Income Inequality in Utah by Dominique Hansen

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By Dominique Hansen, University of Utah Economics Department student intern

Income inequality has increased in recent years. University of California Professor and former Labor Secretary Robert Reich states a disturbing fact that “the 400 richest people in the United States have more wealth than the bottom 150 million put together." (CNN Money, 2013). Not only is the United States' income inequality worsening, but, when it comes to developed countries, the United States has one of the biggest problems with unequal income distribution. The OECD reports that the United States ranks as the 3rd worst OECD country for income inequality in 2014 behind 32 other advanced countries, including Germany, France, Canada, and the United Kingdom.

There are many implications of income inequality and why it’s important to care about. OECD research states, "Reducing income inequality would boost economic growth... countries where income inequality is decreasing grow faster than those with rising inequality. The single biggest impact on growth is the widening gap between the lower middle class and poor households compared to the rest of society. Education is the key: a lack of investment in education by the poor is the main factor behind inequality hurting growth.” As income inequality worsens, more lower income people have trouble getting the education they desire. This then decreases the overall economic growth of our nation.

In the paper Causes and Consequences of Income Inequality: A Global Perspective, International Monetary Fund (IMF) authors agree with the OECD and "find an inverse relationship between the income share accruing to the rich (top 20 percent) and economic growth." (page 7) They also find that "in advanced economies, income inequality is increasingly being reflected in lower life expectancy. This is particularly striking in the United States, where income today is a stronger predictor of life expectancy than it was a generation ago.” (page 16) Differences such as this can have a large impact on our country and the citizens who live here.

Utah has seen a similar trend to the United States. Although Utah does better than most states when looking at the Gini coefficient, the commonly used measure of income inequality, over the years we have become more and more unequal. In 2016, the state of Utah was the second most equal state when it comes to income

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distribution when comparing the Gini coefficient across states. Oftentimes we only look at the Gini coefficient when comparing income inequality; however when we look at other measures, Utah falls short. The summary chart below shows various measures of income inequality and where Utah ranks.

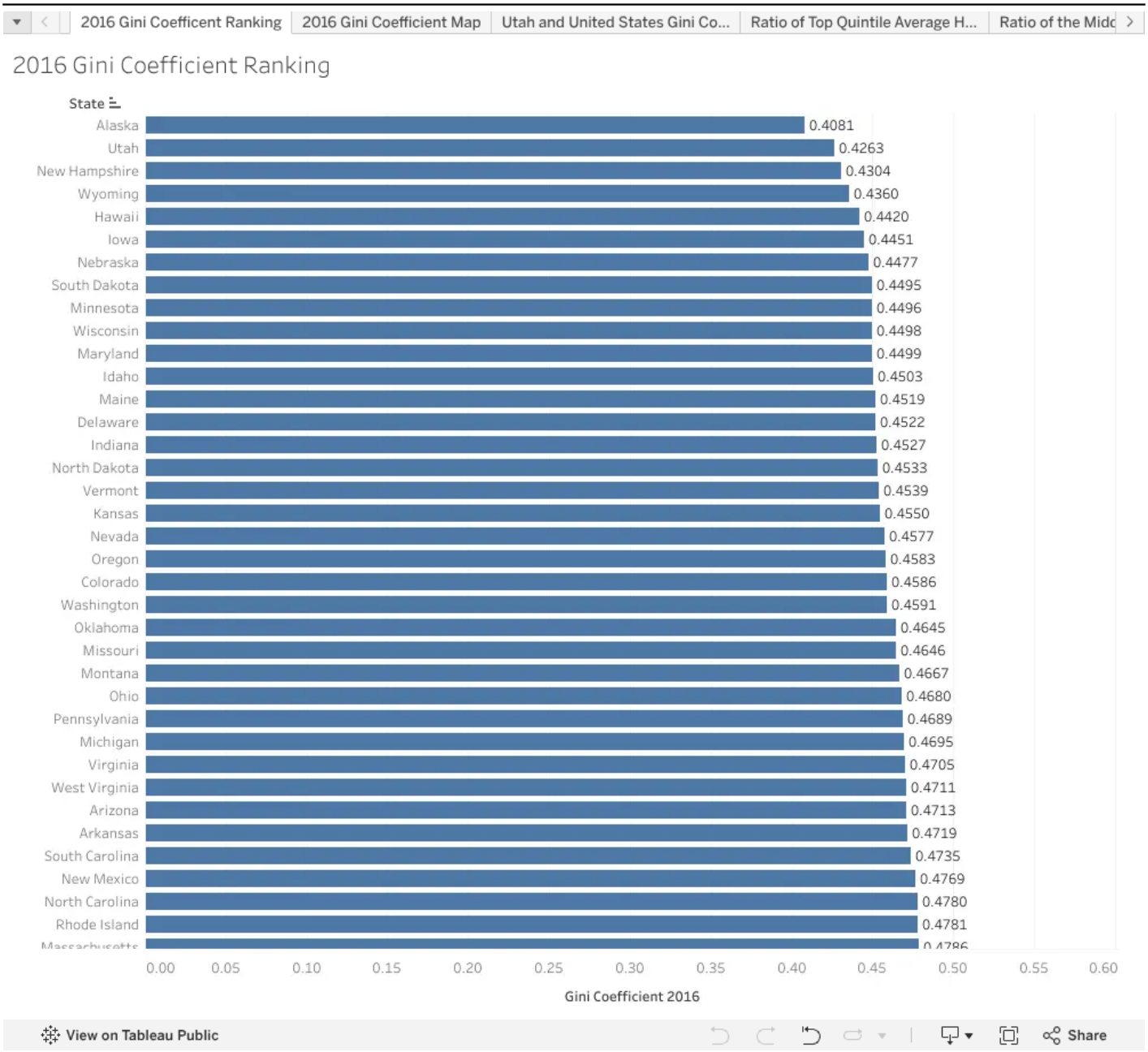
Measure	**Utah's Ranking 1st = Lowest Inequality**
Ratio of Middle Quintile Mean Household Income to Lowest Quintile Household Income in 2016	1st
Gini Coefficient in 2016	2nd
Ratio of Top Quintile Mean Household Income to Middle Quintile Mean Household Income in 2016	3rd
Ratio of Median (50th Percentile) Hourly Wages to 10th Percentile Hourly Wages in 2016	18th
Ratio of Top 1% to Bottom 99% Average Family Income in 2013	24th
Ratio of 90th Percentile Hourly Wages to Median (50th Percentile) Hourly Wages in 2016	31st

As you can tell from the summary chart, Utah's inequality ranking depends on the metric that is being used. There are a few patterns that are interesting to point out. Utah ranks better in most cases when looking at mean household income rather than hourly wages. It is also interesting to see that Utah is very equal when comparing the middle to the bottom of household income while it is not as equal for hourly wages. For both hourly wage and mean household income metrics, Utah ranks better when looking at the middle to the bottom rather than the top to the middle. A cause of this could be that Utah may have higher household incomes at the bottom. Also, the family sizes may be different at the bottom and the middle. Since income inequality often depends on the metric used it would be beneficial to look at various measures to see the whole picture.

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Explanations of Metrics Above:

Gini Coefficient

The Gini coefficient, also referred to as the Gini ratio, is the most commonly used method to measure the wealth or income distribution. Calculating the Gini coefficient has to do with the Lorenz curve. The Lorenz curve is an income representation where the X-axis is the percent of people while the Y-axis represents the percent of total household income. If the income distribution were completely equal then the Lorenz curve would lay on the line of equality. This would mean that 20% of people make 20% of the total income and so on for all percentages. The area under the curve is often called B while the area between the Lorenz curve and the line of equality is called A. The Gini coefficient is calculated by taking A/(A+B). The Gini coefficient ranges between 0 and 1, where 0 represents perfect equality while 1 represents perfect inequality. The US Census Bureau reported Utah's Gini coefficient for 2016 was .4263 while the United State's Gini coefficient was .4824. When comparing Utah to the other states, Utah ranked 2nd for the lowest income inequality in 2016. Alaska was ranked 1st. By this measurement we can see that Utah has a far more equal income distribution when compared to the rest of the nation.

Ratio of Top Quintile Mean Household Income to Middle Quintile of Mean Household Income

Another measure of income inequality is to look at the household income means of various quintiles. To compare the states, I looked at what amount the top quintile makes compared to the middle quintile. When looking at this ratio of the top quintile of mean household income to the middle quintile of mean household income for 2016 Utah ranks 3rd. This means that Utah has one of the smallest discrepancies between our top quintile mean and the middle quintile mean of household income. Utah's top quintile made 2.99 times more than the middle quintile in 2016 on average. This result may be because Utah doesn't have the extremely wealthy people like many states such as Connecticut and District of Columbia. Also, Utah

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doesn't have the financial industry like San Francisco and New York.
Source: Census Bureau- American Community Survey (ACS)

Ratio of Middle Quintile Mean Household Income to Lowest Quintile of Mean Household Income

Like in the previous measure, I am comparing two different quintile means of household incomes. When comparing the bottom quintile (lowest 20%) and the third quintile (bottom 60%) Utah ranks #1 in this measurement, with a ratio of 3.74. This means that Utah's third quintile makes 3.74 times the amount the bottom 20% makes. District of Columbia ranks last with it's third quintile making 8.53 times the amount the bottom 20% makes.
Source: Census Bureau - ACS

Ratio of 90th Percentile Hourly Wages to 50th percentile of Hourly Wages

Often times we don't consider hourly wages when looking at income inequality. However, the hourly wages an individual earns can have a key role in the income distribution. In this measure, I took the 90th percentile hourly wages and divided them by the 50th percentile hourly wages. In this measure, Utah is ranked 31st, with a ratio of 2.36. This means in Utah the 90th percentile hourly wages are 2.36 times the amount the 50th percentile hourly wages. It is interesting to see how Utah doesn't rank as well in hourly wages when compared to its rankings for household mean income.
Source: Economic Policy Institute Analysis of Census Bureau Current Population Survey Outgoing Rotation Group (CPS-ORG)

Ratio of 50th Percentile Hourly Wages to 10th percentile of Hourly Wages

This is similar to the previous measure, except we are comparing the 50th percentile hourly wages to the 10th percentile of hourly wages. In this measure Utah is ranked 18th, with a ratio of 1.85. This means that Utah's 50th percentile hourly wage is 1.85 times the 10th percentile hourly wage. Utah ranks better when comparing 50th percentile to the 10th percentile than when we compared the 90th percentile to the 50th percentile. This seems to say that Utah does better on the lower end of the income spectrum rather than upper end.
Source: CPS-ORG

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Ratio of Top 1% to Bottom 99% Average Family Income

In the report "Income inequality in the U.S. by state, metropolitan area, and county" by Estelle Sommeiller, Mark Price, and Ellis Wazeter, they compared the ratio of the average income of the top 1 percent and the average income of the bottom 99 percent of families. By this measure, Utah ranked 24th with a ratio of 18.70. The ratio means that on average in Utah the top 1 percent of families earned 18.70 times as much as the bottom 99 percent in 2013. The United States had a ratio of 25.3 in 2013, which is quite a bit higher than Utah.

Conclusion

In conclusion, by some measures Utah ranks well for income inequality while in other measures Utah doesn't do as well. However, Utah has had the similar trend of increasing income inequality throughout the years. Based on the research OCED and IMF stated above, reversing this trend in Utah and the United States would contribute to stronger economic growth.

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