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

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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

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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]

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[2]Figures 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.

[3]Katz 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

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[4]Figures 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 again 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*.

[6] Unfortunately, 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.

[7]See 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

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

[9]These 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.

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

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

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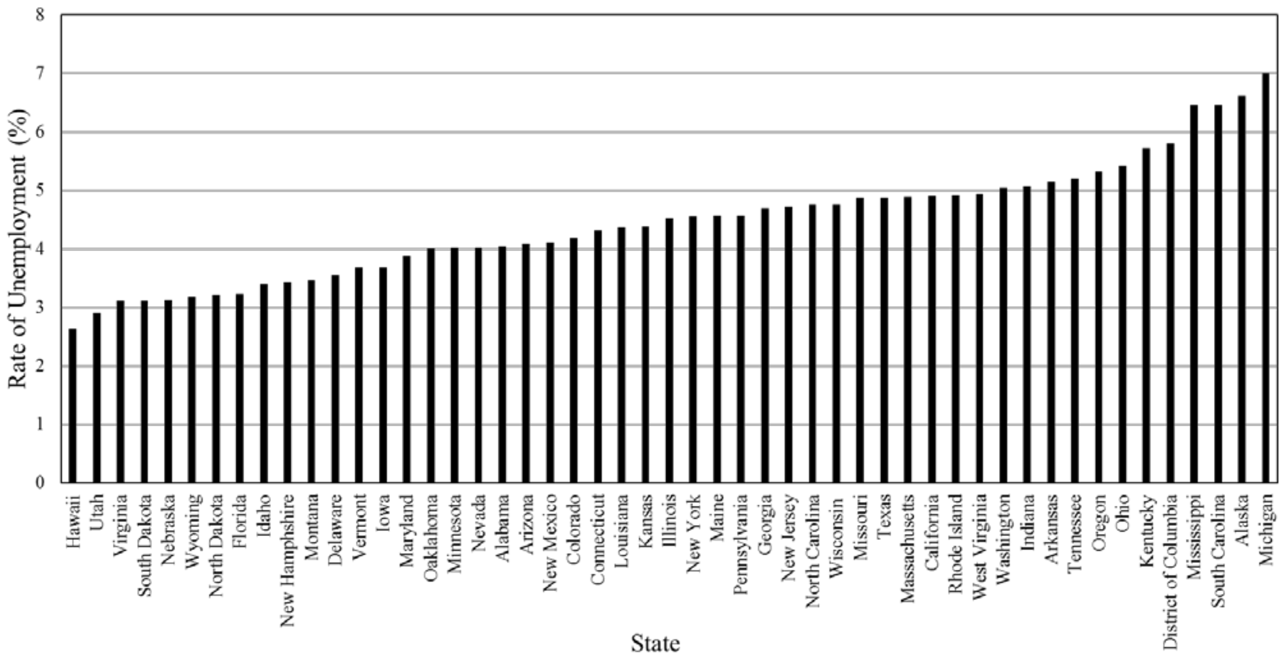
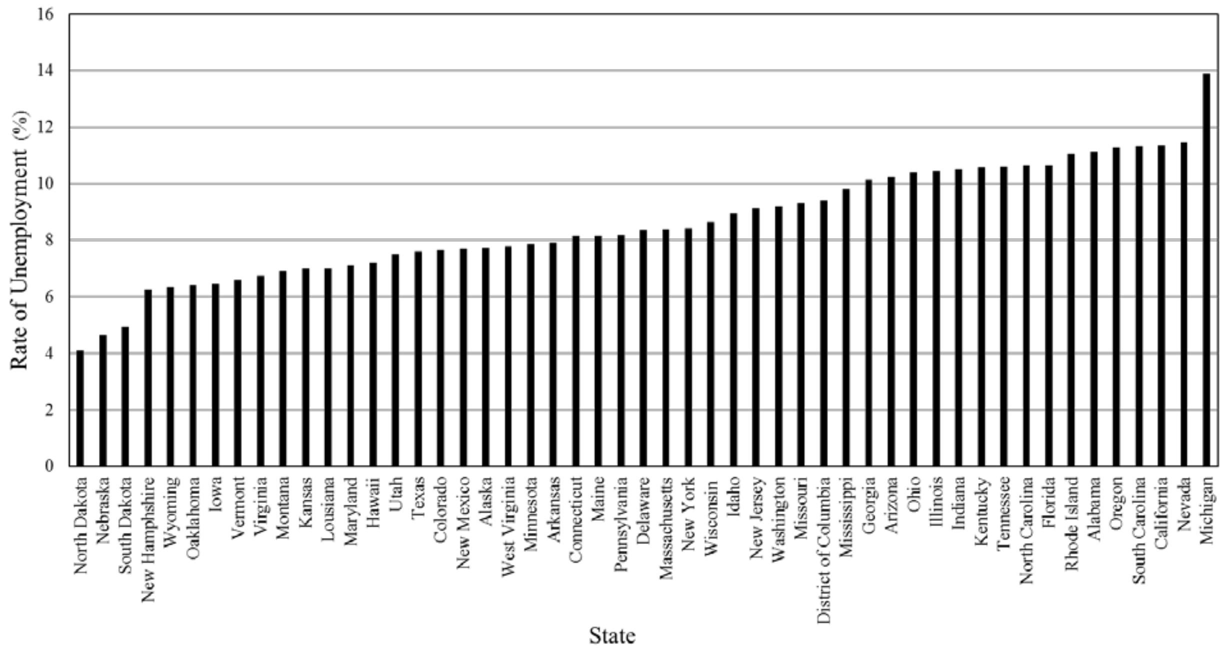
Figures 1-6

Figure 1a. Unemployment Rate by State (2006)



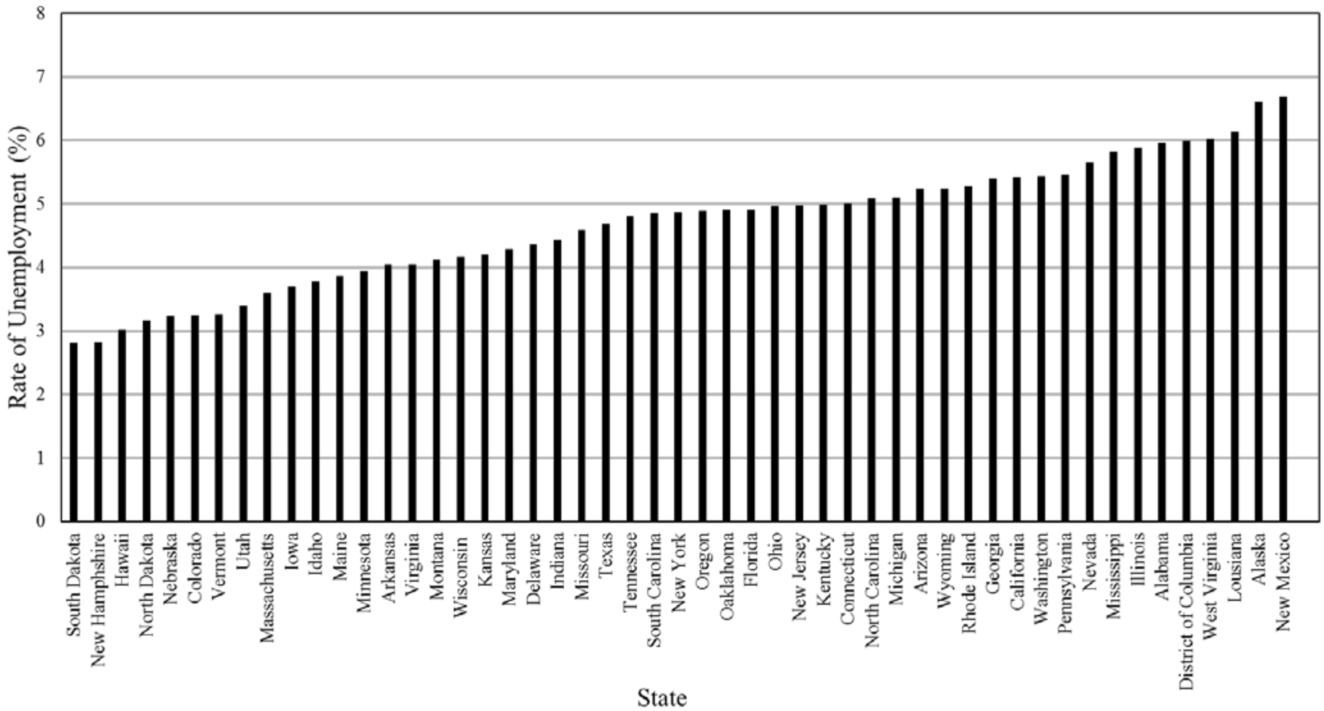
Source: Bureau of Labor Statistics, 2017

Figure 1b. Unemployment Rate by State (2009)



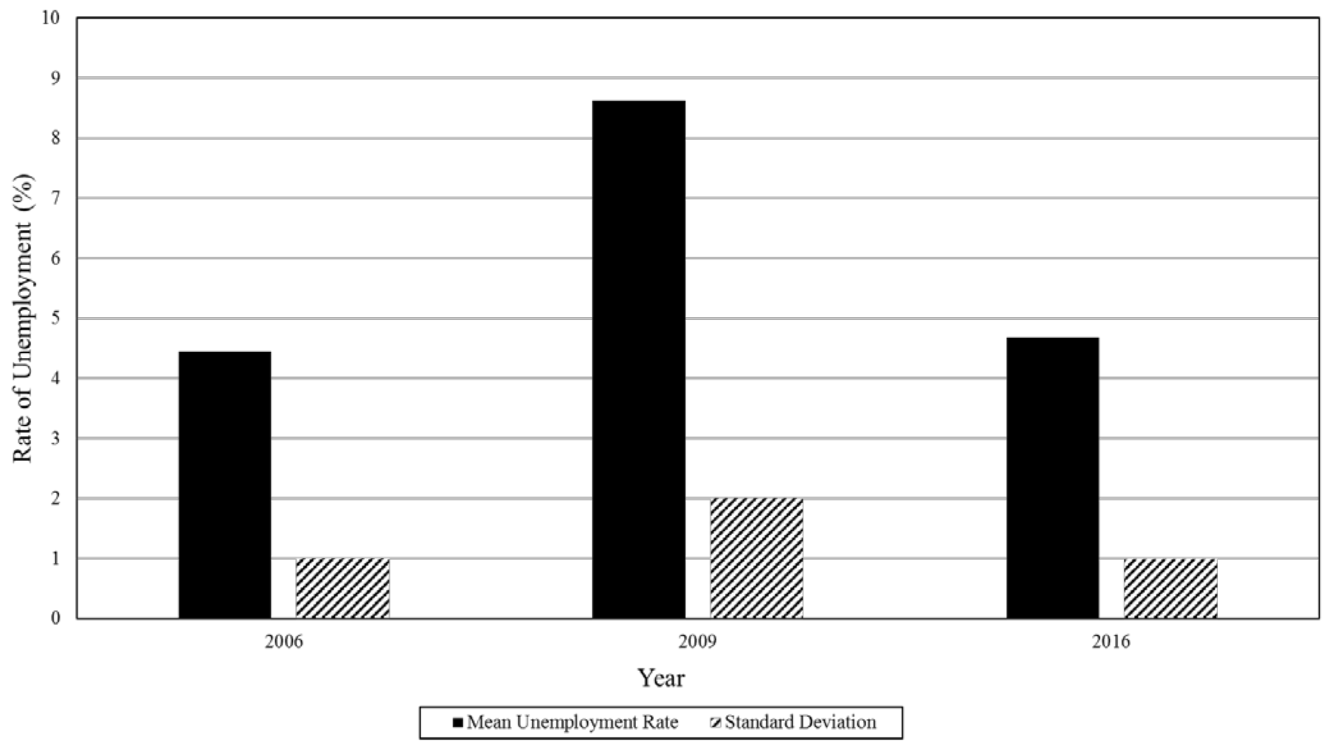
Source: Bureau of Labor Statistics, 2017

Figure 1c. Unemployment Rate by State (2016)



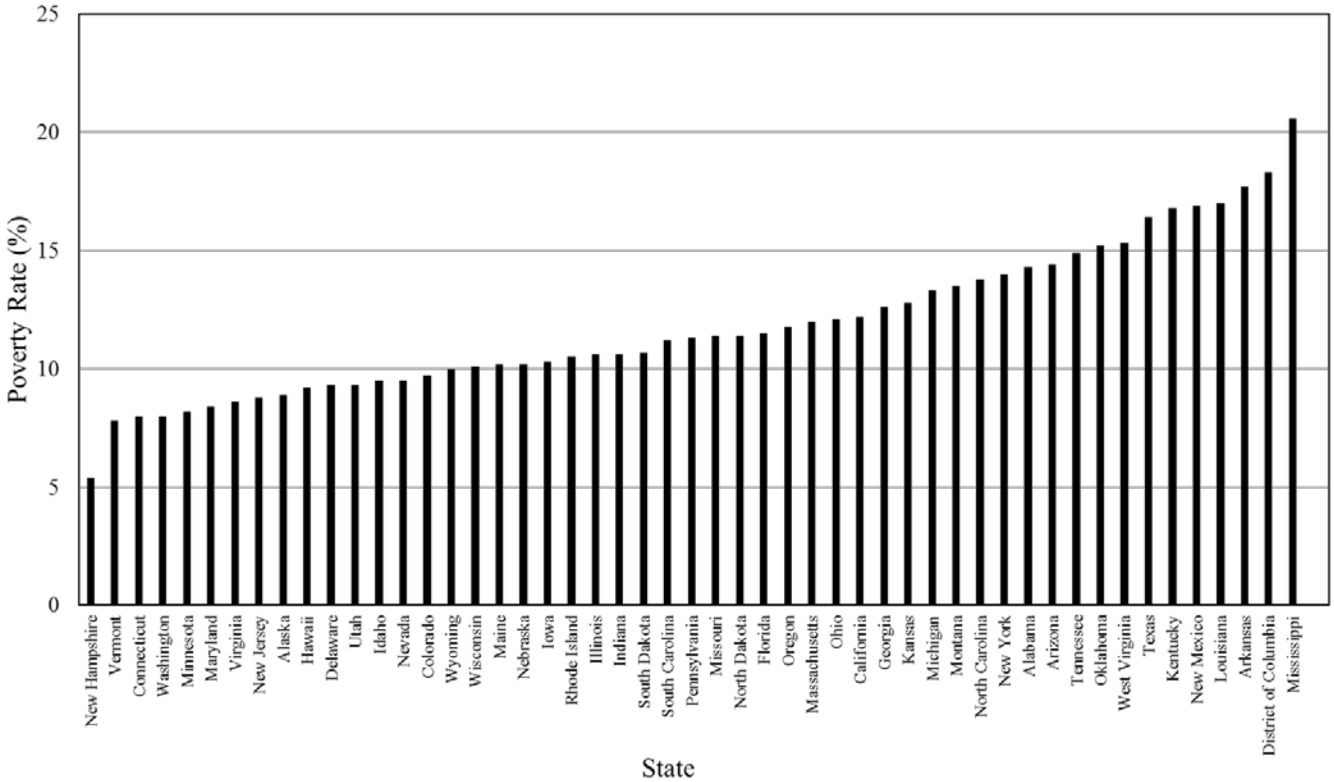
Source: Bureau of Labor Statistics, 2017

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



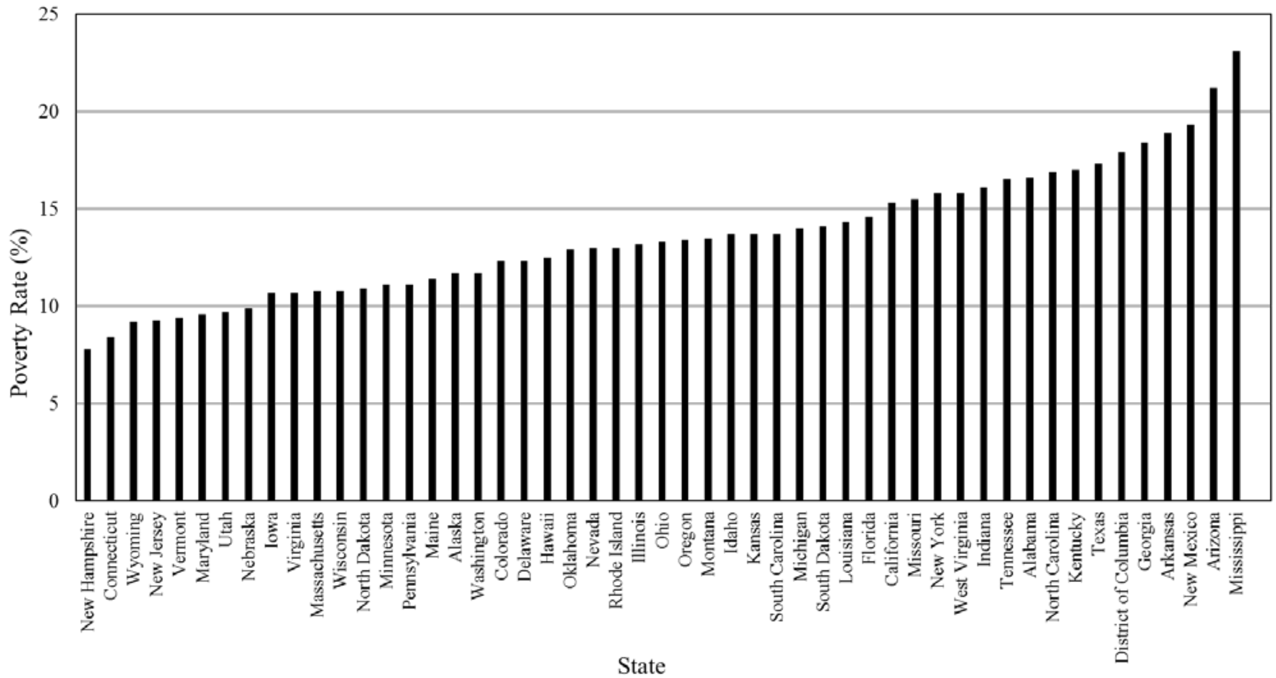
Source: Bureau of Labor Statistics, 2017

Figure 3a. Poverty Rate by State (2006)



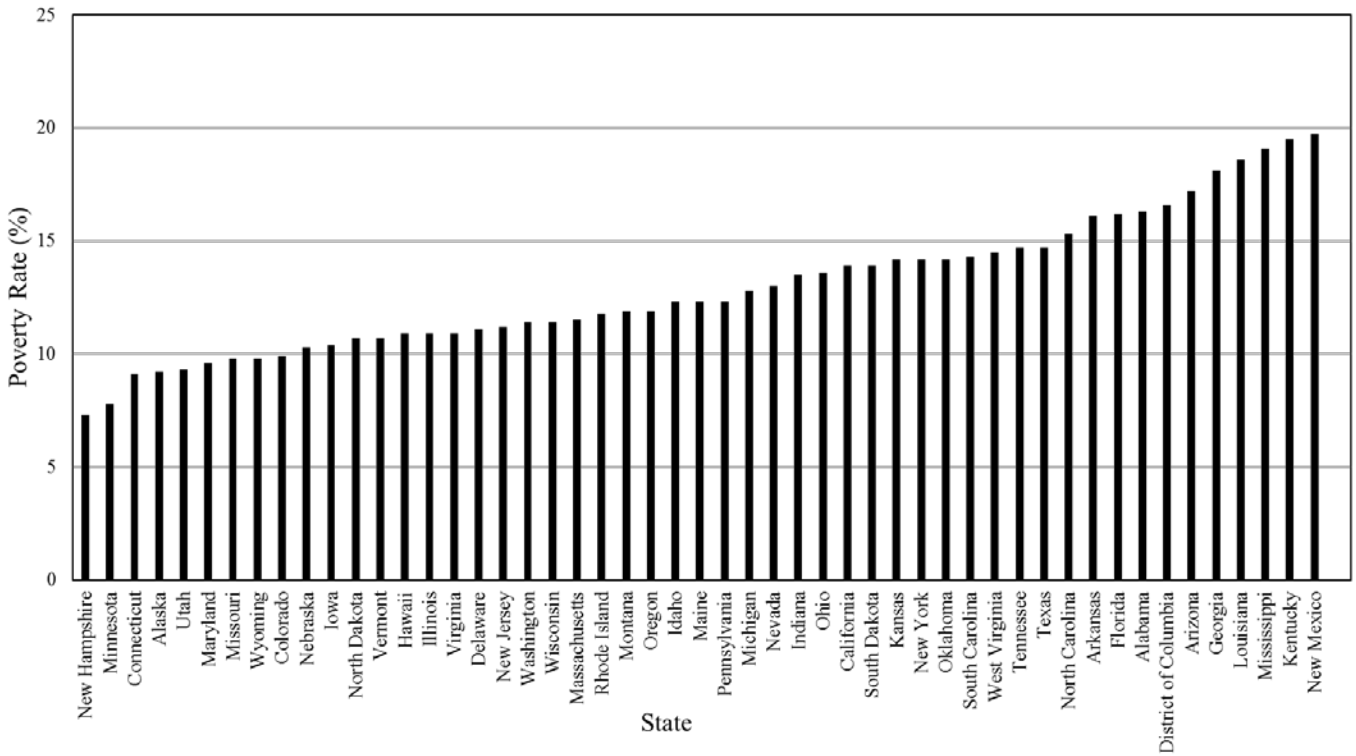
Source: U.S. Census Bureau, 2016

Figure 3b. Poverty Rate by State (2009)



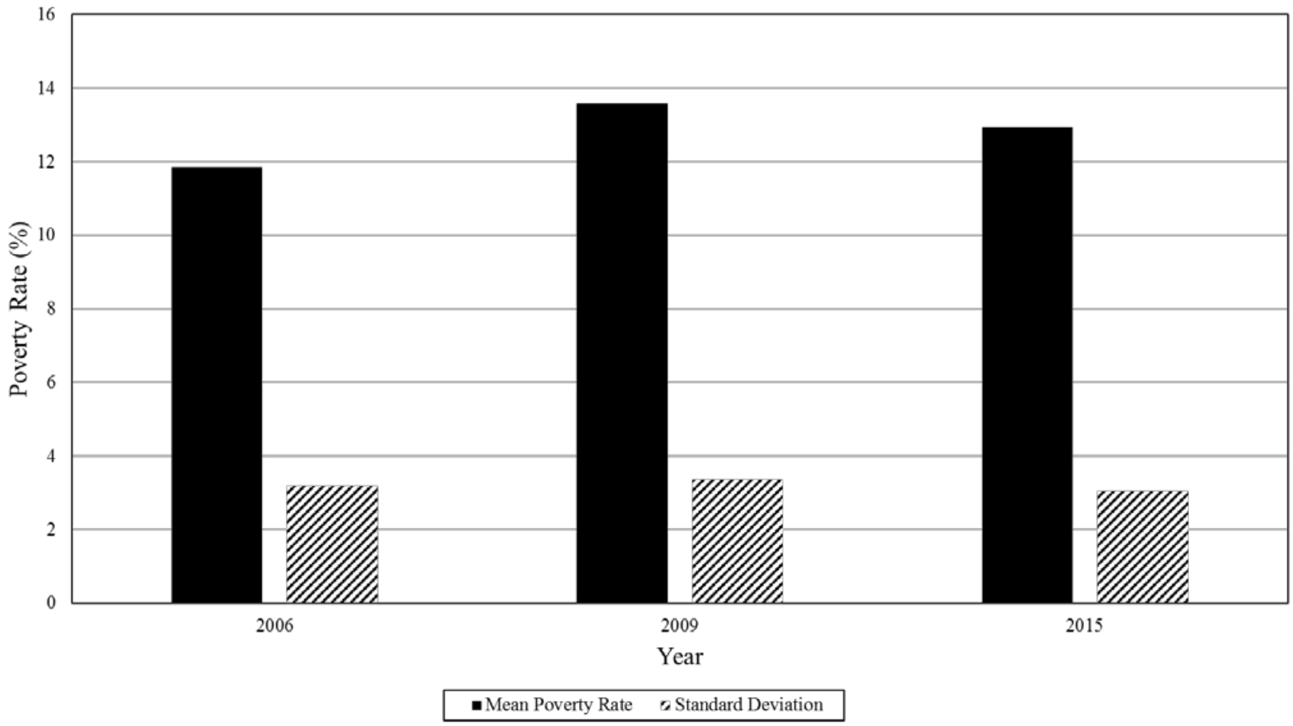
Source: U.S. Census Bureau, 2016

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

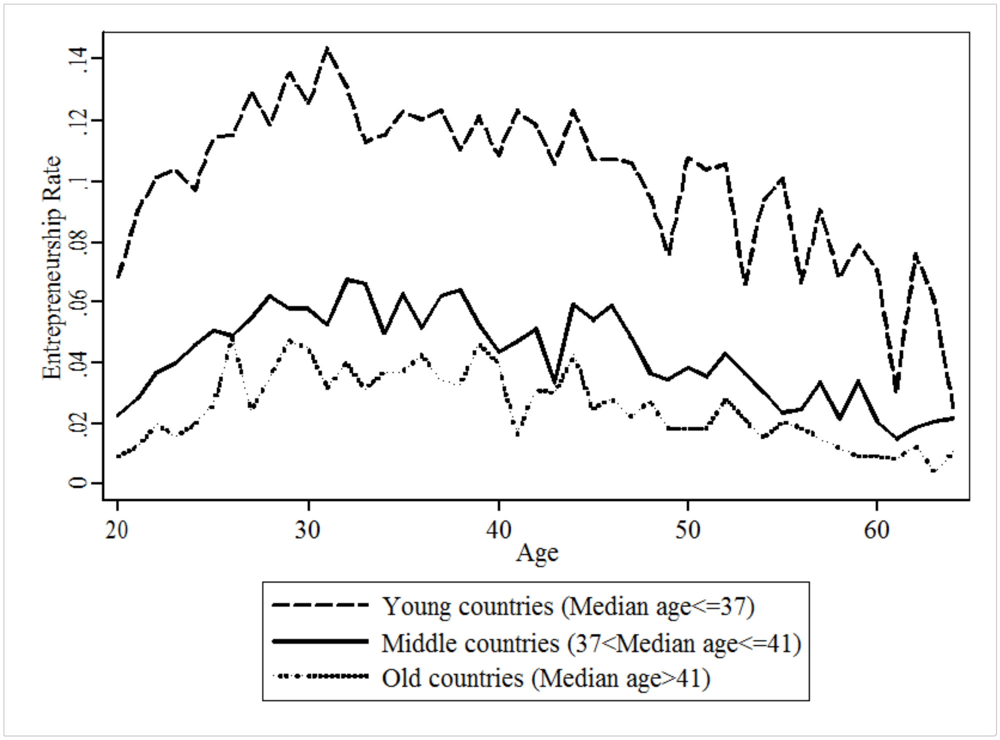


Figure 6: Poor and Rich Do Better In growing Economies, but Not Necessarily at the Same Rate