tiberi. Great question. Good comments.

Mr. Rooney, speaking of buildings things, you are recognized.

Representative Rooney. If we have time, you know, Mr. Lettieri, you talked about business formation, especially for young people, and the impact of industries becoming less competitive. What about the financial service sector? I mean, we have got Dodd-Frank, this giant elephant in the room squashing everything that we try to accomplish in getting lending going. And we have had a lot of smaller banks go out of the market. And we have had some senior bank CEOs joke that Dodd-Frank is the best thing that ever happened to them.

So I just wonder if you all, as trained economists, have any advice for the record about the impact of things like Dodd-Frank and what some other people around here might be thinking about to get lending going.

Mr. Lettieri. I will just make a brief point, then turn it over to my colleagues here, that if you are judging—so Dodd-Frank had a number of different goals. If one of the goals was to reduce industry consolidation, I think that is one where it certainly has failed to produce the intended result. And I am going to, in my answer, stay agnostic as to other results it may have produced that were more successful.

But this obviously is germane to entrepreneurship because access to capital is so critical. And we are seeing small business lending on a downward decline. We are seeing actually a really severe problem and a pervasive problem with a lack of new entrants into the financial services industry. And so whatever the merits of a regulatory event like Dodd-Frank, I think we have enough evidence now to say there are some corrective measures that need to be taken.

Representative Rooney. Thank you.

Dr. Kane. I would just answer briefly, sir. Yeah, I think Dodd-Frank has sort of failed in achieving its goals. It has been hard on local and community banks. We have seen maybe too much consolidation. I don't think consolidation, sir, is always a bad thing if it happens naturally. But when it happens because government is sort of rewarding larger firms and making it harder on smaller firms, that sort of consolidation is a great concern, and I think Dodd-Frank falls into that.

Dr. Bernstein. I differ in the following sense. It is very easy to get amnesia around what happens in financial markets. The purpose of Dodd-Frank, which isn't perfect—and I stipulate to some of the issues my colleagues raised. The purpose of Dodd-Frank was to

ensure that risk was not systemically underpriced so that we have another credit bubble and a massive implosion and recession. And thus far, it has helped in that regard. That doesn't mean that it can't be fixed. But it also doesn't mean that you should forget why Dodd-Frank is in place in the first place. Similarly, the Consumer Financial Protection Bureau has also returned, I think, some very important results for its beneficiaries.

Representative Rooney. I can't count how many times the Bush administration, of which I was a member, testified before Barney Frank begging to raise downpayments for mortgages and were turned down. Okay? The Bush administration tried to prevent that, and the people that were in charge did it.

Dr. Bernstein. I definitely stipulate to your point, but I continue to stress let's not forget why Dodd-Frank is there in the first place.

Representative Tiberi. Thank you. Thank you, sir.

Mr. Lee, you are recognized.

Senator Lee. Thank you very much, Mr. Chairman.

I want to pick up where we left off earlier when we were speaking. Dr. Bernstein, I will start with you. I want to talk a little bit more about the role of civil society. Would you say that more dynamic areas are also known for stronger social ties, active communities, and more civic engagement? Do you see that as something that stands out in the data you review?

Dr. Bernstein. You know, I am not familiar with that connection in the data, but it certainly sounds intuitive to me.

Senator Lee. And the fact that it sounds intuitive, I think, speaks to the relative isolation that seems to pervade a lot of distressed communities. At least, anecdotally, that is what we see, and from what I know of the data, there are data sets to support that.

To your knowledge, has the decline in dynamism in much of America gone hand-in-hand with the decline in social connections at the local level?

Dr. Bernstein. I mean, I think that is true. I don't know so much about the dynamism connection, but I am thinking of the work of Robert Putnam, the guy who—sociologist, "Bowling Alone" and all that. And I think that he is documenting precisely the kinds of dynamics you are talking about.

Senator Lee. Thank you.

Mr. Lettieri, I wanted to get back to you. You mentioned some good stats about my State, which I appreciated, and some nice features. We are seeing a different story than people are seeing in other parts of the country. Labor force participation and the employment-to-population ratio are several points above the national average, far more favorable than what you see in many parts of the country. And the unemployment rate in Utah is consistently noticeably below the national average.

Given your work in understanding the regional variation and economic success, can you describe for us what you think states and regions with similar numbers are doing differently and what is contributing to their success? And then also tell us, could this have anything to do with what we have been discussing, with

strong institutions of civil society, especially with strong families, and high levels of civic engagement?

Mr. Lettieri. It is great question. And you are exactly right. So places like Utah and then other areas where we see the highest rates of labor force participation are also highly dynamic economies. So there is something about a dynamic economy where they get really high engagement from their human capital. And that is an important and really rich scheme that runs throughout those different State and regional examples. They all come with different advantages, they all come with different industry bases, they all come with different demographics, but they all find a way to engage their human capital at really highly rates. So I think that is a lesson, kind of broadly, that we can apply.

I think your point about social capital and institutions runs stronger in the other direction than it does as a predicate for dynamism. And by that, I mean—and I think this gets to Jared’s point—in areas where you see really highly concentrated distress and poverty, you also tend to see low social capital, low connectivity among institutions and families and civic organizations and things like that. It is not always sufficient to produce economic dynamism, but it is a headwind for economic growth when you don’t have it.

And so I think on the poverty and distress end of the spectrum, those two are much more tightly correlated than on the dynamism side of the spectrum.

Senator Lee. It might be sort of a condition precedent for having it, not always a guarantee, but a condition precedent or at least a benefit if you do have it.

Mr. Lettieri. I think that is right.

Senator Lee. So those who in the past concluded that what you needed more than anything was access to a port or access to a river, a highway, or government program, it is not always the case. Sometimes what people need more than anything is access to other people, access to networks, access to institutions of civil society to which they are connected.

Thank you.

Dr. Bernstein. Could I add just one tiny little point?

Representative Tiberi. Go right ahead.

Dr. Bernstein. I think everything you just said makes a ton of sense to me, but I also think kind of at the root of some of the places we are talking about is the lack of access to a job. There is just not enough employment activity.

And I think if you start bottom-up with some direct job creation, actually bring jobs to people, my guess—and, again, this is nascent, sort of embryonic stuff—my guess is that that would help a lot in terms of the dynamics you are concerned about.

Representative Tiberi. Great exchange.

Our last questioner, Mr. Beyer, thank you for staying.

Representative Beyer. Thank you, Mr. Chairman. I wouldn’t miss this.

Representative Tiberi. It has been very good.

Representative Beyer. Dr. Bernstein, my 24-year-old daughter has worked now for two startups since graduating from college. I have been visiting lots of the startups in northern Virginia, like

1776, and what I am struck by is the startups are all brand-new ideas. They are not doing things that were around 10 years ago or 30 years ago. They are really dependent on having some cool new app. Her latest business that she is in is—they do weddings from top to bottom. After Kellyanne Conway's gaff—I can't tell you the name of the firm, but it is pretty cool.

[Laughter]

But then I look and say, how much of—but I also see that relatively few young people are doing this. We talk about college debt. We talk about the difficulty of bank loans—which, by the way, the only way you can get a bank loan right now is if you don't need it.

And then the notion that all the old businesses, whether it is funeral homes or car dealers or gas stations or breweries, anything like that, they tend to be multigenerational. Now, there is the graying effect that you talked about; the average age is 10 years older.

How do you overcome this to get the economic dynamism, the birthrate higher than the death rate, when the barriers to entry are so high?

Dr. Bernstein. Well, first of all—

Representative Beyer. And, by the way, I do believe in concentration as long as it is my family business.

[Laughter]

Dr. Bernstein. First of all, just an anecdote, since we live a few miles from each other, there is a new startup in the Bradlee Shopping Center that is not an app. It is a Duck Donuts shop, and it is just—the line is out the door because the donuts are amazing. Don't eat too many of them, but just—there is entrepreneurialism happening, and it is not related to apps.

I think the one—I will just bite off a tiny piece of that. Others may have other things to say. Because it is a really—it is a deep problem.

But I do think that the indebtedness problem that you suggested for kids who are coming out of college is something we need to address in this space. Because there are people—and they tend to be in the bottom half of the income scale—who aren't getting the training they need and the encouragement they need perhaps to start a business, perhaps to be an entrepreneur, because they are either so burdened by debt or they can't afford to leap over the barriers between them and that kind of education.

And I have a number of ideas in my testimony that tries to bring that down, including income-based repayments but also assistance with college tuition of the type that is being zeroed out in budgets that are currently under discussion. I think that is deeply contraindicated in this space.

Dr. Kane. Sir, if I can—

Representative Beyer. Yes, please, Dr. Kane.

Dr. Kane. Two perspectives.

One is, if you think about this as sort of a supply/demand problem—and I am trying to think of how to frame it. What are the constraints on the supply of entrepreneurs? And I think there are a lot more incentives for entrepreneurs to sort of stay in their safe, nested, paternalistic companies.

What is really shocking—and your testimony points out to this—is that we live in an era where it is so much easier to create a company, right, than it was in 1950 or 1960 or 1970, where if you wanted to create a startup company and, say, you were going to make, I don't know, glass backboards, I mean, you had to build a factory. But now you can make an app. So the capital needs are actually so much lower, we should see an explosion of entrepreneurship, and instead we are seeing the reverse.

So what is it that is holding people back from doing what is out there? And I think maybe the safety net is a little bit too safe, the paternalism is too comfortable. I don't know, but I think that, to me, it is not just a downward trend, it is the lack of potential.

So I think I maybe have one hint on what it is, because if I go to central Ohio and talk to my friends and say, "Why aren't you guys making apps?", they will say, wait a minute, they didn't work in the app—they are 40-year-olds, they are in the prime, but they don't have experience making apps. They have experience in all these other things. So what constraint do they face? And it is this occupational licensing issue that makes it really, really hard to start in traditional industries. I mean, starting a restaurant, rife with risk. The lawsuit risk is higher than it was in the 1960s and 1970s.

So I would look at the legal culture and the occupational licensing are what is holding back what should be a golden era for entrepreneurship.

Representative Beyer. Okay. Thank you all very much.

Thank you, Mr. Chairman.

Representative Tiberi. What a way to end it. Thank you. Great question.

Thank you all for staying extra. This has been outstanding. I really appreciate all of your time, the different perspectives done in a very "happy warrior" way. We absolutely appreciate that.

The record will be open for 5 business days for any member that would like to submit questions for the record.

And, with that, the hearing is adjourned. Thank you.

[Whereupon, at 12:10 p.m., the committee was adjourned.]

SUBMISSIONS FOR THE RECORD

PREPARED STATEMENT OF HON. PATRICK J. TIBERI, CHAIRMAN, JOINT ECONOMIC COMMITTEE

Good morning everyone. Welcome to the first Joint Economic Committee hearing of the year. I want to especially welcome our Ranking Member Senator Heinrich and our Vice Chairman Senator Lee, as well as the other Members of this Committee, and I look forward to working with them this Congress and diving into some important issues facing our economy.

The U.S. economy did not surge back from the last recession as it had after every other recession since World War II, and we are paying a price for that. The drawn-out recovery and the meager growth rate we have settled into are exacerbating the country's many challenges.

The purpose of today's hearing is to gain insight into why the recovery, besides being so slow, is also uneven. Many parts of the country face problems more severe than national average economic growth and unemployment rates convey. Some areas effectively are still in a recession.

In my home State of Ohio, we've made strides in encouraging businesses to come to our State and our unemployment rate has dropped at a steady pace over the past few years. However, that hasn't been true for every part of the State. We can do better, especially for the communities where folks feel they are being left behind. In Ohio that is in counties in Appalachia and in areas surrounding urban centers of Ohio where the dynamics of the rural and urban poor couldn't be more different.

Allow me to submit to you four perspectives. First, accelerated national growth would lift many struggling regions. The familiar image of the tide lifting all boats is appropriate.

Second, innovation is integral to economic development, especially in an advanced economy. Innovation arises from entrepreneurship, which has been the hallmark of U.S. economic success. When entrepreneurial activity wanes, as it has recently, economic growth slows.

Third, a large, complex economy such as the U.S. economy will always have parts that expand and parts that contract, largely related to different rates of technological change. However, government intervention such as with respect to taxes, wage and employment benefit mandates, zoning, and licensing can exacerbate this by restricting market entry, impairing new business formation, and limiting job creation.

Fourth, education and skill development are the key to a productive, adaptable labor force. I was struck by observations Federal Reserve Chair Janet Yellen made in a speech last week in which she stressed the importance of entrepreneurship, the importance of vocational education and apprenticeships, and engaging employers in the training process, among other things.

Everyone is aware of the demographic change the country is undergoing. The baby boom generation is reaching retirement age and that is affecting many aspects of the economy. One such effect is slowing entrepreneurial activity, as a part of today's testimony will explain.

The challenge of an aging population makes it all the more important that the economy work efficiently and that government actions, at both the State and local levels and the Federal level, not be prohibitive.

Unfortunately, this is not always the case. For example, laws and regulations for many years have been accumulating at a faster rate than the economy has grown. As a result, business expansion is discouraged and new projects deferred or abandoned. U.S. worldwide ranking in the ease of starting a business has slipped from 45th out of 190 countries in 2016 to 51st today, according to the World Bank.

Members from both sides of the political aisle have frequently criticized the inefficiencies of the regulatory build-up, yet it has continued. The effects are real and they are holding the economy back.

One of the key areas of weakness in this recovery has been private business investment, which is sensitive to tax and regulatory regimes. The economy requires faster rates of private investment than the existing regimes have permitted. Regulatory and tax reform will create more jobs and opportunity.

A central aspect of the economy's functioning can be characterized as "dynamism"—the rate at which the population starts new businesses, moves to another region, and changes jobs or occupations. It refers to the people's innovativeness, entrepreneurship, and motivation. Less dynamism means less of this is happening.

Many of our communities are hurting, and I believe that increased private investment, restoring economic dynamism and the resulting accelerated economic growth can help them recover.

We have an excellent panel of witnesses today, and I look forward to insightful testimony on economic dynamism and the challenges facing local and regional economies in this country.

In closing let me observe that there are few periods in the country's history when America did not face serious challenges. We may face new challenges today, but I have full faith in the resourcefulness of the American people and the functioning of our market economy to overcome them, as in the past.

OPENING STATEMENT OF HON. MARTIN HEINRICH, RANKING DEMOCRAT, JOINT
ECONOMIC COMMITTEE

Thank you, Chairman Tiberi, Vice Chair Lee, and our witnesses for joining us today for our first hearing of the Congress.

The United States is the global leader in opportunity and innovation.

When I was growing up, both of my parents worked exceedingly hard. Neither had a college degree.

It wasn't easy, but I was able to get a college degree and am sitting here with all of you today because of the sacrifices they made and because of the opportunities this country afforded them.

What seemed like an attainable dream 30, 40, 50 years ago too often seems unattainable today.

Across New Mexico and the Nation, working people feel like they can't get ahead. And parents don't believe the future is bright for their children.

When we ask ourselves—what are the barriers to opportunities for me and my neighbors—my Republican colleagues focus on the role of regulation and the tax code.

This conversation is important, but I caution us all to not conflate what is good for CEOs or investors with what is good for a working family living in rural New Mexico.

It is a mistake to think that deregulation or tax reform alone will revive rural communities or create good paying jobs in cities and small towns across America.

What our business leaders lack is certainty.

Expiring tax credits aren't good for planning.

The constant threat of taking health care away from families doesn't instill certainty.

Repealing rules that keep our air and water clean don't give businesses the certainty they need to create the jobs of the future.

Policies that are good for business and promote pragmatic public health goals—like the methane rule, that Congress is trying to do away with—should be protected not targeted.

We are about 80 days into this Administration and what we've seen is a budget that would devastate rural America, and make it harder for seniors and children to get core services that keep them healthy.

Too many people here in Washington D.C. think that if the stock market is on the rise, the economy is doing just fine. But that's not the reality for most of America's working families.

The way we should measure the success of the economy is if wages go up, parents can afford to send their kids to college, entrepreneurs can start new businesses, and workers are able to retire with peace of mind.

We have to get back to the basics.

Congress must take concrete action that focuses our limited resources on investing in working families—the women and men in this Nation who are fighting to give their kids a better future—rather than on tax cuts for the wealthy.

Comprehensive education and workforce training must be a top priority in the face of the global nature of the new economy.

We need tax and labor policies that reward hard work. We ought to prioritize tax programs for families that are proven to reduce poverty and incentivize work, like the Earned Income Tax Credit and the Child Tax Credit.

Public-private partnerships alone cannot create the modern infrastructure that works for all communities, especially those that rural communities need.

It will take Congress making a substantial investment in roads, water projects, and high-speed broadband that connect people and communities to financial and educational opportunity.

The renewable energy sector is a place where jobs are growing rapidly and not just in metro areas, but also in rural communities. Congress' work to encourage this market through tax credits has helped get the renewable energy industry off the ground.

The success of the future of our economy will be tied to whether Congress today takes the bold steps necessary to connect people with the opportunities that will exist tomorrow.

A lot of work remains to be done to ensure that all of us get a shot at getting ahead.

I look forward to starting this conversation with you all today and hearing from our witnesses.

**The Decline of Economic Opportunity in the United States: Causes and
Consequences**
Testimony before the Joint Economic Committee of the United States Congress

Edward P. Lazear¹
April 5, 2017

Chairman Tiberi, Ranking Member Heinrich, Vice Chairman Lee, and members of the committee: Thank you for giving me the opportunity to address, once again, the Joint Economic Committee, this time on the important topic of opportunity and how it varies within our economy.

I will make four points. First, there is regional variation in economic success. There always has been variation in economic experiences among states. The last recession and recovery were not exceptions. Typically, those areas that were hit hardest during the recession had the most robust recoveries. Second, although states differ in their experiences and outcomes, some adverse factors are common. Most important is an aging population, which affects both employment and business formation. Third, states vary in their performance, partly because they opt for different tax and labor-market policies. State-based policy changes can be helpful to growth, but it is important to encourage genuine growth rather than mere transfers of prosperity from one region to another. Fourth, the most important remedy for local ills is a growing national economy. A rising tide may not lift all boats equally, but draining the ocean will not help those with the least forward momentum.

State Differences in Unemployment and Poverty

My focus is primarily on the period since 2000. Special attention is given to the 2007-09 recession and recovery since it is most relevant to the situation that exists today.

First, state experiences differ before, during, and after the recession in part because education, average ages, and the proportion of new immigrants vary across states. Perhaps most important, the industrial composition varies. Corn is important in Nebraska, but not so in Arizona. Because states have differing industrial makeups and because industries rise and fall somewhat idiosyncratically, it would not be surprising to see states' economic conditions to be out of synch with one another. For example, Texas is more sensitive to oil prices movement than is Tennessee. The dot.com crash in the early 2000s affected Silicon Valley severely, but other parts of the country to a lesser extent.

The housing bust in 2007 was felt strongly in a number of areas including Central California, Florida, Arizona, and Nevada. States like North Dakota barely experienced increased unemployment with the peak rate never climbing more than one percentage point higher than the rate that prevailed in 2006. By contrast, Nevada's labor market was massacred during the

¹Mr. Lazear, former chairman of the Council of Economic Advisers (2006-09), is a professor at Stanford University's Graduate School of Business and a Hoover Institution fellow.

recession, with the unemployment rate rising almost ten percentage points. California was not far behind.

Although these specific cases are vivid and suggest important state differences, a more systematic approach is useful to put things in the proper perspective for policy analysis.

Unemployment

Consider unemployment first. In 2006, unemployment rates varied from a low of 2.6% to a high of 7% or about a 4 ½ percentage point difference. In 2010, when unemployment peaked nationally, about 10 percentage points separated the highest unemployment rate state from the lowest. A standard statistical concept used to measure how much variation there is between states is the “standard deviation.” Not only did the national unemployment rate double during the recession, the standard deviation in unemployment rates across states also doubled from 2006 to 2009.

The relative homogeneity in unemployment experience that existed before the recession has returned. The lowest state unemployment rate in 2016 was in South Dakota at 2.8%, with the highest in New Mexico at 6.7%. The spread between high and low is under 4 percentage points, and the cross-state unemployment rate standard deviation has fallen back below 2006 levels.² Note that despite the return to more uniformity, there still exists significant dispersion in labor market conditions across the country, given that the rate in New Mexico is twice that in South Dakota.

Although there are changes in the rankings by states in terms of their unemployment rates, significant persistence exists. Those states that were low rate states in 2006 tend to be low rate states in 2016. Six of the ten lowest unemployment states in 2006 were in among the ten lowest unemployment states in 2016. There is less persistence among the highest unemployment states. Only Alaska, Mississippi, and the District of Columbia were among the highest ten unemployment states in both 2006 and 2016.

The good news is that, at least some of the time, slack labor markets are not a permanent condition. There are good economic reasons for this. When there is high unemployment in a state, some of those having difficulties finding jobs move to states with better economic conditions. The converse also happens. When there is a good pool of labor available, firms move in to take advantage of the slack labor conditions. Unfortunately, this process is slow and may imply many unemployment experiences, often associated with depressed wages even after finding a job.³

²Figures 1a, b, and c show the variation in unemployment rates across states for each of the three years. Figure 2 displays what happened to the mean and standard deviation of the unemployment rate across states in the three years.

³Katz and Blanchard (1992) discuss how adverse shocks to employment can depress wages for a decade. See von Wachter and Schmieder (2015) on the negative impact of unemployment benefits and nonemployment durations on reemployment wages and von Wachter, Song, and Manchester (2007) on the lasting impact of job loss on future wages. Autor, Dorn, and Hanson (2013) also offer a thorough examination of trade’s adverse impact on wages, unemployment, and labor force participation rates.

Poverty

In 2006, state poverty rates varied from a low of 5.4% in New Hampshire to a high of 20.6% in Mississippi. At the height of the recession in 2009, the same two states were bookends, but the rates varied from 7.8% to 23.1%. By 2016, New Mexico had supplanted Mississippi as the lowest poverty rate state, but Mississippi remained a close competitor. New Hampshire is still the state with the lowest poverty rate.

More important than the rankings, however, is the fact that poverty varies so greatly among the states, with the worst state having a rate about three times as high as the best state. State differences in poverty are persistent. In 2006, Mississippi, District of Columbia, Arkansas, Louisiana, and New Mexico had the highest poverty rates. In 2015, Mississippi, New Mexico, and Louisiana remained among the highest five poverty rate states, and the District of Columbia was sixth highest.⁴

Recession and Recovery

It is important to point out that the state rebound experiences from the recession differ quite substantially. There is almost a perfect inverse relation of post-recession unemployment rate improvement with the peak rate of unemployment during the recession. Those states that experienced the highest unemployment during the recession enjoyed the most improvement. For example, Michigan's unemployment peaked at 13.9% in 2009, but by 2016, it had fallen almost 9 percentage points, down to 5.1%. Conversely, North Dakota, with the lowest peak rate of 4.1% (also occurring in 2009), experienced a rate fall of 1.4 percentage points between its peak and its low in 2014. There is little room for improvement when the rate is very low, but the pattern is not merely mechanical. The rebound phenomenon is pervasive and a positive aspect of our economy. States with high rates can more easily call back idle resources when the economy starts to grow again. Michigan could have remained at very high rates of unemployment, or worse, the rate could have continued to rise. It did not. Instead, it fell to a rate close to the national average.

The Aging Workforce

It is well-known that the workforce is aging, primarily because the large cohort of baby-boomers are entering their senior years. The effects of an aging workforce show up in a variety of ways, but the two most important are the decline in the employment rate, which has a direct effect on GDP growth, and the reduction in business formation, which has drawn the attention of

⁴Figures 3a, b, and c show the variation in poverty rates across states for each of the three years. Figure 4 displays what happened to the mean and standard deviation of the poverty rate across states in the three years.

this committee.⁵ Business formation has declined in many regions, although there are pockets where new business creation remains strong.

The employment-to-population ratio, which is defined as the ratio of those 16 and older with jobs to the overall population 16 and older, was at 63.4% before the recession began and fell about 5 percentage points during the recession. It has crept back up to its highest level in eight years, now at 60%, but still well below the pre-recession peak, despite unemployment rates that are down at 4.7%. About half of the difference between the current rate and the prior peak of 63.4% is a result of an aging population. When a larger fraction of those over 16 are in their retirement years, a smaller proportion of that group will be working.⁶

Another subtler effect of aging is the slowing of entrepreneurial activities, which is consistent with the general decline in the formation of new businesses. Since this session is about opportunity, it is important to report recent findings that establish the effect of an aging population on opportunities for the young.⁷ When a society ages, the top positions in firms tend to be dominated by older persons, and this tendency diminishes the ability of younger ones to acquire the skills necessary to start businesses. The surprising fact from a study of 82 countries from 2000-2010 is that younger countries have higher rates of business formation, but more important is that every age group, and especially in 30s, tends to have higher rates of entrepreneurship in younger countries than in older ones. It is not merely the case that 35-year-olds are more likely to start a business than are 65-year-olds. Additionally, 35-year-olds in Korea are more entrepreneurial than 35-year-olds in Japan because Japan has an older population than Korea. Also true is that Japan was significantly more entrepreneurial a couple of decades back when it had a much younger population than it has today.

Figure 5 demonstrates the importance of aging on entrepreneurship rates. The 82 countries studied are divided into three groups: youngest, middle, and oldest countries. Note that the younger countries have higher rates of entrepreneurship at every age than the middle-aged countries have. The curves do not cross, meaning that the entrepreneurship rate in young countries is higher than in middle countries at all ages. The same is true in a comparison of middle and old countries, with the older countries have the lowest rates of entrepreneurship. One other noteworthy fact is that the curves have an inverted-U shape. Entrepreneurship rates tend to peak when individuals are in their 30s. The young do not have the experience to start businesses, and the old may lack the energy, creativity, or incentives to start businesses.

These results have profound implications for the country as it ages. To keep business formation active and job creation lively, it is necessary to maintain a younger population. To the extent that natural rates of population growth are declining as desired family size shrinks, the

⁵"Dynamism in Retreat: Consequences for Regions, Markets and Workers," February 2017, *Economic Innovation Group*.

⁶Unfortunately, that is not the only issue. The employment rate of those 25 to 54 has also fallen by about 2 percentage points from its pre-recession level and if anything, that rate should be higher, not lower as firms try to find substitutes for older workers who have retired.

⁷See Liang, James, Hui Wang and Edward P. Lazear, "Demographics and Entrepreneurship," forthcoming, *Journal of Political Economy*.

obvious alternative is an immigration policy that encourages young, entrepreneurial individuals to come to the United States.

Policy Driven Differences Among States

Research on cross-state performance demonstrates the importance of policy choices on growth and employment outcomes. Some of the factors discussed above, like those having to do with commodity prices and other industry shifts, may be beyond the control of policymakers, but others are sensitive to choices that the states make. As reported in a *Wall Street Journal* op-ed,⁸ those states that adopt more flexible labor market and low tax policies are the ones that experience the best growth. The relevant paragraphs are paraphrased below.

Market-oriented policies are effective in raising both employment growth and state GDP growth. States that adopt more flexible labor policies and lower taxes enjoy better economic outcomes.

Data on employment, state GDP, employment laws, and tax rates from 2000 to 2015 reveal that states with the most positive business climates grow fastest. There are a number of ways to categorize the business climate that prevails in a particular state. Labor climate is captured by the state's minimum wage relative to that which prevails in other states (or the federal minimum when that is binding) and by whether the state is a right-to-work state or not, defined as having a general right-to-work law on its books. Right-to-work laws prohibit requiring that employees to pay dues to a union. The relevant data are directly available from the Department of Labor, from the US Department of Commerce Census Bureau, and from the Tax Foundation, a non-partisan research group.

Throughout most of the period studied (2000-2015), there were twenty-two right-to-work states. Minimum wages vary both over time and across states. Finally, the proportion of state GDP that is taken in tax varies across states from a high of 12% in New York to a low of 5% in Alaska.

On average, employment growth is twice as high in states that have "market-oriented labor policy," defined as being a right-to-work state and having minimum wages that are below average across states. The difference is statistically significant, meaning that it is unlikely to have occurred by chance. Similarly, GDP grows about one-and-one half times faster over this period in those states.⁹

Perhaps most compelling is that three states, Indiana, Michigan, and Wisconsin changed their right-to-work status during the past three years, although Wisconsin did so too recently to have much of an effect. The before-after comparison is striking. Before the recession, when right-to-work laws were absent, these states averaged slightly negative employment growth that was well below the national average. After passing the legislation, growth in these states was

⁸Edward P. Lazear, June 23, 2015, "Why the Recovery Still Limp Along," *Wall Street Journal*.

⁹These results are consistent with those of Arthur Laffer, Stephen Moore and Jonathan Williams in *Rich States, Poor States: ALEC-Laffer State Economic Competitiveness Index* (2014; updated 2016 9th edition), published by the American Legislative Exchange Council.

one-and-one half times the national average, even accounting for the rebound effect discussed above.

General Growth Rather than Beggar-thy-Neighbor

Some cross state differences reflect policies that for the nation as a whole could amount to a zero-sum game. For example, in sports, cities often try to attract teams. Most recently, Las Vegas acquired rights to move the Oakland Raiders to Nevada. Tax breaks and other concessions are given which may make one city better off at the expense of the other. To the extent that the winning city is the one that gains the most by having the team located there, the situation is better than a zero-sum game. But much of the activity and resources used to win the competition for team location may be unproductive.

The same is true of economic activity more generally. Giving privileges to certain firms to locate in a state may have a local benefit without much value for the US economy taken as a whole. It is important, therefore, to encourage states to adopt policies that avoid beggar-thy-neighbor strategies. Low taxes and flexible labor market policies for the most part are positive pro-growth policies, which, especially if adopted by all states, would likely enhance economic development and opportunities.

General Growth Is the Best Way to Enhance Opportunity

It is tempting to focus policies in a geographically narrow way, wanting to help those regions that have been left behind. These policies are likely to be unproductive or even counter-productive for a number of reasons.

First, sometimes the policies merely transfer jobs and growth from one region to another without any net job or growth creation. This is the “beggar-thy-neighbor” effect just discussed that has some local, but little countrywide benefit.

Second, it is difficult to predict which areas will grow and which will decline and by the time the policies are implemented, the problem may have already passed. For example, back in 2005, North Dakota had just experienced an annual growth rate of about ½%, suggesting an economy that was going nowhere. Between 2005 and 2013, the state’s GDP grew by an astounding 83%, in large part as a consequence of the energy revolution that occurred there. Similarly, at the depth of the recession, Nevada’s unemployment rate was close 13.5%. Since then, its unemployment rate has fallen by 8 percentage points.

Third, general growth helps all regions, even if not at the same pace. As the economy has recovered from recession, unemployment has fallen in every state. Some states have seen very large declines, whereas others have seen more modest gains. But as discussed above, the states with the largest improvements also tend to be those that were hit hardest during the recession, with Michigan leading the pack.

One final point: Just as states differ in the benefits that they derive from growth, so too do individuals benefit differentially from growth. A rising tide lifts all boats, but unlike a tide, the

large and small boats do not necessarily rise by the same amount.¹⁰ It is well known that the disparity in incomes between the rich and poor has grown over time. But it is important to understand the causes of this problem in order to find appropriate remedies.

The pattern is a general one. Not only has the difference between earnings of the top 1% grown relative to the bottom 1%, but those at, say, the earnings of the 80th percentile have grown relative to earnings at the 20th percentile. The fact that the growth in income disparity exists throughout the distribution, albeit most pronounced at the extremes, suggests that there is a common factor behind the pattern. That common factor is the value of education, which has risen over recent decades. The most educated earn high wages relative to the least educated, and the education premium has grown. This manifests itself in industries that use highly skilled individuals, like higher education and health, where costs have gone up along with the compensation of those who work in the industry.

If growing income disparity reflects a rising return to skill, then the remedy is to enhance the skills of those who are benefitting the least from our economic growth. A comparison between wages in the US and Germany is striking. A smaller fraction of Germans attend college than do Americans, but most Germans without college training are enrolled in strong vocational training programs. The results are clear.¹¹ Germans with vocational training earn 92% of the average wage in Germany, whereas US high school graduates (let alone dropouts) earn only 70% of the average wage in the US. The numbers are even more striking in manufacturing. A US high school graduate earns less than half of a college-educated manufacturing worker. In Germany, that number is close to two-thirds. The German system has its shortcomings, but there is much to be learned about opportunity from other countries. It is essential that we provide all Americans with the skills necessary to perform successfully in a modern economy.

Conclusion

The most effective way to enhance opportunity for all Americans is to ensure that we have a vibrant growing economy, built on flexibility and minimal impediments. It is especially important that we continue to strive for a society where opportunity is available to all.

¹⁰See Figure 6, which demonstrates that high and low earners do best in rapidly growing economies, but not at the same rate.

¹¹Edward P. Lazear and Simon Janssen, September 9, 2016, "Germany Offers a Promising Jobs Model," *Wall Street Journal*.

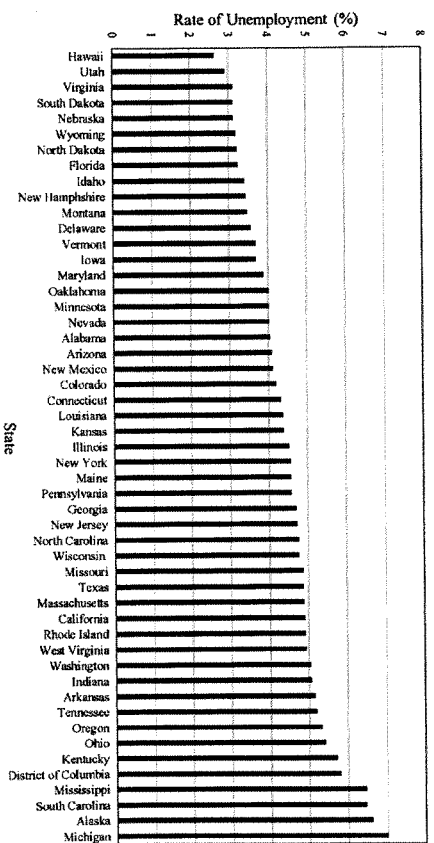
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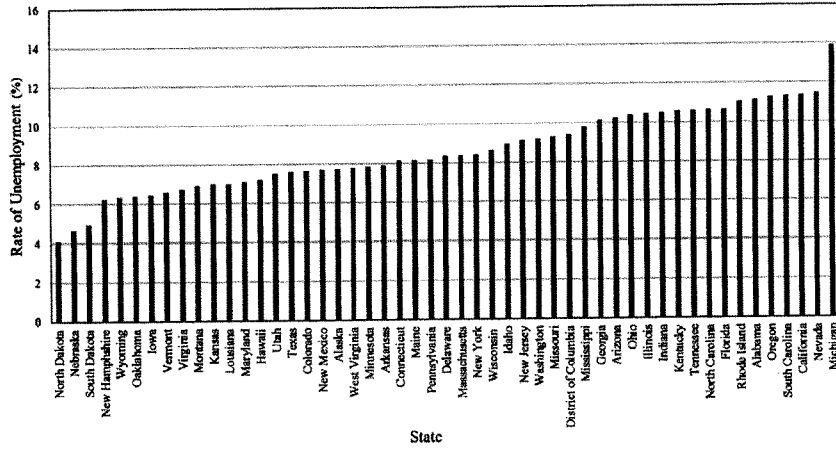
Figures 1-6

Figure 1a. Unemployment Rate by State (2006)



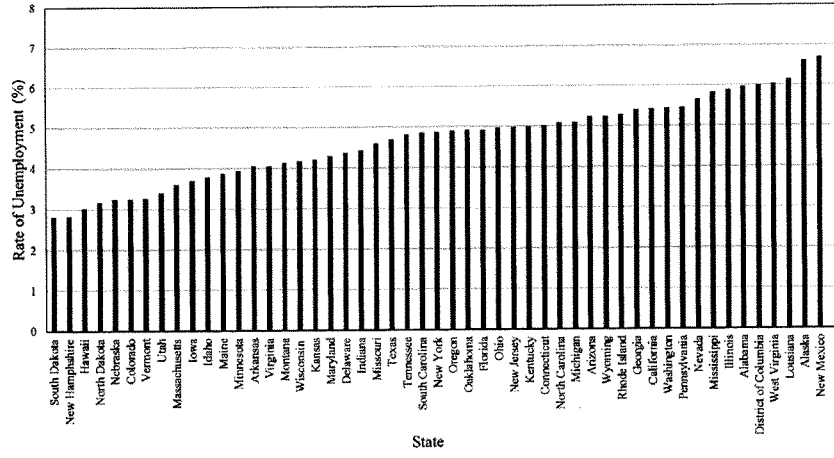
Source: Bureau of Labor Statistics, 2017

Figure 1b. Unemployment Rate by State (2009)

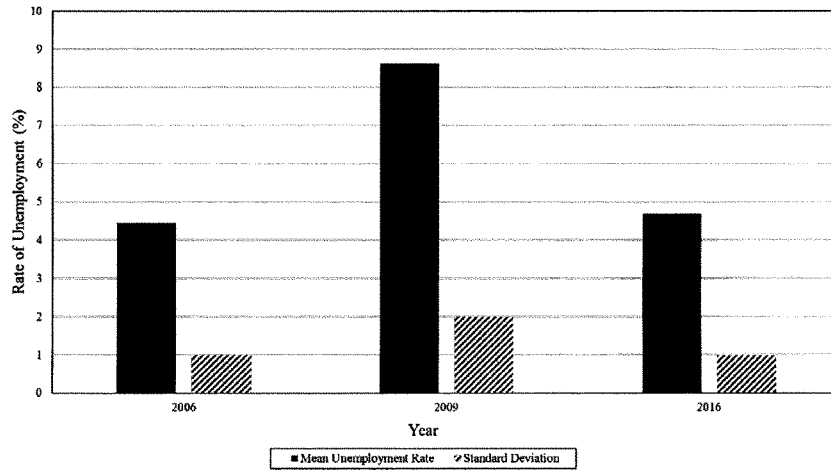


Source: Bureau of Labor Statistics, 2017

Figure 1c. Unemployment Rate by State (2016)

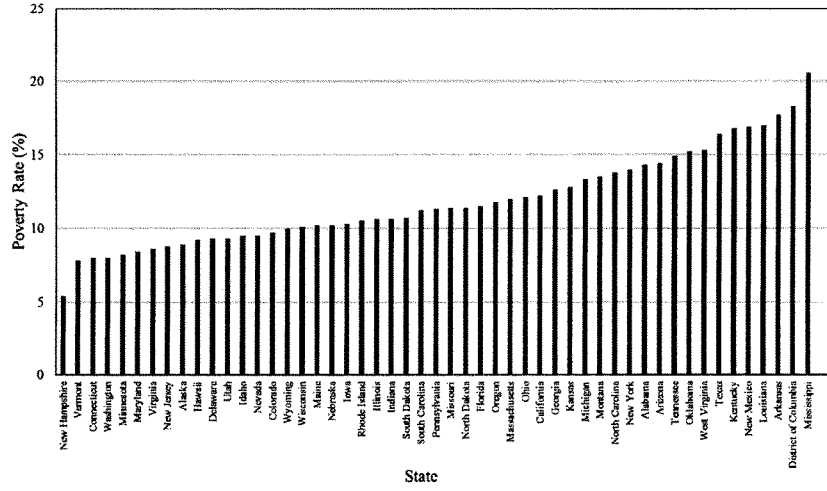


Source: Bureau of Labor Statistics, 2017

Figure 2. Means and Standard Deviations of Unemployment Rates for 2006, 2009, and 2016

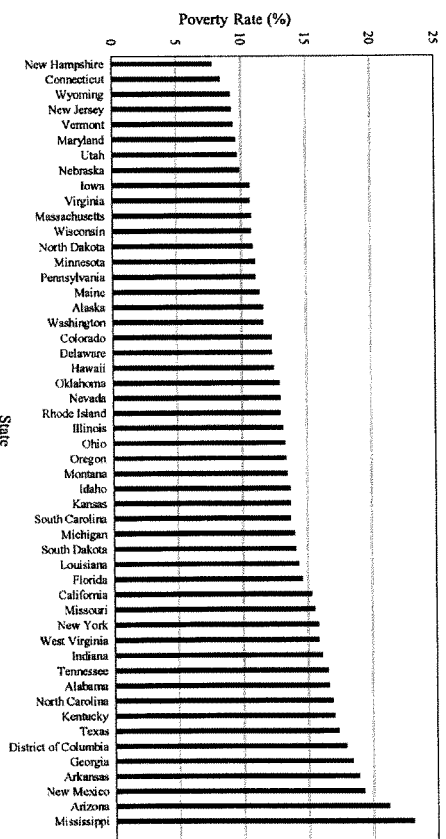
Source: Bureau of Labor Statistics, 2017

Figure 3a. Poverty Rate by State (2006)



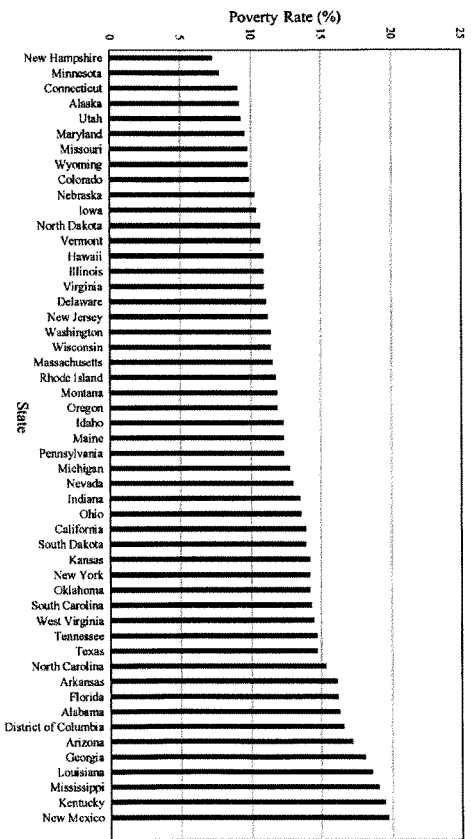
Source: U.S. Census Bureau, 2016

Figure 3b. Poverty Rate by State (2009)

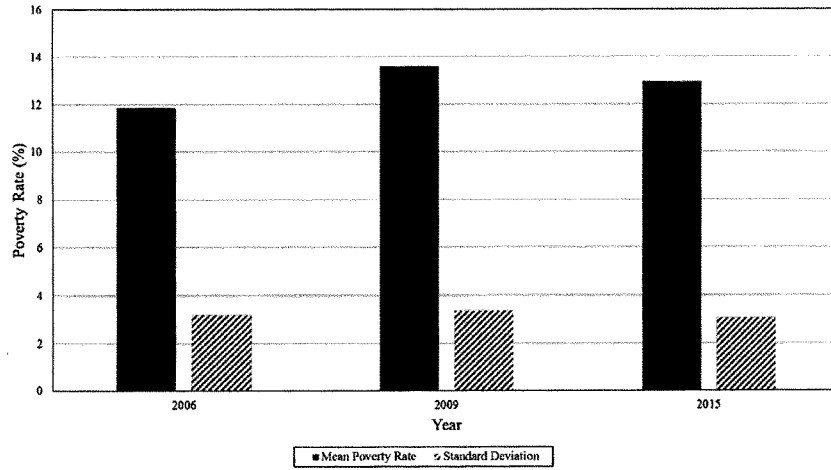


Source: U.S. Census Bureau, 2010

Figure 3c. Poverty Rate by State (2015)



Source: U.S. Census Bureau, 2016

Figure 4. Means and Standard Deviations of Poverty Rates for 2006, 2009, and 2015

Source: U.S. Census Bureau, 2016

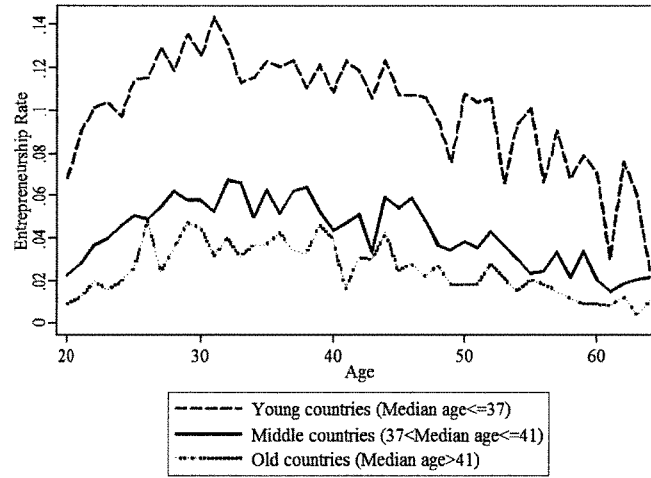
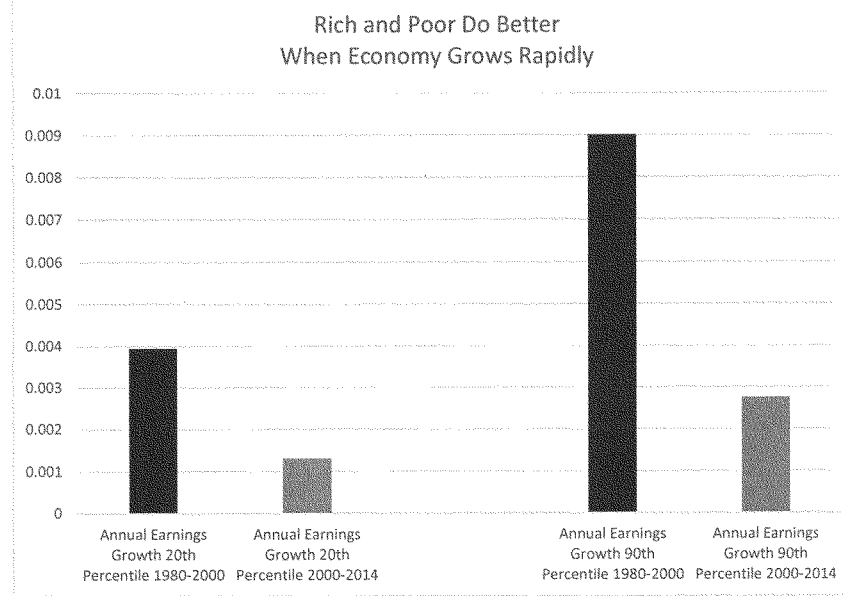
Figure 5. Entrepreneurship Rates in Countries with Young, Middle, and Old Populations

Figure 6: Poor and Rich Do Better In growing Economies, but Not Necessarily at the Same Rate



“The Decline of Economic Opportunity in the United States: Causes and Consequences”

Testimony before

The Joint Economic Committee of the United States Congress

April 5, 2017

**John W. Lettieri
Economic Innovation Group**

Chairman Tiberi, Ranking Member Heinrich, Vice Chairman Lee, and members of the committee: Thank you for the opportunity to testify today.

Many ingredients that helped the United States forge the world’s leading economy over the past century are now the subject of considerable political debate and anxiety—from international trade and investment, to advanced technology, to robust immigration, to even capitalism itself. But one thing that still seems to unite all sides is the shared belief that the United States should be a country in which access to opportunity is broadly available—not simply reserved for those who won the lottery of birth. This idea is at the very core of our national identity.

While there are many ways to approach a discussion on economic opportunity, my testimony today will focus on the pervasive decline of U.S. dynamism and its implications for workers, markets, and regions.

Why focus here? Because a less dynamic economy is one likely to offer fewer pathways to achieving the American Dream. For workers, declining dynamism means fewer labor market opportunities and less upward mobility. For markets, it has corresponded with an era of diminished competition and greater rewards to entrenched incumbents. For regions, it means shrinking industrial bases and more profound geographic disparities.

I especially want to emphasize that the challenges we face related to economic dynamism are new, having emerged clearly in the early 2000s and then accelerated sharply with the onset of the Great Recession. The trends and consequences described later in my testimony put our economy—and, therefore, our policymaking efforts—in uncharted waters. We do not have a playbook for the current status quo.

In short, the central economic challenge of our time is not the trade deficit, tax rates, or income inequality. It’s dynamism.

Dynamism in Retreat

The economy today is suffering from too little change, not too much. I realize this is a provocative claim in the age of the gig economy, automation, and the dawn of artificial intelligence. But the fact is Americans are less likely to start a business, move to another region,

or switch jobs now than at any other time on record. Indeed, the U.S. economy is quickly becoming less dynamic in nearly every measurable respect.¹

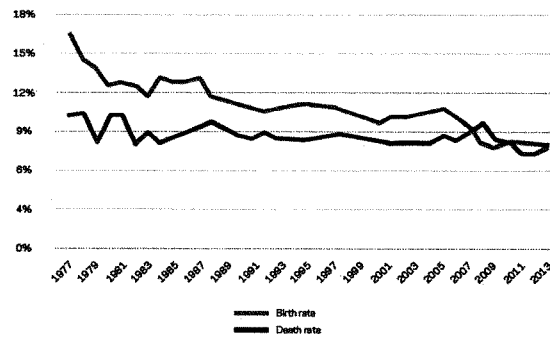
Why does this matter? If we believe the problem is *too much* change, it follows that policy priorities will be oriented around mitigating disruptions and hedging against risk. On the other hand, if we understand the economy has grown *too static* and *too risk averse* in too many areas, the logical response is a dynamism-boosting policy agenda—precisely what I believe is urgently needed.

Dynamism can be understood, in essence, as the rate and scale of economic churn. It fuels an economy's process of creative destruction, enhancing our ability to adapt and allocate resources in a more efficient manner. Historically, the high-churn nature of the U.S. economy acted as a kind of shock absorber in times of economic change or trauma.

Let's start by assessing the state of dynamism today through three important and interrelated measures: the startup rate, job turnover rate, and domestic migration rate.

- **New firms are becoming scarce.** At the core of the broad decline in economic dynamism is a steep drop in new firm formation. The startup rate collapsed during the Great Recession to its lowest point on record—dipping below the closure rate for the first time. Even as the broader economy has improved, the startup rate has barely budged and remains mired at 8.0 percent—narrowly outpacing the firm closure rate (this is important, as we will see below). Even in absolute terms, the economy produced 25 percent fewer new firms in 2014 than it did before the crisis. The decline is pervasive across all regions and industry sectors.

Figure 1
Firm birth (startup) and death rates



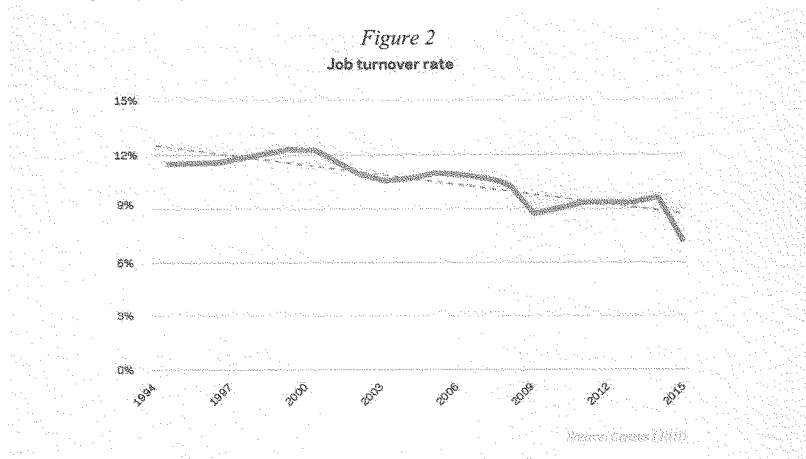
Source: Census BLS

¹ "Dynamism in Retreat: Consequences for Regions, Markets, and Workers." Economic Innovation Group (February 2017). Unless otherwise cited, all statistics cited in this section and the next are from this report.

This is a deeply troubling development. New firms are the “creative” part of creative destruction. They help keep the economy in a constant state of rebirth by replacing dying industries, fostering competition with incumbent companies, and producing new and higher wage jobs. When they disappear, the cycle of creative destruction falls out of balance.

It is worth noting that the rate at which firms close has remained fairly stable over the past 30 years. In fact, given all the talk about disruption these days, one might be surprised to see the closure rate currently near its *lowest point on record*. At least as far as businesses go, the dynamism problem is rooted in anemic birth rates, not spiking closures.

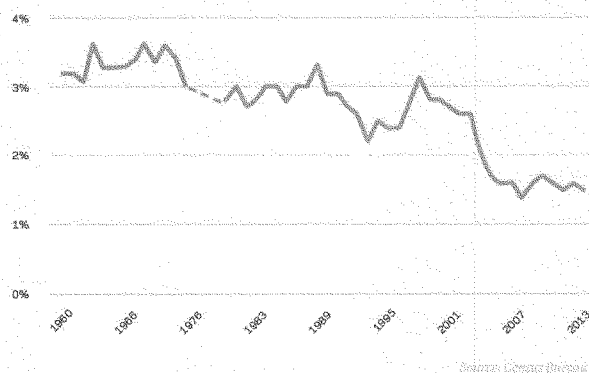
- **Job turnover has plummeted.** Job turnover is an important sign of labor market flexibility. High turnover was once a key feature of the U.S. economy but has declined substantially from a high of 12.4 percent annually in 1999 to a low of only 7.2 percent in 2015. In other words, only one in every 14 positions turned over in 2015. Disadvantaged workers are the ones most acutely impacted by lower turnover rates. Without churn in the labor market, it’s simply more difficult to find an unoccupied rung on the career ladder. For individuals, low job churn has negative implications for wages. For the broader economy, there is evidence that slower rates of churn meaningfully reduced GDP growth during early stages of the economic recovery.



- **People are staying put.** Americans are far less geographically mobile than they once were. High rates of internal migration historically served as an important adjustment mechanism for the U.S. economy, mitigating downturns as workers moved to areas more rich in opportunity. The domestic migration rate throughout the 1950s, 1960s, and 1970s

was consistently between 3.0 percent and 3.5 percent, and it was above 3.0 percent as recently as the late 1990s. Since then it has fallen by roughly half, settling to a historic low of 1.5 percent. While demographic factors impact domestic migration, the bulk of the trend can be attributed to declining business dynamism. As fewer firms open and close, fewer employment opportunities emerge, and thus, fewer people have reason to move long distances.

Figure 3
Percent of the population moving across state lines



Consequences of Declining Dynamism

Let's now explore some of the consequences of a low-dynamism economy.

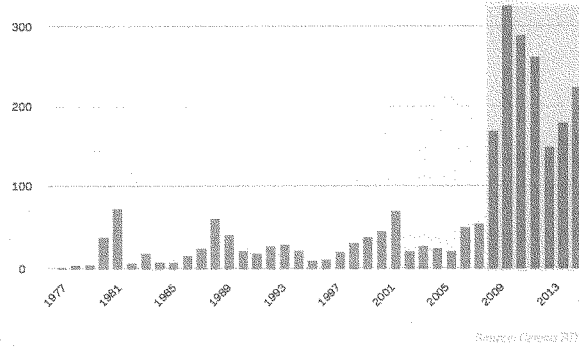
Declining Stock of U.S. Firms

The rapid decline in the U.S. startup rate has ushered in the modern economy's first period of a shrinking U.S. business sector. Prior to 2008, the vast majority of U.S. metro areas saw more businesses open than close every year. In fact, the share of metro areas generating a net increase in firms in a given year never fell below 80 percent, fueling a steady increase in the total number of firms nationwide—even during years of recession (Figure 4). From 1977 to 2007, the U.S. economy generated an average net increase of roughly 117,000 firms per year (Figure 5).²

² This number reflects the difference between the number of firms that started and the number of firms that died in any given year. It differs from the change in the total number of firms operating in the economy, which is influenced by the entrance of existing companies from abroad, mergers, and other factors as well.

Figure 4

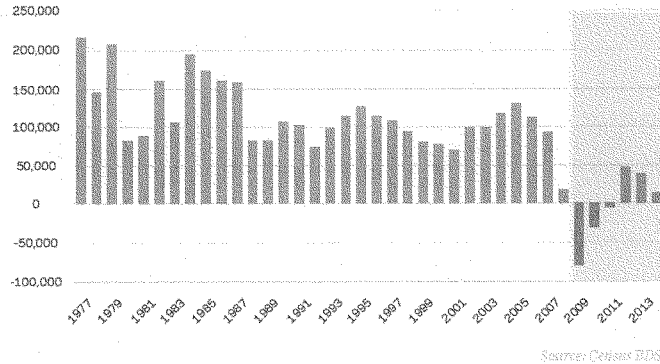
Number of metro areas with higher firm death rates than birth rates
 (Total number of metro areas is 365)



Source: Census BLS

Figure 5

Annual difference between firm births and deaths in the U.S. economy



Source: Census BLS

This trend reversed entirely with the Great Recession. At its worst, nearly 90 percent of metros experienced a net *decrease* in firms in 2009. Perhaps of even greater concern is that the national recovery has not brought a return to normalcy. As of 2014, more than 60 percent of metro areas continued to lose more firms than they were creating. Even the economy's best year for net firm formation since the recession (2012) fell far short of its *worst* year prior to 2008.

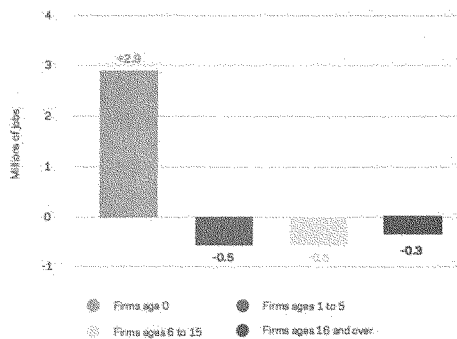
To underscore the severe and unprecedented nature of this reversal: Prior to the recession, the United States had never recorded a year-over-year decrease in the number of firms. By 2014,

however, the economy's total stock of firms was *182,000 smaller* than it was in 2007—in spite of an increase of \$1.1 trillion in real GDP.

Fewer Jobs

Workers suffer in an economy with fewer firms competing for their labor and less labor market turnover. New firms are the economy's most potent engine for net job creation and play an underappreciated role in keeping the labor market healthy. In fact, established firms as a cohort tend to shed more jobs than they create in an average year; only *new* firms are consistently net job creators. Thus, the meager startup rate has served to mute both the quality and quantity of job growth during the current recovery. Our conservative estimate is that the cumulative deficit from a missing generation of new firms between 2007 and 2014 was 3.4 million jobs.³ At a time when nearly 15 percent of prime working-age men are out of the labor force,⁴ diminished startup activity will continue to pose a major impediment to the goal of expanding access to opportunity through quality employment.

Figure 6
Average net annual job creation by firm size (1992-2014)



Source: EIG, 2017

Incumbency and Market Concentration

The economy is now dominated by older incumbent firms who are thriving in an environment with fewer new challengers and weaker competitive pressures. Firms that are at least 16 years old are claiming an ever-larger share of the business sector and now employ nearly three-quarters of the country's workforce, up from 60 percent in the early 1990s. Corporate profits, which

³ By EIG's broad calculation for 2014 holding the number of new and young firms and employee per firm ratios constant at 2006 levels. In "Grown-Up Business Cycles" (2014) Benjamin Pugsley and Aysegül Sahin use a more sophisticated methodology to estimate that 14 million jobs were missing in 2012 due to the cumulative impact of depressed rates of new firm formation going back to 1997.

⁴ Fox, Justin, "The Jobs Statistics Trump Should Be Worried About." Bloomberg (March 29, 2017).

normally average around 6 percent of GDP, have averaged over 9 percent of GDP over the recovery. Market concentration is becoming more pervasive. Two-thirds of U.S. industries saw an increase in concentration between 1997 and 2012, with the top firms claiming a larger and larger share of total revenue.

To be clear: Some degree of market concentration is not inherently bad for consumers or the broader economy. However, remarkably high and persistent profits alongside pervasive concentration are a warning sign of economic rents. What should be temporary rewards in a competitive economy now resemble perpetual rewards to incumbency. And the steady creep of regulatory complexity only serves to strengthen incumbents' hold on the market.

Another reason to be concerned by the graying of the business sector is its impact on innovation and productivity. An array of research indicates that firms tend to become more risk averse as they age, while new companies are disproportionately likely to bring radical innovations to market.⁵ But with the number of initial public offerings down significantly since the 1990s and number of acquisitions going up, much of the innovation generated by today's new companies simply goes to directly strengthening—instead of challenging—an incumbent.

Rising Geographic Inequality and Concentrated Growth

The economy has undergone massive changes in recent decades, but few are as obvious as the shifting geographic distribution of new jobs and businesses. The last recession and subsequent years have accelerated a trend towards geographic concentration after decades of decentralizing growth that spread economic activity to more locales. An increasingly narrow set of places are responsible for national rates of growth as an increasingly wide swath of places get left behind. While regional variations have always been a fact of life, the relationship between place and opportunity appears more pronounced than ever.

As the map of economic growth and recovery has changed, so too has the nature of economic opportunity for millions of Americans. Consider these findings:

- **The local benefits of dynamism are accruing to smaller shares of the population.** For example, fully half of the net increase in U.S. firms from 2010 to 2014 were located in only five metro areas: Houston, Dallas, Los Angeles, Miami and New York. These places were home to only 17 percent of the country's jobs. Compare that to the 1992 to 1996 period, in which 30 metro areas—spread throughout the entire country and housing 40 percent of U.S. employment—produced half the net growth in firms.

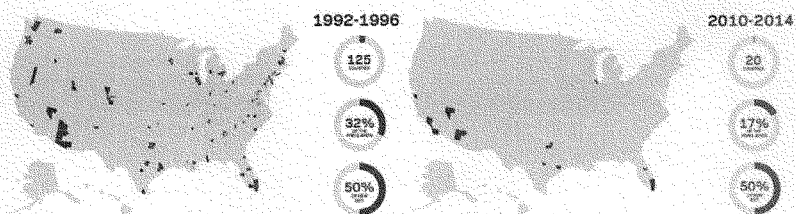
⁵ Huelgo, Elena and Jordi Jaumandreu, "How Does Profitability of Innovation Change with Firm Age?" *Small Business Economics* 22 (3) (2004): 193-207; Litan, Robert and Carl Schramm, *Better Capitalism: Renewing the Entrepreneurial Strength of the American Economy* (Yale University Press 2012); Acemoglu, Daron and Dan Cao, "Innovation by Entrants and Incumbents," *Journal of Economic Theory* 157 (2015): 255-294. See also Acemoglu, Daron, Ufuk Akcigit, Nicholas Bloom, and William Kerr, "Innovation, Reallocation, and Growth" Working Paper 18993 (National Bureau of Economic Research 2013), for an analysis of the differences in the innovation and R&D activities of new firms versus incumbents.

It is crucial to note: This trend is the result of most places doing worse, not a few places doing better than ever. For example, the New York metro area produced roughly the same increase in firms over the last three economic recovery periods. In other words, the pie itself is getting smaller and the biggest slices are going to resilient large metro areas.

The trend with firms and metro areas holds true for counties and business establishments as well.⁶ This is important because if fewer new firms were still producing a broad and healthy distribution of growth in business establishments, the detrimental effects would likely be less severe. Instead, we see that half of the net growth in establishments from 2010 to 2014 occurred in just 20 counties home to only 17 percent of the U.S. population. This is again a far cry from the 1992 to 1996 period, during which 125 counties home to roughly a third of the population generated half the net establishment growth.

Figure 7

Map of counties accounting for half of recovery-era establishment growth



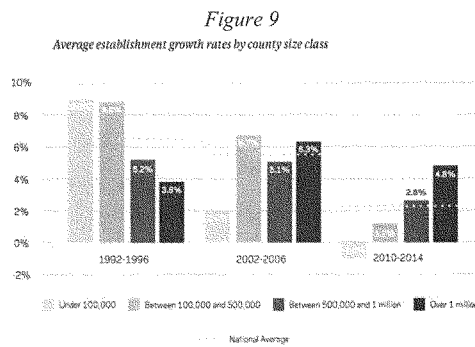
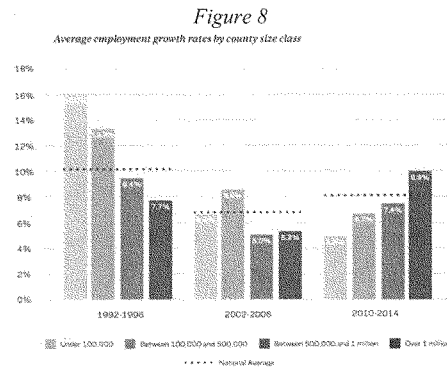
- Counties losing business establishments have more than tripled over the past three recoveries.** The percentage of counties seeing a net decline in business establishments during national recoveries went from 17 percent from 1992 to 1996 to 59 percent from 2010 to 2014. As a result, most U.S. counties had fewer business establishments in 2014 than they did in 2010. Counties seeing a net establishment loss were home to nearly one third of the U.S. population.⁷
- The early recovery passed over the neediest communities.** National figures are increasingly unreliable in telling a local story. For example, EIG's Distressed Communities Index project found that U.S. zip codes in the bottom quintile of prosperity saw significant ongoing losses of both jobs and business establishments during the first four years of the national economic recovery. On average, they saw a -6.7 percent change in employment and a -8.3 percent change in establishments. These are places spread throughout every region and housing over 50 million Americans—often adjacent to highly prosperous centers of economic growth. Meanwhile, the top quintile of zip codes

⁶ Firms are the corporate entities with paid employees that own physical establishments.

⁷ "The New Map of Economic Growth and Recovery." Economic Innovation Group (May 2016).

saw employment gains of 17.4 percent and establishment growth of 8.8 percent.⁸ These findings underscore the consistent disconnect between the national narrative of steady recovery and the deep anxiety many Americans still feel about their own local economies.

- **Small and rural counties experienced a stunning reversal of fortune over the past two decades.** Low-density counties went from a 16 percent employment growth rate in the 1992 to 1996 period to a 4.9 percent growth rate from 2010 to 2014. Worse, over the same period, those counties went from leading the nation with a 9.0 percent establishment growth rate to last place with a rate of -1.0 percent.⁹ While many flourishing rural and small town communities remain, the landscape of opportunity and economic growth has clearly shifted toward higher density locales.



⁸ “The 2016 Distressed Communities Index: An Analysis of Community Well-Being Across the United States.” Economic Innovation Group (February 2016): 9-12.

⁹ Economic Innovation Group, May 2016: 23-24.

- **The largest counties were the clear winners of the 2010s recovery.** As fortunes have faded elsewhere, counties with over one million residents led the nation in employment and establishment growth rates for the first time.¹⁰ This defies the conventional wisdom that growth rates in larger and highly developed cities are by nature slower than growth rates in smaller and less developed ones.

The geographic shift in employment and business growth cannot be explained by population trends alone. For example, roughly one-third of the counties that lost business establishments and one-quarter of the counties that lost jobs during the 2010s recovery actually saw an increase in population. Furthermore, populations increased in more than 20 percent of counties that lost *both* jobs and establishments.¹¹

Upward Mobility

While rumors of the demise of the American Dream have been greatly exaggerated, there are clear signs it is under threat or fenced off in too many American communities. Raj Chetty, Nathaniel Hendren, and their colleagues at the Equality of Opportunity Project (EOP) have done an enormous service through their research on upward mobility. Thanks to their work, as well as a flurry of other new research into economic mobility and geographic inequality, we understand better than ever just how profoundly geography impacts an individual's economic destiny.

EIG recently merged EOP's data on economic mobility with its own Distressed Communities Index (DCI) data on economic well-being to examine the relationship between economic well-being and upward mobility in communities across the United States.¹² Specifically, we studied counties that fell into the top and bottom fifths of prosperity nationally. We find that county-level economic distress weighs more heavily on children from poor backgrounds than it does on children from wealthier ones, who are better equipped to rise above their surrounding circumstances. Troublingly, 60 percent of Americans under the age of 18 are growing up in counties that historically exert a negative impact on the economic mobility of low-income children.

Our analysis also finds a clear correlation between the degree of prosperity or distress in a county and the extent to which living there boosts or hinders a child's future earnings potential. Prospering counties are generally more likely to foster upward mobility, although exceptions abound (especially in the Southeast). In fact, more than a quarter of the nation's most prosperous counties fail to positively impact the future earnings potential of their poor children. Surprisingly, 10 percent of economically distressed counties still manage to promote upward mobility for poor children.

¹⁰ Economic Innovation Group, May 2016: 23-24.

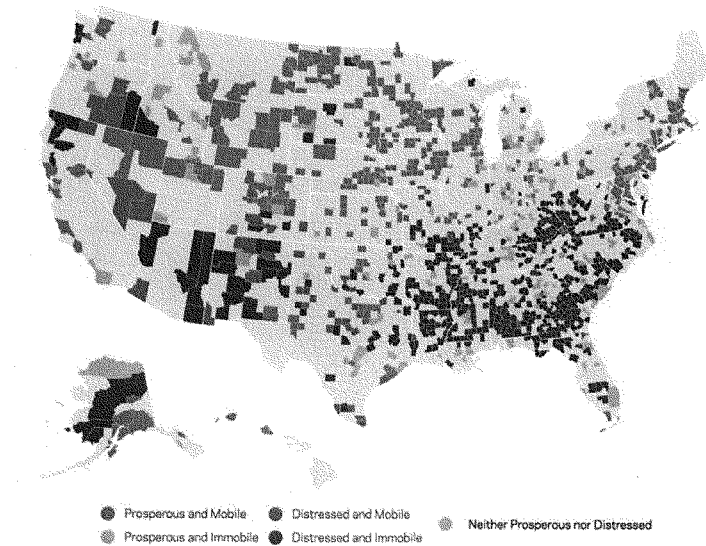
¹¹ Economic Innovation Group, May 2016: 12-13.

¹² "Is the American Dream Alive or Dead? It Depends on Where You Look." Economic Innovation Group (March 2017).

We also found an important silver lining for rural economies: Prosperous rural areas predominantly in the Upper Midwest and Northern Plains are the country's most powerful engines of upward mobility.

Figure 10

Categorizing the United States' most prosperous and distressed counties by their impact on the future income mobility of poor children



Source: EIG analysis of Distressed Communities Index and Equality of Opportunity Project data.

Demographic Considerations

Recent U.S. demographic trends are exacerbating the decline of dynamism. Population growth is a major driver of startup rates both nationally and regionally, so it should come as a concern that the U.S. population grew by only 0.7 percent in 2016—the slowest since at least the Great Depression.¹³ Meanwhile, the median age in the United States has increased by nearly a decade since 1970.¹⁴ Immigration into the United States is an obvious dynamism booster on two fronts. First, it helps keep population growth in positive territory and bends the median age down. Second, immigrants in the United States are highly entrepreneurial; research by the Kauffman Foundation found that immigrants were nearly twice as likely as U.S.-born individuals to start a

¹³ U.S. Census Bureau National Population Totals Datasets: 2010-2016.

¹⁴ Economic Innovation Group, February 2017: 34.

business in 2014.¹⁵ Not only that, but they are disproportionately likely to start *high-growth* companies. A study last year found that more than half of the current crop of U.S.-based startups with a valuation of at least \$1 billion were started by immigrants.¹⁶

Guideposts for an Opportunity Agenda

Before discussing potential solutions, let's play devil's advocate and ask if declining dynamism is really a problem that can or should be solved. If the decline is inevitable, why bother with useless policy prescriptions? Or, if there are hidden benefits to declining dynamism, why be worried at all?

Dynamism is only worth restoring to the extent that its decline corresponds with downstream negative outcomes. If, for example, we were seeing strong GDP growth, robust labor force participation, increased upward mobility, and strong wage growth, declining dynamism would be a moot point. Unfortunately, we see just the opposite. Furthermore, we can be certain that much of the current dilemma is due to policy choices and thus totally within our control. Nevertheless, our solutions should not fundamentally be aimed at making the economy look more like the past, but rather at ensuring that the benefits of tomorrow's economy are broadly shared.

Here are five guideposts for a future-oriented opportunity agenda:

1. **Focus on new firm creation and competition.** Access to opportunity suffers when incumbents are too powerful, markets are too concentrated, and entrepreneurs are an endangered species. Policymakers should rebalance the playing field with lower barriers to entry and greater emphasis on the unique needs of new companies. This includes, among other things, reforming exceedingly complex tax and regulatory regimes, which serve to protect incumbents from competition, and boosting access to capital and talent for new ventures. It also includes accelerating the pipeline of high-skilled workers into the labor market—both through better skills training and by fixing the truly self-defeating U.S. immigration system.
2. **Enhance geographic mobility and labor market fluidity.** Central to any opportunity agenda should be empowering people to move to places of opportunity and efficiently develop and deploy their skills in the marketplace. Among other things, this means getting rid of onerous occupational licensing requirements, designing a safety net that does not discourage mobility, and revamping local zoning and land use regulations so that high-opportunity areas can accommodate more people.
3. **Invest in the future.** The United States has benefitted enormously from previous decades of massive public sector investments in infrastructure and basic research, but we often forget why such investments are critical to private sector innovation and dynamism. As we renew our commitment to smart public sector investments, we should also abandon

¹⁵ Stangler, Dane and Jason Wiens, "The Economic Case for Welcoming Immigrant Entrepreneurs." Ewing Marion Kauffman Foundation (September 2015).

¹⁶ Anderson, Stuart, "Immigrants and Billion Dollar Startups." National Foundation for American Policy (March 2016).

traditional economic development incentives, which too often amount to giveaways that mortgage the future of local communities. New approaches are needed.¹⁷

4. **Growth is still key.** The United States is in desperate need of stronger GDP growth, which itself would go a long way to addressing concerns about access to opportunity and upward mobility. A broad pro-growth agenda is necessary, but we should also be bold in incorporating ideas aimed at helping struggling regions regain their footing. Meanwhile, let's resist the temptation to feel complacent given our relatively strong post-crisis performance in comparison to other developed economies. Their present struggles are a glimpse into our economic future unless we take action soon.
5. **We need data.** It is hard enough to diagnose complex problems when data are available. Without sound data, we are left with little more than faith-based policymaking. The federal government should protect and expand its investment in the economic statistical agencies and allow for improvements that will make their work even more useful in the years to come.¹⁸ But that is not enough. In light of how little we know about solving long-standing problems (especially related to upward mobility), federal policies should aggressively support novel approaches and reward state and local policy innovation. A more experimental approach to policymaking alongside existing legacy programs could provide a wealth of new data on what works and what should be discarded.

Conclusion

The decline of dynamism poses a threat to economic opportunity and upward mobility for future generations. A country as prosperous as the United States has a moral obligation to devote serious resources and brainpower to ensuring that everyone—especially children from poor backgrounds—has a shot at a better life. This is by no means the job of government alone, but the public sector has a crucial role to play in organizing the necessary attention and resources. The good news is that we retain enormous advantages and resources as a nation—more than enough to meet this challenge if we choose.

¹⁷ Lettieri, John and Steve Glickman, "New Bill Does Hard Job of Injecting Capital into Needy Communities." *The Hill* (March 28, 2017).

¹⁸ Schanzenbach, Diane and Strain, Michael, "America's small investment in government data has big payoffs." *The Hill* (March 7, 2017).

April 5, 2017

The Joint Economic Committee

“The Decline of Economic Opportunity in the United States: Causes and Consequences”

Testimony of Jared Bernstein, Senior Fellow at the Center on Budget and Policy Priorities

Chairman Tiberi, ranking member Heinrich, it is a pleasure to once again come before this committee, and I thank you for holding this hearing on the state of economic opportunity in the United States. In our often hyper-partisan era, it is refreshing to see this joint committee coming together to think about ways in which public policy can enhance the opportunity, mobility, and living standards of Americans who’ve not been sufficiently reached and lifted by economic growth in recent decades.

My testimony stresses the following points:

--Though the US economy continues to grow steadily at moderate rates and the labor market closes in on full employment, many barriers to economic opportunity and mobility remain in place.

--These opportunity barriers include high levels of income inequality, unequal access to educational opportunities, residential segregation by income, inadequate investments in children and certain areas, and a markedly slower employment recovery in rural relative to metro areas.

--Near-term policy solutions aimed at reducing these barriers include running tight labor markets, infrastructure investment, direct job creation, health care and other work supports, apprenticeships, and more.

--Longer-term solutions invoke policy interventions targeting inequality, inadequate housing, income and wage stagnation, nutritional and health support, the criminal justice system, and educational access.

--Avoiding policies that keep opportunity barriers in place is just as important as the proactive agenda items I recommend. Reducing the provision of public health care, regressive tax cuts, and budget cuts to programs that help low- and moderate-income families would all reduce opportunity.

Opportunity barriers and their causes

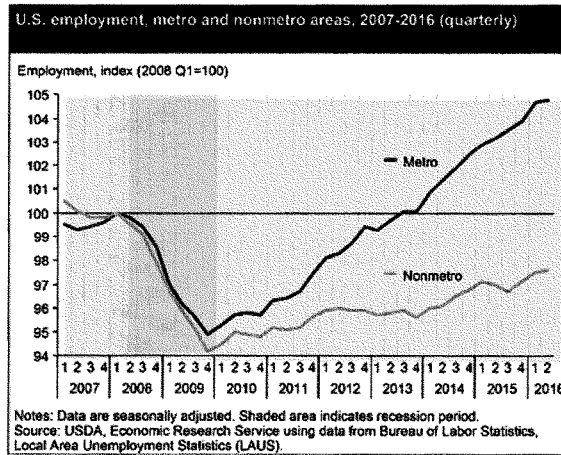
There is no fixed definition of economic opportunity, but most will agree that it corresponds to the realization of personal potential. If a child faces an inadequate school system, or a toxic environment, it will be much harder for her to realize her intellectual, and later, her economic, potential. If a parent lives in a community with an insufficient quantity of jobs, or jobs that pay wages that are too low to support a family, or jobs for which she lacks the necessary skills, both she and her family face opportunity shortfalls. Such barriers can meaningfully be extended beyond schooling and jobs to housing, nutrition, health care, and even infrastructure. For example, consider the fact that due to toxic infrastructure—lead leaching into water pipes—children in parts of our country may suffer brain impairments (though, importantly, such damage need not be permanent). This is a clear example of an opportunity barrier constructed by a public policy failure, one that should be unacceptable in an economy as wealthy and advanced as our own.

Given that framing of the problem, a clear role for policy in the opportunity space is to take down the barriers that get between people and the realization of their economic potential. The extent of the problem can be at least roughly measured through a set of proxies that indicate the existence of opportunity barriers.

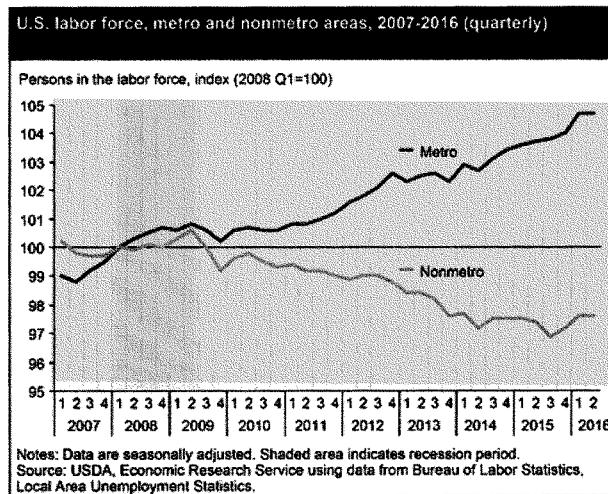
Labor market barriers associated with income, race, and education: Federal Reserve chair Janet Yellen recently noted that unemployment rates “averaged 13 percent in low- and moderate-income communities from 2011 through 2015, compared with 7.3 percent in higher income communities.” Chair Yellen also noted that in majority minority areas, the jobless rate averaged 14.3 percent between 2011 and 2015. The share of 25-54-year-old (so-called “prime age”) workers in these areas was nearly 9 percentage points lower than in non-majority-minority communities. Racial disparities exist in unemployment rates even controlling for education. Among white people with terminal high school degrees, unemployment was about 5 percent in 2015. For black people, it is twice that. Black people with at least BA’s have unemployment rates of 4.1 percent, compared to the 2.4 percent for whites with at least BA’s.

Labor market barriers associated with rural areas: My own work has documented periods of slack labor markets and their negative impact on the earnings and income growth of low- and moderate-income working families. The Economic Research Service of the United States Department of Agriculture recently analyzed different trends in employment in rural (or nonmetro) labor market indicators versus those from metro areas.

The figure below shows employment growth in rural and metro areas, with both indexed to 100 in 2008q1. While employment levels fell about the same amount in percentage terms in both areas over the Great Recession of 2007-2009, metro employment has recovered much more quickly, as the gap at the end of the figure reveals. In the middle of 2016, rural employment was still well below its pre-recession peak.



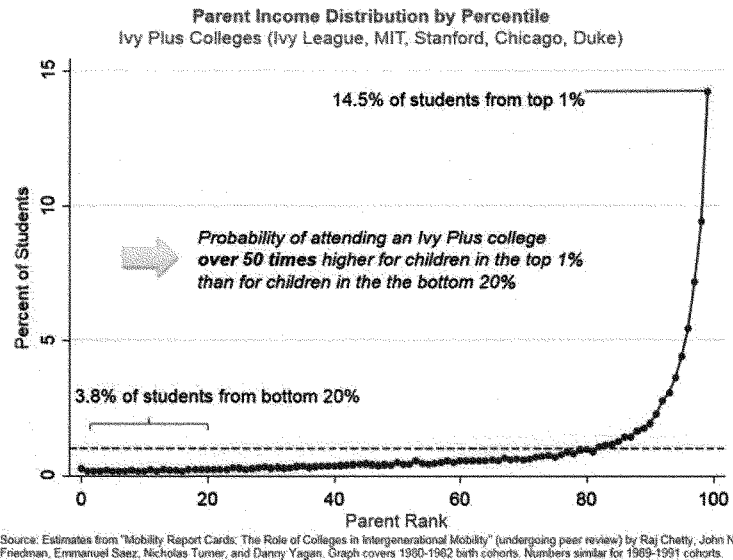
Labor force participation rates have been particularly slow to recover over this expansion, and while part of that trend is driven by the retirement of baby boomers, and thus not necessarily an indicator of weak labor demand, participation rates have yet to recover for prime-age workers as well. The next figure shows that the size of the labor force has significantly declined in rural areas, a trend all the more striking when compared to the labor force growth in metro areas during this same time period. Part of the discrepancy is due to differential population growth rates – while population grew over this period in metro areas, it was flat in rural places – but the rural labor force grew even more slowly than its population.



Mobility barriers associated with regional economic segregation. In recent decades, families with children have lived in increasingly segregated neighborhoods, a trend driven both by rising income inequality and by wealthier parents segregating themselves into areas with higher-performing schools, among other factors. As Chetty et al. and my colleagues Barbara Sard and Doug Rice have found, residential segregation by income exacerbates the gaps in opportunities between children from low-income and high-income backgrounds. Researcher Ann Owens also connects this development to diminished future opportunities for children: “Rising income inequality provided high-income households more resources, and parents used these resources to purchase housing in particular neighborhoods, with residential decisions structured, in part, by school district boundaries. Overall, results indicate that children face greater and increasing stratification in neighborhood contexts than do all residents, and this has implications for growing inequalities in their future outcomes.”

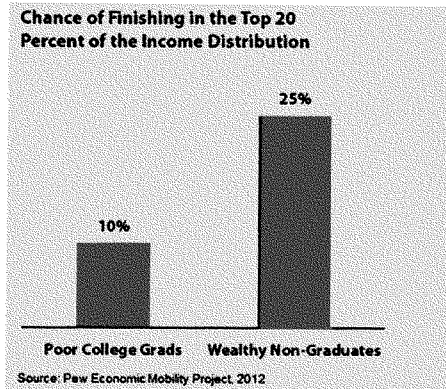
Education barriers associated with income: Yellen noted that close to 100 percent of children of parents with higher incomes and levels of educational attainment pursued higher education, and 60 percent earned a bachelor’s degree. But among children of parents with lower incomes and education levels, 72 percent pursued higher education and only 14 percent completed a BA. The figure below, from Chetty et

a), shows that the likelihood that a child from a wealthy family will attend an Ivy-league or similarly elite school is 50 times that of a child from a low-income family.



Federal Reserve data also show that as inequality has increased, college debt burdens have become much larger for low- relative to high-income families. In 1995, families with education debt in the bottom half of the net worth (a broader definition of income, including assets minus liabilities) distribution had a mean debt-to-income ratio of around 0.26 (for every dollar of their net worth, they owed 26 cents in college debt). For families in the top 5 percent, that ratio was eight cents on the dollar. By 2013, the debt-to-income ratio had more than doubled to 0.58 for the bottom half (some of whom are poor but many of whom are middle class) while remaining unchanged for those at the top.

Mobility barriers associated with income, inequality, and inadequate investments in children. While higher educational attainment is clearly associated with higher earnings, it is also the case that children who grow up in affluent households but do not graduate from college are *2.5 times* as likely to have high incomes in adulthood as children who grow up poor but *do* graduate from college (see figure below). Recent research by Raj Chetty and others finds correlations between higher inequality and lower mobility. Chetty finds that as inequality has increased over time, one metric of mobility—the likelihood that adult children out-earn their parents—has fallen, and that rising inequality explains 70 percent of the increase. One reason this relationship might exist is that, when less GDP growth flows to lower-income families, their abilities to overcome mobility barriers—to move to opportunity, to invest in their children’s future, to avoid the negative externalities of difficult neighborhoods—is diminished.



In fact, growing inequality is associated with less investment in children, both by parents and governments. In the early 1970s, high-income families spent 4 times what low-income families spent on “enrichment goods” for their kids (tutoring, books, trips, art supplies); in the mid-2000s, they spent seven times as much. Other OECD countries spend 5 times what we spend on young children, often through pre-kindergarten education, despite the fact that solid research shows the benefit-cost ratio of such spending to be more than 8-to-1.

--Employment and opportunity barriers associated with the criminal justice system. The National Employment Law Project reports that 70 million people in America now have a conviction or arrest history that can show up on a routine background check for employment. NELP also points out that more employers are conducting background checks wherein these records are likely to show up. Research shows extensive employment and earnings disadvantages to those with criminal records, with serious negative spillovers to the families of those who face incarceration. The opportunity/mobility costs of having a criminal record are high: men with criminal records are twice as likely to remain in the bottom fifth of the income scale as men without records. The fact that these problems disproportionately affect racial minorities is partially a function of institutionalized racism associated with the criminal justice system, so the barrier of discrimination is germane here as well.

The root causes of these problems are described by the barriers themselves. Discrimination, persistently slack labor markets, historically high levels of inequality and even higher levels of wealth inequality, regional economic segregation, inadequate investments in both the contemporary and future well-being of less-advantaged children and families (often through disinvestment in public goods), low access to educational opportunities, high exposure to toxic environments—all of these factors are causes of the erosion of opportunity for many in our society.

Especially given the economic focus of this committee, I stress the role of our high levels of inequality as one of the most important opportunity barriers. A common concern among macroeconomic analysts today, for good reason, is that growth, particularly productivity growth, has slowed sharply over the past

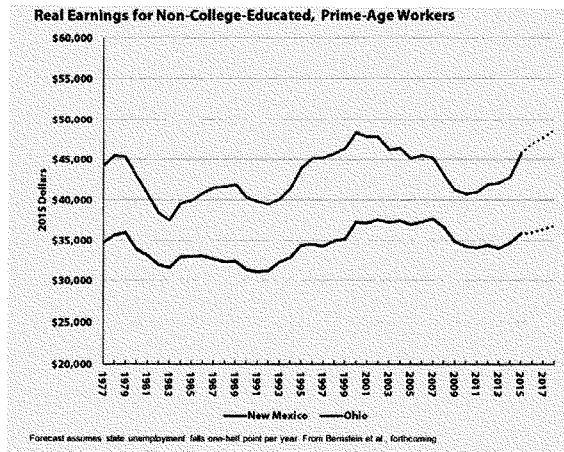
decade (a problem seen across advanced economies). I would characterize this deceleration as one of the most important constraints on growth and, thereby, on aggregate living standards. But the key word is “aggregate.” In the presence of high inequality, stronger growth is necessary but not sufficient to take down mobility barriers. If most of the growth flows to the top of scale, as has occurred in recent decades, then absent aggressive redistribution, we cannot expect to push back on the many problems just documented.

How can public policy push for greater opportunity?

A useful way to think about policies targeting opportunity is to consider those that can address near-term opportunity barriers and those that address longer-term barriers. Near-term policies address opportunity deficits with negative impacts on people’s economic circumstances today, like the absence of gainful employment opportunities, or the impact on living standards when inequality contributes to stagnant paychecks. Long-term interventions, like quality pre-school or improved access to higher education, can enhance the future opportunities of children. As I report below, considerable research has found that many safety net programs, like nutritional and health care support, both help reduce poverty in the near term *and* improve longer-term outcomes for children.

Near-term opportunity enhancers

Running a tight labor market: There is extensive evidence showing that lower-wage and minority workers are disproportionately helped by tight labor markets. Forthcoming research from the Center on Budget and Policy Priorities (CBPP) Full Employment Project shows that in both Ohio and New Mexico, for example, the real annual earnings of non-college educated, prime-age workers ended up in 2015 at about the same level as they were in 1977 (see figure below). The figure, however, reveals a strong response to the tight labor market of the 1990s in both states, as well as a strong pop at the end of the figure, in 2015 (the latest year in which data is available), that continues in a forecast that assumes unemployment continues to decline.



This forecast, driven by simulating even lower unemployment than today's, implies an important role for the Federal Reserve: in balancing their dual mandate of stable prices and full employment, they must be careful not to tap the economic growth brakes (i.e., raise the benchmark interest rate they control) too aggressively. The recovery appears to finally be reaching some places that have thus far been left behind, so absent clear evidence of inflationary pressures, the Fed should proceed with caution.¹ It also implies a role for fiscal policy to help create more labor demand where it is lacking, as with my next policy suggestion: infrastructure investment.

Investing in infrastructure: It is widely agreed that underinvesting in maintaining and improving the nation's public goods is harmful economic policy. I should note that complaints about the conditions of our public capital are bipartisan: both poverty advocates and Chambers of Commerce argue that Congress must work together to address this investment shortfall. Civil engineers have identified the productivity-dampening deterioration of our roads, bridges, public transit, and other transportation infrastructure. The Obama administration's Environmental Protection Agency argued that our water treatment and distribution systems need \$384 billion in investments over the next 20 years. Over half of America's public schools need to be repaired, renovated or modernized; the average age of the main building of a public school today is about 44 years. Roofs, windows, boilers, and ventilation, plumbing and electrical systems need to be fixed, upgraded or replaced.

Such investments fit both here and under longer-term opportunity enhancers, especially if we consider, as we should, investments in human capital as another dimension of investing in public goods. Improving water systems can yield profound long-term benefits in children's brain development, and upgraded school facilities have been shown to improve teacher retention and academic outcomes.

But in the near term, infrastructure investment can create employment for blue-collar laborers, making it a particularly strategic investment in parts of the country with too little labor demand. Economists have documented that when and where job markets are slack, infrastructure investment has a relatively high "multiplier," meaning a bigger bang for the buck on jobs and economic activity. Economist Josh Bivens points out that, by boosting longer-run productivity growth, well-placed infrastructure investment can allow the Federal Reserve to target lower rates of unemployment, an important complement to my point about tight labor market policy above.

Direct job creation: While Congress often tries to provide help to left-behind places through targeted tax-credits, such incentives have a poor track record. My conclusion is that these policies are simply too indirect, and that if we want to help places with too little labor demand, we must consider direct job creation policies, meaning either jobs created by the government sector or publicly subsidized private employment (as noted below, an alternative is to "move people to jobs," but that is an insufficient response to the problem). Infrastructure ideas, like renovating our stock of public schools by directly creating temporary jobs, fit into this space as well, but Bernstein and Spielberg (2016) elaborate a more ambitious approach.

¹ A key distinction here is between inflation and inflationary expectations. Higher inflation (faster price growth) should be expected at this stage of the recovery, especially given how low inflation has been thus far. But as long as price expectations remain "well-anchored," the risks of dampening recent wage and income gains should be heavily weighted.

We stress that subsidized jobs and job creation programs provide income to people who need it and will spend it, thereby helping to boost weak local economies, while providing opportunities to workers disconnected from the labor market. We also cite research showing that there can be lasting benefits from helping such workers overcome labor market barriers that are preventing them from gainful employment.

Though our work largely focused on direct jobs to offset recessions, today many policy makers are legitimately concerned about places facing recession-like conditions even while other places are doing much better. We therefore recommend “an employment fund that supports a set of national service jobs on an ongoing basis *and* includes a flexible funding stream that can ramp up in economic downturns. This initiative should enable states to try different approaches to subsidized jobs, encouraging them to experiment to learn more about what works best and for whom.”

Health care and other work supports: Another important way to help less advantaged persons get in and stay in the labor force – and to tap entrepreneurial opportunities – is to ensure a solid system of work supports, with health care as a standout example. Extensive research shows significant, positive labor supply effects from the Earned Income Tax Credit (a wage subsidy for low-wage workers), and policies that support working parents, especially help with child care, have been shown to raise women’s ability to join and stay in the labor force.

Opportunities related to entrepreneurship are of particular interest to this committee. Members will thus be interested in the findings from two studies suggesting that employer-provided health coverage is a constraint on business formation by potential entrepreneurs. These studies find that people who can secure health coverage through non-employment sources have higher levels of self-employment and “entrepreneurship probabilities” than those who lack such access. Such work is consistent with other research by Nick Buffie showing the release of insurance-driven “job lock” as the Affordable Care Act has ramped up. These findings underscore a commonsense connection between access to affordable coverage outside of employment, the ACA, and entrepreneurial opportunities.

Helping small manufacturers join global supply chains: The Trump administration has talked about the need for policy to help our manufacturers compete more effectively in the global economy. In analysis I did with Congressman Ro Khanna, we argued that policy should target smaller manufacturers from areas with displaced workers, helping such firms modernize and find their way into the global supply chain. We identify three policies consistent with this goal: expanding the Commerce Department’s Manufacturing Extension Partnership, pushing back on currency interventions, and investing in new, high-demand industries.

The MEP’s...mission is to “enhance the productivity and technological performance of U.S. manufacturing.” It does not provide direct financing, but it does provide guidance, by helping small manufacturing firms adopt new technologies, integrate into global supply chains, strengthen regional partnerships and connect with national labs. According to a 2014 report from the nonpartisan Congressional Research Service, the 30,000 companies served by the MEP “reported \$2.5 billion in new sales, \$4.2 billion in retained sales, \$1.1 billion in cost savings, \$2.7 billion in new client investment, the creation of 17,833 jobs and the retention of 46,069 jobs.”

The program costs \$130 million annually, or 0.003 percent of federal government spending...In the interest of helping small manufacturers and boosting U.S. net exports, its funding should at least be doubled.

Instead, as we note in the piece, President Trump's "skinny budget" zeroes out the MEP, a counterproductive cut if our goal is to create more opportunity and jobs in this space.

In this [recent oped](#), I also suggest two measures to level the trade playing field and push back on currency manipulation: currency reciprocity (the ability to purchase the currency of manipulators to neutralize their intervention) and countervailing duties on exports from countries that use currency depreciation to subsidize exports.

Invest in renewable energy: [Pollin et al.](#) find that a combination of market incentives (carbon caps and taxes) alongside public and private investment in renewable energy would improve both environmental and employment outcomes. In terms of public investment, they call for retrofitting publicly owned buildings, initiating green infrastructure projects (e.g., building out a "smart" grid), implementing procurement policy such as supplying the US military with renewable energy, and expanding federal research and development into renewable energy development, storage, and distribution. They estimate that their investment agenda (private and public) would generate 2.7 million jobs.

Khanna and I agree and highlight a role for public investment in battery/energy storage technology. We also note the utility of public/private [innovation centers](#) that build connections between university labs and factory floors. Such multilevel workforce investments that involve everyone from research programs and scientists to engineers and manufacturers have the potential to revitalize communities that have lost manufacturers and experienced years of disinvestment.

Apprenticeship programs: Economist Robert Lerman makes a strong case that apprenticeship programs, or work-based learning, can be highly effective in connecting young workers with limited prospects to good jobs. Public policy can help (and is doing so in some states and other advanced economies) through grants and credits to employers who stand up apprenticeship programs, as well as spreading the word to the broader employment community. Lerman [writes](#) that "expanding apprenticeship offers a long-term, [evidence-based strategy](#) that increases productivity by increasing skills at very modest cost to the government. Apprenticeships combine serious work-based learning and classroom instruction usually lasting two to four years, aimed at mastering occupational and employability skills, and leading to a recognized credential."

Work-based, "learning-by-earning" programs can address high youth unemployment while preparing young people for "middle-skill" careers in potentially high demand sectors such as health care, advanced manufacturing, construction, and information services. Moreover, these programs can enhance opportunity by setting out career pathways for upward mobility, as well as including post-secondary education as part of their package.

Moving to opportunity: The inequality and mobility expert Raj Chetty and various teams of researchers have identified a set of neighborhood correlates associated with lower and high levels of opportunity and mobility for children. They find that when families with young children "move to opportunity," those children do better as adults relative to children who stay in disadvantaged places. While Chetty et al.'s correlations are rigorously derived, it is important to realize that they represent correlation, not

causation, so we cannot assume that neighborhood factors themselves drive mobility. For example, they find that families with a large share of mother-only families correlate with relatively low mobility. But two-parent families in those neighborhoods experience the same lower mobility rates, suggesting that single parenthood is likely a correlate more than a cause. Also, policy makers cannot, of course, simply advocate leaving disadvantaged neighborhoods as a sole strategy for families there. We must apply policies like those noted above to help the families that stay behind. Helping people move to opportunity is certainly one valid strategy, but moving opportunity to people where they are is another.

Longer-term investments in opportunity

As discussed above, the long-term rise of income inequality has negative impacts on long-term opportunity and mobility through at least three channels.

First, it makes neighborhoods of concentrated poverty and wealth more common and neighborhoods with more income diversity less so. Children in neighborhoods of concentrated poverty are exposed to more environmental hazards, lower-quality public goods, and less privileged social networks than children in higher-income neighborhoods.

Second, income/wealth inequality makes access to quality educational experiences less equal, with strong immobility consequences. Higher-income parents can invest in more enrichment opportunities for their children, and children from wealthier families can attend more adequately funded schools. Students from privileged backgrounds can afford to attend elite universities while students from less privileged backgrounds often can't, and when they can, their debt-to-income ratios can rise to levels that generate a new set of constraints.

Third, inequality directly undermines opportunity by subjecting some people to persistent disadvantages and stressors that others don't face. For example, poverty researchers note that experiences associated with persistent and deep poverty, such as overcrowded or unsafe housing, inadequate nutrition and medical care, and exposure to environmental toxins, can lead to "toxic stress" and delayed physical and social development, with obvious negative implications for future opportunity.

Addressing these long-term barriers requires policy interventions targeting inequality, inadequate housing, income and wage stagnation, nutritional and health support, educational access, and environmental degradation.

Importantly, extensive research on longitudinal data (data that tracks people or places over time) finds that many of our safety net programs work as long-term mobility enhancers. That is, quasi-experimental designs that follow children over time and compare those who received an intervention to those who didn't (or those who got larger "doses" of the intervention to others who got smaller doses) find that these programs do not simply boost consumption in the present. They work like investments, with lasting impacts. Consider:

--Duncan et al. find that a \$3,000 annual increase in income to poor children before age 6 is associated with 135 extra hours of work a year for adults between the ages of 25 and 37, with an increase in annual earnings of 17%.

--Manoli and Turner find that adding \$1,000 of the EITC during a student's senior year of high school boosts college enrollment by 0.4 to 0.7 percentage points.

--Cohodes et al. find that Medicaid eligibility expansions between 1980 and 1990 "had an impact equivalent to cutting today's high school dropout rate by 9.7 to 14 percent and raising the college completion rate by 5.5 to 7.2 percent."

--Hoynes et al. find that access to SNAP in the 1960s and early 1970s decreased kids' adulthood obesity by 16 percent and their incidence of heart disease by 5 percent while increasing their high school completion rate by 18 percent.

--Former President Obama's Council of Economic Advisors finds that every \$1 spent on early childhood education results in roughly \$8.60 of "benefits to society...about half of which comes from increased earnings for children when they grow up."

--Chetty et al. find that children in families that received a Section 8 voucher when they were younger than 13 under the "Moving to Opportunity" program saw a 15 percent earnings boost in adulthood, while kids in families that got the voucher that had to be used in a low-poverty neighborhood saw a 31 percent earnings increase.

CBPP has elaborated a set of recommendations for boosting longer-term opportunities in the spirit of this research by strengthening and extending successful safety net programs.

For example, bipartisan support exists for significantly increasing the value of the Earned Income Tax Credit for childless adults. Such workers under 25 are ineligible for the wage subsidy and, if they earn poverty-level wages, are exposed to payroll and income taxes that can push them into or deeper into poverty. Older low-income childless workers are eligible for only a very small credit; e.g., a full-time minimum wage worker would be eligible for a credit under \$50. Proposals to significantly increase the value of the credit would lift hundreds of thousands of workers out of poverty and bring millions closer to the poverty threshold.

Since we're talking about childless adults, proposals to significantly raise this credit may appear to belong in the bin of shorter-term opportunity enhancers. However, researchers argue that these expansion proposals could have positive impacts on longer-term labor supply, reduced incarceration, and higher marriage rates.

Increasing the EITC is sometimes promoted as a substitute to higher minimum wages. But Robert Greenstein, CBPP's president points out that proposals to raise the minimum wage and the EITC should not be viewed as substitutes; their designs have several complementary attributes and it will take both to raise living standards and boost opportunities.

CBPP has also argued for strengthening the Child Tax Credit, which currently excludes the first \$3,000 of a worker's earnings from consideration, for very poor families with young children. That can be accomplished by either "making the *current* CTC fully refundable for families with a young child or by creating a fully refundable *supplement* to the CTC just for families with young children (an option that is more expansive because it boosts the tax credit for all families with young children that receive the CTC, not just those at lower income levels)."

With respect to the findings of Chetty et al., as well as Ann Owens (on residential segregation by income), CBPP also views renewing and boosting the funding of Housing Choice Vouchers as an opportunity-enhancing policy intervention. Housing expert Barbara Sard notes that HCV has a strong

track record in reducing homelessness, foster care placements, and frequent disruptive moves, and has been associated with lower rates of “alcohol dependence, psychological distress, and domestic violence victimization among the adults with whom the children live.” She finds that HCV “has an important, positive impact on minority families’ access to opportunities,” one that is particularly pronounced for minority families. But Sard also notes that relatively few families are able to use vouchers to find housing in low-poverty areas with access to better educational opportunities, and she suggests improvements that would enable more such moves, including increased incentives for state and local agencies to seek higher-opportunity locations; setting subsidy caps and jurisdictional rules that facilitate moving to opportunity; and direct assistance and encouragement both to landlords in low-poverty areas and to families who would benefit from moving to such areas.

A full treatment of criminal justice reform is beyond my scope here, but there are many changes that could begin to reduce the harm caused by mass incarceration. For example, Mitchell and Leachman recommend state-level policies that can reduce the negative effects of incarceration rates: reducing penalties for low-level felonies, many of which fall disproportionately on minorities, reexamining sentencing laws, reducing sentences, and more. Congress could accelerate such progress with legislation allowing federal judges to impose sentences below the mandatory minimums when warranted. Emsellem and Ziedenberg have also written about the need for expanding “fair chance” hiring practices such as “ban-the-box” (which allows those with records to not reveal them in initial interview stages), and they find positive results in many places that are trying these interventions. They also underscore the importance of making background checks more reliable and accurate, and recommend “clean slate” or expungement laws for minor, nonviolent felonies.

Finally, the long-term benefits of Medicaid access underscore the importance of tapping the Affordable Care Act’s Medicaid expansion in the 19 states that have yet to do so. The expansion led to significantly improved coverage of low-income families in states that took it up, and Medicaid is particularly important to residents of rural areas, which, as shown above, have faced less employment growth in recent years. In this regard, recent efforts by some House Republicans to significantly cut the Medicaid program as part of their American Health Care Act go in exactly the opposite direction of creating more opportunity for less advantaged families. I now turn to that and other policies that should be strongly resisted in the interest of promoting opportunity.

Policies that would diminish opportunity

There are at least three areas where Congress and the Trump administration are in danger of taking steps with the potential to significantly reduce opportunities: health care, budgets, and taxes.

Health care: I have already testified to the opportunity-enhancing characteristics of publicly provided health care, including how it unlocks entrepreneurial opportunities and improves the long-term health and educational attainment of children who receive it. Subsidized coverage, a key component of the ACA, also provides income relief for families whose budgets are already tight even before paying for health coverage.

In contrast, the recent House health care replacement bill (AHCA) not only rolled back the ACA’s subsidies to lower-income and older persons, it cut Medicaid funding by 25 percent in 2027. In total, as scored by the Congressional Budget Office, the bill would have completely unwound the coverage gains of the ACA, adding 24 million to the ranks of the uninsured. Based on the research cited above, such

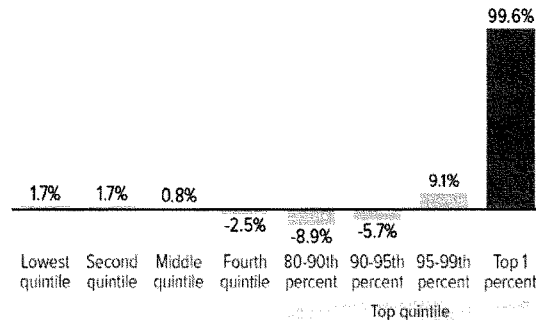
ideas clearly run counter to an opportunity agenda. Instead, as noted above, I urge members to build on the successes of the ACA and improve its flaws. That would mean expanding Medicaid to the 19 states that have yet to adopt it, introducing a public option into the insurance exchanges, as President Obama himself suggested last year, and strengthening the risk pool by raising enrollment and marketplace subsidies to lower out-of-pocket costs.

Taxes: In addition to threatening opportunity by reducing health coverage, the AHCA also did so by proposing about \$600 billion in highly regressive tax cuts. As noted throughout this testimony, and as the work of Chetty and others have underscored, high levels of inequality are associated with immobility, wage and income stagnation, residential segregation, and diminished opportunity in both the near-term and, especially regarding poor children facing educational and environmental barriers, the long term. Yet regressive tax cuts “pile on” and exacerbate market-driven inequalities that are already too high from an opportunity perspective.

As Congress moves on to tax policy, it is notable in this regard that, according to the non-partisan Tax Policy Center, by 2025, just short of 100 percent of the tax cuts in the House Republican tax plan go to the top 1 percent (see figure below). President Trump’s tax plan is not quite as skewed to the wealthy, but it is close. In his plan, TPC analysis finds that millionaire households get an average 14 percent boost in their after-tax incomes, while the middle-class (\$40,000 and \$50,000) ends up with an average 1 percent boost in 2025. Tax analyst Chye-Ching Huang points out that the “total tax cuts for people with incomes below \$100,000 would be only about one-fifth as big as the tax cuts for millionaires.”

Overwhelming Share of House Republican Tax Cuts Goes to Top 1%

Share of total federal tax cut by income group, 2025



Note: The total federal tax change under the House GOP plan would be a net tax cut, but some income groups are expected to receive tax increases. Those groups are shown with a negative share of the total change, while groups expected to receive tax cuts are shown with a positive share.

Source: Table 5 from James R. Nunns, et al., “An Analysis of the House GOP Tax Plan,” Tax Policy Center.

Huang also reports that the House plan loses \$3.1 trillion in revenues (1.3% of GDP) in the first decade and another \$2.2 trillion (0.6% of GDP) in the second decade. Trump's plan loses \$6.2 trillion in revenues (2.6% of GDP) in the first decade and another \$8.9 trillion (2.6% of GDP) in the second decade.²

In other words, these plans thwart opportunity in two ways: by exacerbating after-tax inequality, a problem clearly associated with immobility and diminished opportunity, and by reducing revenues needed to support the many ideas elaborated above, ideas which would lower barriers to opportunity.

Budget policy: President Trump's so-called "skinny budget" proposal likewise seems designed to buttress rather than reduce opportunity barriers. And while the president's partial proposal has been criticized by both Democrats and Republicans, in one important way relevant to this testimony, it merely exacerbates a longer-term trend: the decline in support for non-defense discretionary programs. Many programs in this budget category are associated with reducing the opportunity barriers discussed throughout this testimony, including housing assistance programs, job training programs, Head Start, aid for poor school districts, Pell grants, the MEP discussed above (a program within Commerce which helps small manufacturers access global supply chains), and block grants that support community and economic development. CBPP analysis shows that NDD funding is already heading for its lowest levels as a share of GDP on record. Recent Republican budgets have followed a similar "architecture": large tax cuts that worsen after-tax inequality and spending cuts that fall mostly on low- and moderate-income households.

Instead, I have argued that supporting an opportunity agenda in a fiscally responsible manner, while protecting key income and health security programs like Medicare, Medicaid, Social Security, and SNAP (food assistance), will require additional, not less, revenue. Meanwhile, revenue neutrality is too low a bar for our tax debate. In the interest of maintaining and supporting the opportunity enhancers discussed in this testimony, we must raise revenues, not try to break even (or, worse, use questionable scoring practices to claim neutrality). I have elaborated measures Congress might consider to raise revenues in a progressive manner, which include the closure of various loopholes that lead to lower effective tax rates for the richest individuals.

Conclusion

This testimony documents extensive barriers to opportunity and mobility stemming from income inequality, discrimination, residential economic segregation, low access to educational opportunities, inadequate job opportunities, and more. I then elaborate a set of short- and long-term policies to reduce these barriers. Finally, I argue that there are policies under discussion in the areas of health, taxes, and budgets that push in precisely the wrong direction, threatening to reinforce these barriers.

In discussing some of the long-term benefits to children who were in families that received certain anti-poverty benefits, I highlighted several rigorous analyses showing how these programs have improved the life chances of these recipients. This information is important both as a guide to opportunity-enhancing policy and as a reminder that, too often in this town, those who oppose these programs wrongly claim that "nothing works."

² These are static scores. Dynamic scores show slightly lower revenue losses. For example, instead of losing \$3.1 trillion, TPC's dynamic scores estimate that the House tax loses between \$2.5 and \$3 trillion.

In fact, there is continuing evidence that health care policy, child-centered educational policies, anti-poverty policies, and workforce policies (recall the above discussion around apprenticeships) are having their intended effects. If we are serious about providing Americans with the opportunities they deserve to realize their potential, then the policies and programs discussed in this testimony must be nurtured, strengthened, and improved.

QUESTIONS FOR THE RECORD FOR DR. KANE SUBMITTED BY SENATOR AMY
KLOBUCHAR

Earned Income Tax Credit

There is extensive research on the benefits of the EITC, including from Dr. Bernstein, and I am a strong supporter of the EITC and the Child Tax Credit. There is bipartisan support for increasing the Earned Income Tax Credit (EITC) for childless individuals. This is a very interesting idea—supported by former President Obama and Speaker Ryan.

- Can you discuss how increasing the EITC would help foster greater opportunity and lessen income equality?
- Are there other policies that we should also consider as we look at the EITC?

RESPONSE FROM DR. KANE TO QUESTIONS FOR THE RECORD SUBMITTED BY SENATOR
AMY KLOBUCHAR

The Earned Income Tax Credit (EITC) is one of the most effective approaches to alleviating poverty in the United States because it gets the work incentives right. Government anti-poverty programs typically offer cash or some benefit to individuals who qualify by falling below some income threshold, which by their very nature act as rewards for non-work and thereby establish perverse anti-work incentives. In contrast, the EITC was created in 1975 as a supplement to work income that phases in and out over a range of low incomes. In 2017, the maximum credit for families with one child is \$3,400, while the maximum credit for families with three or more children is \$6,318. Individuals without children can earn a maximum credit less than one-tenth that amount. I agree with Senator Klobuchar that expansion of the EITC would help foster greater opportunity, which is a worthy goal, though I would caution that the EITC could be made much more effective if reformed to operate through payrolls rather than through the complicated returns of the annual Federal income tax.

I have many friends who currently and previously qualified for the EITC, who tell me it is a great program that works as promised. I am indebted to the legacy of the late Milton Friedman who was an economist at the Hoover Institution where I now work who championed the idea of the negative income tax which served as the genesis of the EITC. With 28 million Americans benefiting from the EITC, nearly 7 million experience an income boost that lifts them above the poverty line, including 3.3 million children. The problem is that the program is both underutilized and overutilized, meaning that roughly one-fifth of eligible families do not participate in the program (presumably because the tax code is overly complex, causing millions to neglect to claim the credit when filing income tax returns) while at the same time nearly one-third of the current claims are estimated to be in error (many fraudulent) according to the IRS itself.

The program works by offering matching funds for each dollar earned, so that, for example, a mother of three young children who earns \$10,000 a year from working will receive \$4,500 from the Federal government in the form of an income tax refund. The matching amount varies with the number of children, from a maximum of 45 percent in the example above to 40 percent for two children, 34 percent for one child, and 7.65 percent for no children.

I would recommend the following changes to the EITC:

- Lower the qualifying age for childless workers from 25 to 21, double the phase-in and phase-out rates from 7.65 percent to 15.3 percent, and increase the maximum credit from \$503 to \$1,005. This idea has been modeled by Dr. Doug Holtz-Eakin, Ben Gitis, and Curtis Arndt.¹
- To eliminate erroneous payments, make the credit more efficient by having it operate directly through employer payrolls. This idea was recently recommended in an April 8, 2017, essay by Dr. Jason Fichtner and Indivar Dutta-Gupta in *The Hill*.² Entitlement programs such as Social Security are inextricably linked to anti-poverty programs such as the EITC, so Congress would wisely reconcile their operations and economic effects.

¹See <https://www.americanactionforum.org/research/the-work-and-safety-net-effects-of-expanding-the-childless-etc/>

²See <http://thehill.com/blogs/pundits-blog/economy-budget/327666-reforming-earned-income-tax-credit-could-be-a-bipartisan>

- Expand peak credit amounts to \$20,000 of earned income with the caveat that any expansions are to be matched 50:50 with states, giving each State the flexibility to expand as they see fit.
- Give each State the right to lower its minimum wage below the Federal level, just as they currently have the freedom to raise it above the Federal level. There is little evidence that wage controls are effective, but certainly no logical basis for Federal sovereignty over what should be set at the State level. And in order to fight poverty, a fair compromise is to increase funding for the EITC in exchange for greater State and local control over minimum wages.

Finally, we should recognize that there is some madness in government making the EITC and payroll taxes for Social Security operate in opposite directions. Americans with the lowest wage incomes pay 15.3 percent in payroll taxes (half directly, half indirectly by their employer) on work income. But they are also paid by the government a matching sum up to 45 percent. The payroll taxes are deducted immediately from each paycheck, but the EITC payments occur only once as a refundable credit on tax returns. Simplifying these contrary incentives would offer tremendous efficiencies.

Thank you, again, for the opportunity to share my thoughts on how we can together fight poverty in America and enhance opportunity for all of our fellow citizens.

QUESTION FOR THE RECORD FOR DR. JARED BERNSTEIN SUBMITTED BY SENATOR AMY KLOBUCHAR

Rural Economic Recovery

While the rural economy is doing well in many parts of Minnesota, I am still seeing challenges. Last year, we had large layoffs on the Iron Range due to steel dumping. People are just now getting back to work. We have a shortage of affordable workforce housing. In some areas, we have manufacturers who have jobs open, but can't find enough trained workers.

- *In your research you looked at some of the trends that will affect the rural economy. What did you learn from your research? What policies or programs could we implement that could benefit the rural economy?*

RESPONSE FROM DR. BERNSTEIN TO QUESTIONS FOR THE RECORD SUBMITTED BY SENATOR AMY KLOBUCHAR

While both metropolitan and rural areas were hit with equally steep employment losses during the Great Recession, the recovery from the last downturn has been geographically unequal. As the Economic Research Service of the United States Department of Agriculture recently documented, rural-area employment was still about two percent below where it had been before the recession as of the second quarter of 2016, while metro-area employment was five percent above its pre-recession level. And while rural population growth is well behind that of metro areas, the labor force in rural areas has declined faster than rural population in recent years.

One clear policy that would help people in rural areas is for states that haven't already done so to adopt the Medicaid expansion, as Medicaid plays an even more important role in connecting residents to care in rural areas than it does elsewhere in the country. Having access to health care is an important work support.

Recent economic research has made a strong case for "moving to opportunity," or helping people move from areas of weak employment growth and high poverty to areas with more positive profiles along those dimensions. While this may be a solution for some families, it is certainly not one for all, and, in fact, there's some evidence of reduced geographical mobility in recent years. Thus, my strong conclusion is that sound public policy must consider both helping people move to opportunity and moving opportunity to them.

In this regard, direct public investments in infrastructure and renewable energy could potentially create jobs in rural areas while simultaneously helping to meet important public needs. Federally funded direct job creation programs in these areas also hold promise, as their guarantee of job availability would provide opportunities and incomes to disadvantaged workers likely to quickly spend their money in local economies, generating "knock-on," or multiplier, effects. While such an intervention may sound far afield from contemporary economic policy, that's not the case at all. During the last recession, as part of the Recovery Act, there was a robust subsidized jobs program with a strong record and impressive bang-for-the-buck in terms of job

creation. A recent, rigorous study of the history of subsidized employment programs shows that many of these programs have been successful.

Earned Income Tax Credit

There is extensive research on the benefits of the EITC, including from Dr. Bernstein, and I am a strong supporter of the EITC and the Child Tax Credit. There is bipartisan support for increasing the Earned Income Tax Credit (EITC) for childless individuals. This is a very interesting idea—supported by former President Obama and Speaker Ryan.

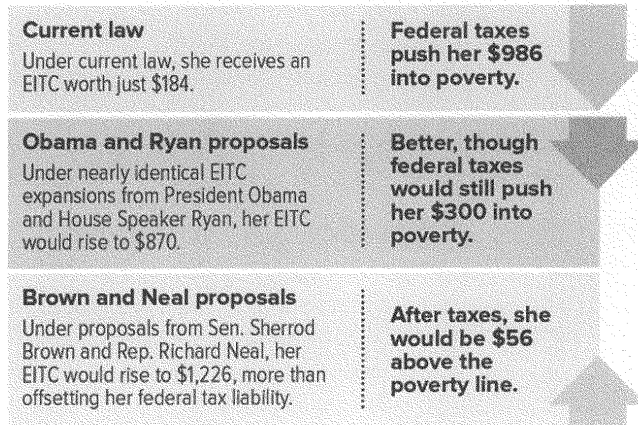
- Can you discuss how increasing the EITC would help foster greater opportunity and lessen income equality?
- Are there other policies that we should also consider as we look at the EITC?

The EITC is a wage subsidy that pulls people into the labor force and provides much-needed income support to low-wage workers in low-income families; it lifted 6.5 million people, including 3.3 million children, out of poverty in 2015, and brought another 21.2 million people (7.7 million children) closer to the poverty line. Research also shows that its benefits redound to its recipients at every stage of their lives, improving infant health, school performance, the chances of enrolling in college, and later adult earnings for those who receive the credit as children.

Workers under the age of 25 without children do not receive the EITC, however, and workers without children over the age of 25 are eligible for only a very small subsidy. Making the EITC available to younger workers in this category and more generous for those who are eligible, as the bipartisan proposal you mentioned would do, would both improve these workers' short-term prospects and potentially reduce their likelihood of becoming incarcerated. As shown in the figure below, the proposal from Senator Sherrod Brown and Representative Richard Neal would ensure that the updated credit kept a childless worker making poverty-level wages out of poverty (whereas under current law and the Obama/Ryan proposals, Federal taxes would keep such a worker below the poverty line).

Childless Adults Taxed Into Poverty; Earned Income Tax Credit (EITC) Proposals Would Help Address Problem

A single childless adult with poverty-level wages in 2016 (\$12,494) owes \$1,170 in income taxes and payroll taxes (employee share).



Source: CBPP analysis of Internal Revenue Code, President's 2016 budget, Speaker Ryan's "Expanding Opportunity in America" discussion draft, Working Families Tax Relief Act of 2015 (S. 1012), and Earned Income Tax Credit Improvement and Simplification Act 2015 (H.R.902). Assumes Neal proposal uses same inflation adjustment as Brown proposal.

You also mentioned the CTC, a policy that should be strengthened for very poor families with young children. The best way to do so would be for eligibility for the credit to begin with the first dollar of earnings (it is today entirely unavailable to families with earnings under \$3,000 and only partially available to families with a little more than that). One way to accomplish that would be to make the CTC “fully refundable,” which would mean allowing all such families to access the entire credit.

The minimum wage should be raised along with the EITC, as these policies are complementary.

Also, my own research has shown that one of the most surefire ways to raise the pay of low- and middle-wage workers is to maintain very tight labor markets. As you have stressed, and the data on rural economies supports, even as the national macroeconomy is closing in on full employment, pockets of weak labor demand persist. Much of my empirical work, including this recent analysis of the employment rates of “prime-age” (25–54) men, shows that full employment significantly lifts the earnings and employment opportunities of workers who otherwise have too little bargaining power. This insight further underscores the importance of the jobs programs—infrastructure and direct job creation—touted above.

There is much else for policymakers to tackle in this space. Criminal justice reforms that expand “fair chance” hiring practices for people with criminal records and allow Federal judges to impose less punitive sentences on people convicted of crimes are needed. So is an expansion of housing choice vouchers, which are an effective way to reduce homelessness. In general, policymakers who want to boost opportunity should focus on strengthening the safety net, not cutting taxes for the wealthy.

