

CHANGES IN INCOME INEQUALITY UNDER
DEMOCRATIC AND REPUBLICAN GOVERNORS

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REPUBLICAN GOVERNORS

I examined a panel of all 50 states over a period of 30 years between 1981 and 2010, estimating a random effects model to examine the relationship between the party of a state's governor and changes in pretax and transfer income inequality. Though the literature has quite consistently shown that income inequality increases more quickly under Republican governors or when policies favored by Republicans are implemented, I find no evidence to support this, though this is perhaps because I did not allow a long enough lag time for new policies to have an effect.

I did, however, find that pretax income inequality increases more quickly under Democratic presidents than under Republicans, in spite of the fact that all previous research shows the opposite to be true. I suspect that this unusual finding is the result of a quirk in my 1981-2010 time frame, namely the effects of the shift in welfare policy under the Clinton administration in the 1990s.

Dr. Aaron Dusso, Chair

Table of Contents

Introduction.....	1
Literature Review.....	5
Hypothesis.....	13
Data and Methodology.....	14
<i>Dependent Variable</i>	14
<i>Independent Variable</i>	17
<i>Control Variables</i>	18
Analysis.....	23
Conclusion and Implications.....	26
Works Cited	34
Curriculum Vitae	

Introduction

We live in a world in which resources are not evenly distributed. As of January 2014, nearly half of the world's wealth is owned by just one percent of the global population, and the 85 wealthiest individuals in the world control as much wealth as the 3.6 billion poorest (oxfam.org, 2014). While the distribution of wealth within nations, particularly within developed nations, is not nearly this wide, considerable gulfs still exist. As of 2012, the top 10% of earners in the United States controlled 50.6% of all income (Frank, 2014). Moreover, the vast majority of economic growth in recent decades has disproportionately favored the extreme top end of the income distribution. Between 1979 and 2007, nearly 60% of all economic growth went to the top 1 percent. During this time period, the real post-tax household income of the wealthiest 1 percent of Americans increased by 275%, compared to an increase of 18% for the poorest quintile. This divide has been noticed by academics, politicians, and the media.

Searching "income inequality" on Lexis Nexis produces 903 results from the first seven months of 2015, 712 of which are newspaper articles alone. That averages out to more than 100 newspaper articles per month. Though this is not a new trend, popular conceptions on the issue are mixed. Some journalists have argued against the evils of income inequality, such as one *Business Week* article by Gene Koretz (1997), which pointed out the relationship between death rates and the maldistribution of wealth in the United States. Others articles have dismissed the importance of the debate. The *New York Times* ran an article by economist Andrew Caplin (2010), which argued that reducing income inequality cannot help the economy, and any energy devoted to

attempting to do so is wasted. Still others attempt to do nothing more than illustrate how unevenly distributed wealth in the United States is. One Canadian journalist wrote,

In 1894, John D. Rockefeller was the "Richest Man Imaginable," with a yearly income of \$1.25 million (\$30 million in current dollars)...More than 100 years later, Rockefeller wouldn't have even made a top-25 list. By 2009, top yearly incomes in the United States were calculated in the billions of dollars, not mere millions. A single job category, hedge-fund manager, boasted 25 men who collectively made \$25.3 billion, or more than \$1 billion each on average. Rockefeller in his heyday made 7,000 times the yearly income of the average American worker; the hedge-fund managers made more than 24,000 times as much (Bagnall, 2010)¹.

Politicians, too, have increasingly discussed the issue in recent years. During the 2015 State of the Union, President Obama called on Congress to raise the minimum wage to \$10.10 per hour, urging Congress to “give America a raise,” (Baker, 2015). Self-described Democratic Socialist Senator Bernie Sanders has made income inequality the centerpiece of his presidential campaign, and sits firmly in second place in Democratic primary polls. Even Republicans have gotten into the act. In former Florida Governor Jeb Bush’s first speech after declaring his candidacy for president in 2016, he focused on the issue, saying that “The American dream has become a mirage for far too many,” (Martin, 2015).

¹ This claim, as well as the figures supporting it, are debatable. According to Forbes.com (2010), Rockefeller should be, and widely is, considered to be the wealthiest person in the history of the world. The best measure of this, they contend, is examining the ratio of the individual’s personal wealth to the GDP at the time. In Rockefeller’s case, that ratio was 1:65 at the height of his fortune. That would make his wealth equivalent to roughly \$268 billion against the World Bank’s 2014 estimate for United States GDP, \$39 billion more than the combined fortunes of Bill Gates, Carlos Slim, and Warren Buffet, the three richest people in the world today (Forbes, 2015; World Bank, 2015).

In light of all this, it is clear that income inequality is at the forefront of the minds of journalists and politicians, if not the public. However, interest in this issue is not limited to the mainstream media—academics have also devoted a great deal of time to it.

One of the most prominent works on the subject is Bartels' (2008) book, which attempts to explain the political origins of income inequality. In it he concludes that the policies pursued by the Republican Party (specifically Republican presidents) have led to a massive increase in income inequality in the latter half of the twentieth century, and particularly since the 1980s. In some 300 pages, he lays out an argument using various quantitative methods to track changes in inequality under Democratic and Republican presidents, and qualitative case studies designed to explore specific policy preferences that led to this result. In each model he ran, the result was the same: income inequality increase far more quickly under Republican presidents than Democratic presidents as a result of massive income growth among the very wealthy and very little income growth among at the lower end of the income distribution. This repeated result was enough to convince Bartels that his findings were neither fluke nor coincidence².

This work provides a wide enough array of evidence that his claims must be taken into serious consideration, particularly when considered alongside other research showing the importance of political parties on the distribution of income (Kelly & Witko, 2012; Hatch

² It is important to note that Bartels is not arguing that Democrats should always occupy the White House or that Republicans never should. He specifically states that it is “arguably unrealistic” to assume “that if either party had uninterrupted control of the White House, it would do all the time what it in fact does only half the time (Bartels 2008, 61).”

& Rigby, 2015; Volscho & Kelly, 2012). However, though he is tracking data from 1945 to 2006, he has only eleven presidential administrations to examine in that time period. Moreover, income inequality has increased in a number of other developed nations in recent decades (Kenworthy, 2010; Weiss & Garloff, 2011; Alvaredo, Atkinson, Piketty, & Saez, 2013). It would be very difficult to blame the Republican Party for increases in income inequality in nations like Canada, Great Britain, and Australia. Thus, it is possible that external circumstances are responsible for changing economic patterns, rather than the conservative economic policies favored by the Republicans.

Another way to examine the question of how and whether or not partisan control of the executive branch can influence income inequality would be to focus on state governments rather than the national government. Since 1945, the fifty states have elected hundreds of governors from both parties. Additionally, they have been under very similar external pressures as a result of their identical relationships to the federal government. In spite of this fact, they show differing trends in inequality through time, which suggests that forces individual to specific states, including political policies, can also influence inequality (Hatch & Rigby, 2015; Barrilleaux & Davis, 2003). As such, they provide another testing ground for the conclusions put forward by Bartels. This study cannot answer the exact same question that Bartels asked, as he was interested in the federal level. However, answering the question of how partisan control of governors' mansions in the states affects income inequality should serve the dual purpose of building on the information provided by Bartels and allowing us to learn more about the politics and economy of the states.

Literature Review

Before looking into the question at hand, there is another issue that needs to be addressed—does income equality even matter, and if so, how? Even in liberal political philosopher John Rawls’s conceptualization of justice, high income inequality is not objectionable if society’s least well-off benefit in absolute terms (Kenworthy, 2010). Many economists argue that income inequality is not a problem; in fact, they see it as necessary to provide individuals incentive to work (Brux, 2005; Schiller, 2008).

Others argue that inequality is a good thing because wealth will trickle down from the wealthiest members of society to the poorest. Bartels (2008) found that increases in income for earners at the 95th percentile does result in lagged growth for people at the 20th, 40th, 60th, and 80th income percentiles³. And he is not alone. In a study of 92 countries done for the World Bank, Dollar and Kraay (2002) find that the income of the poorest quintile will increase at roughly the same rate as the average income for society⁴. Moreover, they add that government consumption is strongly negatively associated with income growth for the poorest quintile, and the best policies to stimulate economic growth without exacerbating income inequality are what they describe as “pro-growth macroeconomic policies.” These include low inflation, moderate size of government, sound financial development, respect for the rule of law, and openness to international trade. While these specific policies are more applicable at the national level, rather than

³ He does, however, note that it is unusual that he found this, as most empirical analysis has shown no evidence that this occurs.

⁴ While this does run contrary to Bartels’s claims, it is important to note that the Dollar and Kraay study focuses on 92 developing nations, therefore leaving out the United States. Thus, it is possible that the studies are not mutually exclusive, and income inequality has different effects on nations at different stages in development.

those implemented by state governments, the authors essentially argue that any government attempts to decrease income inequality will hurt the poor by slowing overall economic growth, arguments consistent with the supply-side or laissez faire economic philosophies favored by the Republican Party. In a state-level panel, Mark W. Frank (2009) found a strong correlation between growth and rising inequality, which was driven primarily by the concentration of wealth among top earners.

However, many other researchers challenge the effectiveness of trickle-down theory. Andrews, Jencks, and Leigh (2009) offer a far more tentative analysis. They find that rising income for the top 1 percent is associated with faster economic growth, and some of this, they argue, will trickle down to the poor, while some of this top-percentile income will come at the expense of the poor. In the short run, the poor will suffer negative consequences of income inequality, while in the long run; it will work out to their benefit. However, it takes an average of 13 years for the bottom 90 percent of the income distribution to see the benefits of an increase in the top 10 percentile.

Others have been more critical, arguing that it doesn't work at all (Alesina & Rodrick, 1994; Kenworthy, 2010). In fact, Kenworthy (2010) goes on to show that the biggest cause of improvement in absolute income for the poor has been changes in government transfers and taxes, as absolute income of the bottom 10 percent is much more likely to increase as a result of these policies—not from an increase in earnings that can be attributed to a rise in income for the wealthiest 1 percent.

Not all researchers have such a favorable outlook toward income inequality. On a simple philosophical level, there is the basic argument that too much income inequality can retard growth, as it may eliminate incentives for the poor to improve their lot in life if the gap is too wide (Brux, 2005). Some go further than mere philosophy, arguing that poor distribution of wealth not only slows economic growth, but destabilize the economy as a whole (Jayadev, 2013). In particular, many scholars point out the high levels of inequality that existed in the 1920s preceding the Great Depression (Zinn, 2003), and in the years leading up to the Great Recession (Stiglitz, 2012). Others express concerns that increasing income inequality also leads to a concentration of power in the hands of the superrich. Bonica, McCarty, Poole, & Rosenthal (2013) point out that during the 2012 election cycle, more than 40 percent of all political donations came from the largest 0.01 percent of donors. Moreover, the very wealthy then use this increased power to pursue policies that further increase income inequality (and thus, their political influence), such as lower taxes on top incomes, the repeal of the estate tax, and a weak social safety net (Bartels, 2008; Bonica, McCarty, Poole, & Rosenthal, 2013; Stiglitz, 2012).

A larger, and perhaps more problematic, argument regards the relationship between health and income inequality. Many studies have shown that income inequality in a society negatively impacts health, even for the wealthy in that society (Pickett & Wilkinson, 2015). Individual studies have shown correlation between inequality and shorter lifespan (De Vogli, Mistry, Gnesotto, & Cornia, 2005; Elgar, 2010; Williams & Rosenstock, 2015) depression (Kahn, Wise, Kennedy, & Kawachi, 2000; Pabayo, Kawachi, & Gilman, 2014; Cifuentes, et al., 2008), and infant and childhood mortality

(Pickett & Wilkinson, 2015; MacKenbach, 2002). It is significant to note that these results suggest that it is in everyone's best interest—even the wealthy—to reduce income inequality (MacKenbach, 2002). However, there is still some disagreement on this point.

Some studies have only agreed with these findings in part, asserting that the negative correlation between income inequality and lifespan is more significant in developing nations than in wealthy ones (Asafu-Adjaye, 2004; Moore, 2006). Another study by MacKenbach (2002) has argued that this relationship only exists for childhood mortality in developed European nations, not for lifespan in general. He adds, however, that the United States is not included in his data and goes on to suggest that it may be an exception to the rule. This would make sense, given that the social safety net in the United States is not as strong as it is in Western Europe, whose nations all have single-payer healthcare, which may serve to mitigate the effects of income inequality on health.

A more important question to the research topic than the effects of inequality regard its causes. The highest exposure to the study of Economics that most Americans will ever have is their basic high school Economics course. The Economics textbook used by the state of Indiana describes “differences in skills and education” as the primary reason behind the gap in income between the wealthy and the rest of the population (O'Sullivan & Sheffrin, 2003). They argue that the laws of supply and demand will properly reward people for the skills and education that they receive, as well as their work ethic. In other words, income inequality exists because the market naturally creates it, and the poor are to blame for their lot in life. Many prominent economists support the view that it is

nameless, faceless market forces that create inequality (Autor, Katz, & Kearney, 2008; Bound & Johnson, 1992; Kaplan & Rauh, 2013; Weiss & Garloff, 2011). Government officials also frequently express this view. In one example, Treasury Secretary Henry Paulson said that, "... as our economy grows, market forces work to provide the greatest rewards to those with the needed skills in the growth areas... This trend... is simply an economic reality, and it is neither fair nor useful to blame any political party (Bartels, 2008, p. 29)."

Perhaps the most frequently-examined market force blamed for creating income inequality is changing technology. One of the most influential theories of economic inequality was put forward by economist Simon Kuznets (1955). He described historical changes in income inequality as an inverse-U pattern. As nations industrialize, a few people quickly become very wealthy as they are the first to take advantage of the new technology. Over time, inequality will peak, and then fall, as more and more people within the population are able to utilize industrial technology to their benefit. Until the 1970s, this description seemed almost perfect. However, since then, the curve seems to be doubling back on itself, particularly in the United States and other predominantly English-speaking nations (Alvaredo, Atkinson, Piketty, & Saez, 2013). Piketty and Saez (2003) argue that this is the next logical step, because what caused the initial increase Kuznets described was not industrialization per se, but a rapid change in technology; which first leads to an increase in inequality that will ultimately slow and reverse once more workers are able to take advantage of the new technology. This analysis is supported by other scholars (Beckfield, 2008; Krugman, 1994).

Bartels argues that the body of literature has focused too much on these market forces at the expense of political variables. Regardless of specific policies, it has been demonstrated that income inequality tends to be reduced under stable, long term democracies. There is a strong inverse relationships between income inequality and both years of democratic government and regime stability (Muller, 1988). Interestingly, with this pattern, one would expect the United States, with nearly two and a half centuries of democratic government, almost untouched by instability, to have a remarkably equal distribution of wealth. The fact that this is not the case offers more support for MacKenbach's (2002) suggestion that the United States is somehow different from other industrialized nations in terms of income inequality.

Bartels is not the first to examine the effect of partisan control of the presidency on income inequality. In fact, Bartels states that he built heavily on earlier works by Hibbs (Hibbs & Dennis, 1988), who analyzed data from 1953 through 1983, and found lower unemployment and higher real output under Democratic administrations. In his own work, Bartels (2008) names taxation and transfer payments in general and the Bush tax cuts, the repeal of the estate tax, and the eroding minimum wage specifically as policies supported by Republicans that increase the gap between the rich and the poor.

Many other scholars have found that government policies can have an impact on inequality, with most showing that policies which are generally associated with the Democratic Party lead to reductions, or at least slower growth, in income inequality (Kelly, 2005; Kelly & Witko 2012; Volscho & Kelly, 2012). Specifically, studies point

to less progressive tax structures (Kelly, 2005; Alvaredo, Atkinson, Piketty, & Saez, 2013; Volscho & Kelly, 2012; Hatch & Rigby, 2015), disproportionate representation for the wealthy in the political arena (Bonica, McCarty, Poole, & Rosenthal, 2013; Jacobs & Skocpol, 2005; Schlozman, Page, Verba, & Fiorina, 2005), free trade policies (Volscho & Kelly, 2012), less progressive labor market policies and a weakening of labor unions (Hatch & Rigby, 2015; Bonica, McCarty, Poole, & Rosenthal, 2013) and supply-side policies generally (Langer, 2001).

These patterns hold up whether they are measured before or after taxation and transfers are considered, meaning that these policies work through both direct transfers and market conditioning (Kelly, 2005; Kelly & Witko, 2012). Additionally, these studies were conducted at both the federal and state levels.

One notable exception to this pattern is the work of Barrilleaux & Davis (2003). They found that both state and national policies had little effect on income inequality, and that higher welfare spending may counterintuitively be associated with greater inequality. The only two welfare policies that showed correlation with changes in inequality were the distance between average welfare benefits and the retail wage and spending on food stamps. Interestingly, while the former was associated with a small decrease in inequality, the latter was correlated with higher levels of inequality. Specifically, each 1% increase in food stamp spending was associated with an 8% increase in Gini. The authors suggested that this was because states with high levels of inequality were more

likely to implement more generous food stamp policies rather than because food stamps actually cause increased inequality

Hypothesis

In an examination of states, income inequality will increase more rapidly in years in which a Republican governor is in office than when a Democratic governor is in office.

Data and Methodology

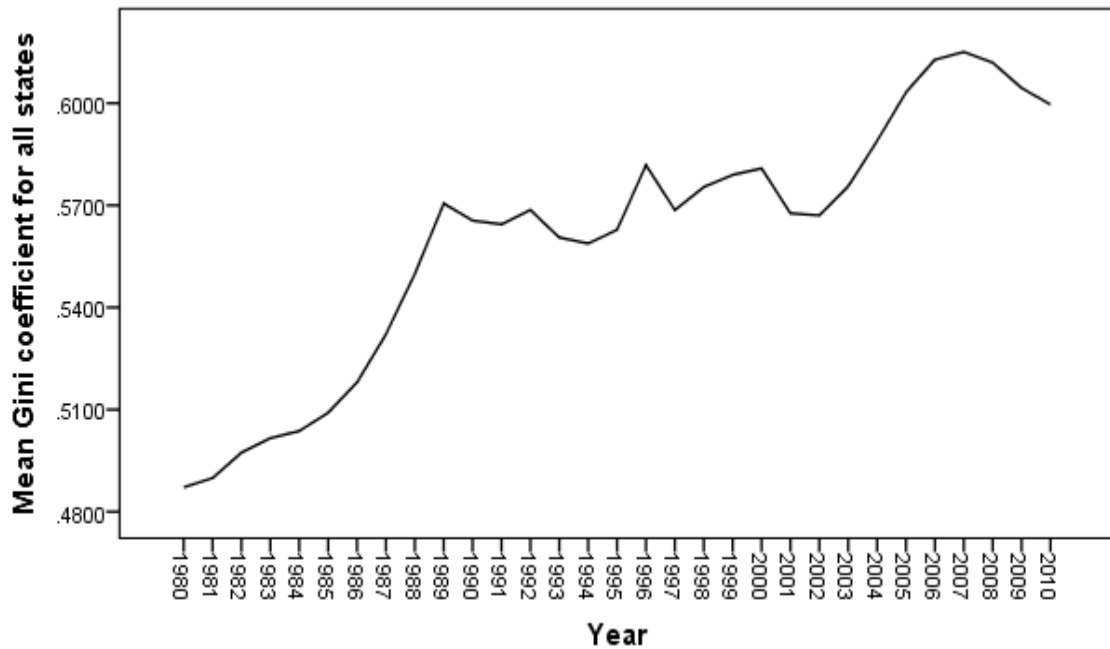
In order to test these ideas, I gather data for all 50 states from 1980 to 2010. Thus, the unit of analysis for this study will be the state year. This produces a total of 1500 cases. Ultimately, this data functions similar to panel data, in that each state is in the data 30 times. Therefore, must be careful when specifying their model. As a result, I will estimate a random effects model to examine the relationship between the party of a state's governor and changes in income inequality. This method accounts for the fact that this data contains 50 states that have been observed 30 times each, rather than 1500 unique observation.

Dependent Variable

The dependent variable in this study is change in income inequality. There are many ways to measure inequality, and which variable is selected can have a significant impact on the results of an empirical study (De Maio, 2007; Wen, Browning, & Cagney, 2003). For this study, I utilize the Gini coefficient, a widely-accepted measure of income inequality which Langer (1999) has shown is valid and reliable across states and time. In this model, Gini offers two distinct advantages over other measures of inequality. First, it is most sensitive to inequality in the middle of the income distribution (De Maio, 2007), where the majority of incomes fall. Second, with a defined range between 0 and 1, it is easy to track and understand changes over time. For example, an increase of 0.05 in Gini between two points in time always indicates that the observed income distribution is 5 percent farther away from perfect inequality at the second point than it was at the first point. Other measures, like Theil's index, lack an upper bound, which means that a

change of 0.05 does not necessarily indicate a 5 percent change, only that inequality has increased. The data for each state were constructed from individual tax filing data available from the Internal Revenue Service by Frank (2009). Updated data through the year 2012 are freely available at his website (Frank, 2014). Note that the variable which will be used is not the Gini coefficient for a given state-year, but the absolute change between two consecutive years.

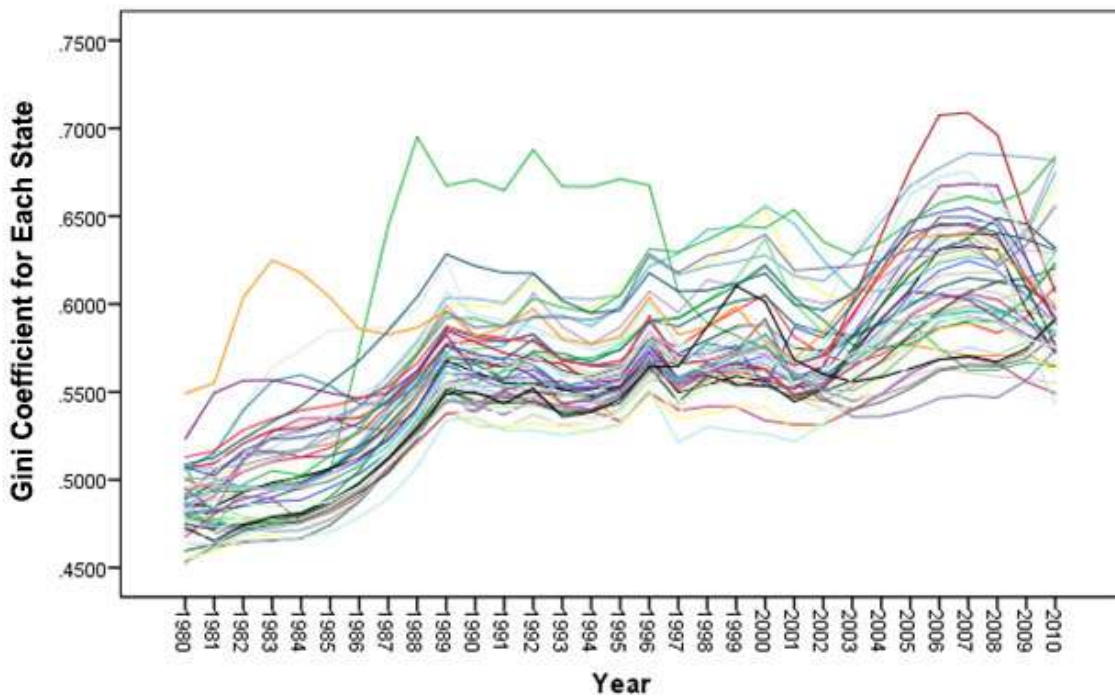
Figure 1



As Figure 1 shows, an examination of changes in Gini over time is consistent with the literature. Inequality has risen over the past three decades, with the mean Gini for all 50 states at its lowest point in 1980 at .486 and its highest point in 2007 at .606. Figure 2 shows that most individual states followed a similar pattern, though there is considerable variation between states. There are also a few notable outliers, the most significant of which is Alaska. This state entered the 1980s with relatively low levels of inequality.

However, Gini expanded so rapidly between 1985 and 1988 that it was soon by far the most unequal state in the nation. Its high level of inequality held until the mid-1990s, when it plummeted, and returned to the middle of the pack by 2001⁵. Only four other states experienced their highest level of inequality before 2005⁶, and inequality peaked in 37 states in 2007 or later. The lowest Gini coefficient for an individual state year was .4533 (New Hampshire, 1980) and the highest was .7088 (Mississippi 2007). At .2236, Alaska had the largest range.

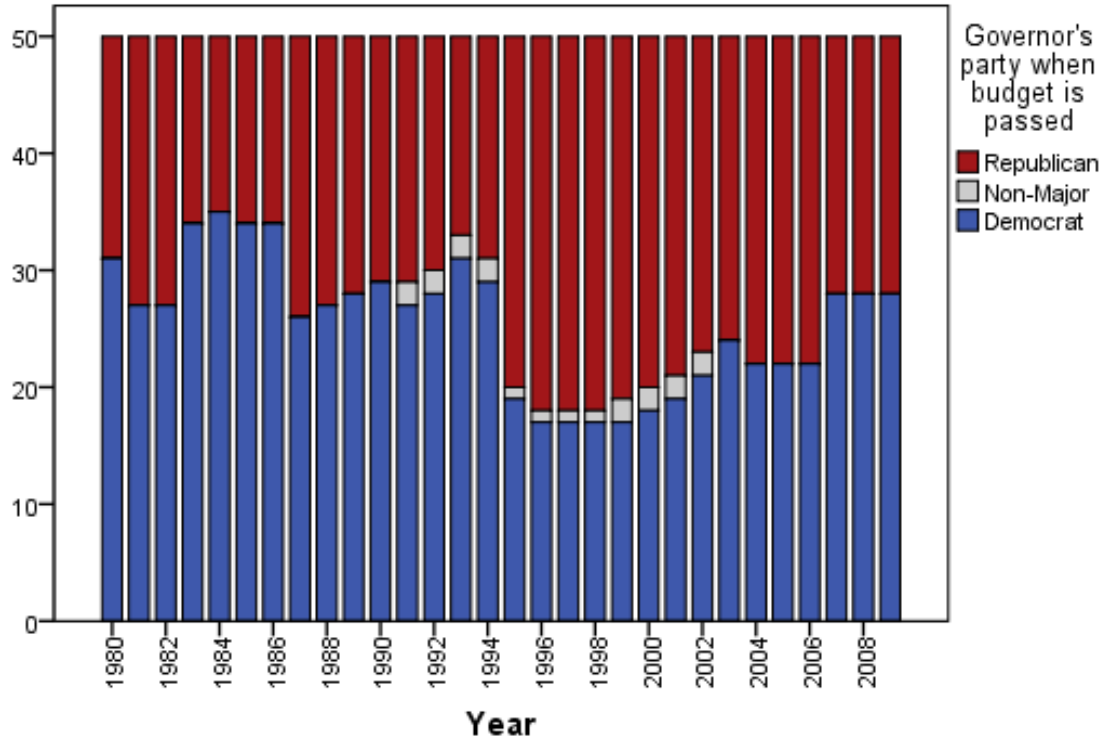
Figure 2



⁵ It is difficult to understand the reason for these wild swings. At first glance, there appears to be an inverse correlation between the real price of oil and income inequality in Alaska, which would make sense given the importance of oil to Alaska's economy. However, on closer examination this idea falls apart. The rapid rise in inequality began a few years after oil prices began falling in the 1980s, but the decline in inequality in the 1990s predates the spike in oil prices that began in the 2000s.

⁶ Washington (1999), Massachusetts (2000), New Hampshire (2000), and Maryland (2000)

Figure 3



Independent Variable

As shown in Figure 3, the independent variable will be the party of a state's governor at the time that the state's budget was passed⁷. To allow governors time to implement their policies and then time for these policies to have an effect, the governor for the previous year will be tied to the change in income inequality. For example, the change in income inequality between 1980 and 1981 will be assigned to the state's governor at the time the 1980 budget was passed. Accordingly, while I will examine changes in income inequality from 1980 to 2010 for this study, I will only be examining governors who served between 1980 and 2009. Republicans will be coded as 1, and Democrats as 0. Between 1980 and 2009, the states elected a reasonable balance of Democrats and Republicans. In the 1500 state-years, Democrats served as governor for 766 (51%),

⁷Data were collected from Carl Klarner's dataverse page at Harvard University (Klarner, 2013). All data from this source may also be found at www.klarnerpolitics.com.

Republicans for 714 (48%), and non-major parties for 20 (1%), as can be seen in Figure 3. There were generally more Democratic governors than Republicans at any given time, with the GOP controlling the majority of states for only 12 of 30 years (1995-2006), and never more than 32 states in any given year, while the Democrats controlled as many as 35. Note that this means that each party had more success at electing governors when the opposing party controlled the White House. Republicans controlled a majority of the states for 6 of the 10 years in which there was a Democratic President; while Democrats controlled most of the states in 14 of the 19 years that Republicans held the White House.

Control Variables

Dealing with governors instead of presidents and states instead of the nation presents a number of complications that Bartels (2008) was not forced to address. For instance, the last time a President was elected from a party other than the Democrats or the Republicans, slavery was still legal in the United States. However, a number of third party or independent governors have been elected. That being said, minor party governors are rare, accounting for only 20 of the 1500 state years for all 50 states from 1980 to 2009. Additionally, as non-major parties and independents may fall on the left, the right, or the center of the political spectrum, there is no reason to expect any kind of ideological or policy consistency across these various governors. To account for this, a dummy variable for non-major party governors is also included.

Southern states also present a challenge. Throughout much of the time frame in question, it was inconceivable that Southern states would elect a Republican governor. However, the Democrats that they elected often supported conservative economic policies and held

views on the role of government more consistent with Republicans in other states (Lamis, 1999). Including these Democrats who may have governed more like Republicans, could significantly skew the results of the study. Conversely, the Northeast is a much more liberal region, and New England Republicans may govern more like Democrats in conservative states. To eliminate the effects of regional differences, dummy variables are included for each census region.

It is also necessary to include other factors, including several which were used by Bartels (2008). These include education, the real price of oil, economic growth, and labor force participation. The change in percent of the adult population holding at least a bachelorette degree will be used to account for differences in education in the states⁸. As time has progressed, the percentage of college-educated individuals has increased dramatically, nearly doubling from a mean of 10% in 1981 to 19% 2010.

The change in real price of oil will be determined using the annual national average, as reported by the U.S. Energy Information Administration (U.S. Energy Information Administration, 2015). Oil prices dropped dramatically in the early 1980s, falling from nearly \$100 per barrel at the start of the decade to around \$30 in 1985. From there, it stayed relatively consistent, never exceeding \$40 or falling below \$17, until it began sharply increasing in 2001, and peaked at just over \$100 in 2007.

⁸ Data were collected from Mark W. Frank's U.S. State-Level Income Inequality Data page (Frank, 2014).

Economic growth was calculated by determining the percent change in real Gross State Product⁹. Real GSP increased consistently in our states across the timeline, with the Great Recession causing 2008 to 2009 to be the only year in which the sum of real GSP across all of our states actually decreased. The two major parties have a nearly identical record of growth, with Democratic governors averaging a 5.75 percent annual increase and Republican governors averaging 5.74 percent.

Labor force participation will be defined as the percent change in the percent of the civilian, noninstitutionalized population in the labor force¹⁰. On average across all 50 states, labor force participation has varied from 60.1% in 1982 to 66.5% in 1999 and 2000, though individual states have had a much wider range, dropping as low as 52.9% in Pennsylvania in 1983 and rising as high as 73% in Minnesota in 2000.

Additionally, taking into account the work of Bartels (2008), I will also include a variable for the party of the President. It is particularly important to include this variable given the previously mentioned tendency of Democratic gubernatorial candidates to perform well during Republican Presidential administrations and vice versa. Failing to do so would disproportionately tie the economic performance of presidents to governors of the opposition party.

⁹ Original GSP data is from bea.gov, via (Klarner, 2013).

¹⁰ Both this definition and the data were collected from bls.gov (Bureau of Labor Statistics, 2015)

Finally, I am able to include a variable which Bartels was unable to use: partisan control of the state legislature. As Congress changed hands so rarely in the time frame examined by Bartels (2008), he was unable to include a variable for the party in control of the legislative branch. To control for legislative power, I utilize a measure composed by Klarner, which shows the additive power of Democrats in the state legislature. A value of 0 indicates that Republicans controlled both chambers of the state legislature, and a value of 1 indicates the Democrats controlled both chambers. The variable may also have values of 0.25, 0.5, or 0.75, which indicate degrees of control in which Republicans control one chamber and the other is split; each party controls one chamber; and Democrats control one chamber and the other is split, respectively (Klarner, 2013). As with the independent variable, it is important to lag control of the state legislature by one year to allow time for policies to be implemented and take effect. By default, the inclusion of this variable will make it necessary to eliminate Nebraska from the analysis, with its nonpartisan, unicameral legislature.

In 74.6 percent of all state years, one party controlled both houses of their state legislature (Republicans in 37.5 percent of years and Democrats in 37.1 percent). In spite of this, it was rare for one party to control both houses in a majority of states. The Democrats accomplished this only four times (1983, 1984, 2009, and 2010) and Republicans only six (1995-1998, 2003, and 2004). In only 40% of state years did Governors have the opportunity govern alongside a state legislature in which their party controlled both houses, with the majority dealing with either a split or opposition-controlled legislative branch.

Finally, it is necessary to include dummy variables for each year in the analysis, which will control for other trends that occur throughout our time frame. To conserve space, these results will not be included the output table, but are available upon request.

Analysis

After performing a random effects GLS regression, I am unable to reject the null hypothesis. Even if the result had been statistically significant, it would have been so small as to be virtually meaningless. This model provides no evidence that either party has used state governments generally or the offices of the governors specifically to have any influence on income inequality.

Table 1
Random Effects GLS Regression
Number of obs = 1500
Number of groups = 50
Obs per group = 30

Dependent Variable	Change in Gini	
Variable	Coef	Std. Err.
Republican Governor	0.0004	0.0005
Minor Party	0.001	0.002
State Legislature	0.0003	0.0006
Change in real price of oil	-0.0003*	0.00007
Economic growth	-0.0001	0.00008
Change in labor force participation	-0.00009	0.0002
Change in unemployment rate	-0.0000001	0.00003
Change in college attainment	-0.000002	0.00004
Democratic President	0.024*	0.004
$R^2 = .4954$		$*p \approx .000$

One possible reason for the lack of a result is that I did not allow enough time for policies to take effect. A great deal of research has shown that, while the effects of government action on income inequality are initially very small, they increase over time (Kelly, 2005; Kelly & Witko, 2012; Volscho & Kelly, 2012; Hatch & Rigby, 2015). Allowing a longer

lag time would likely provide a better understanding of the ability of governors to affect income inequality in their states.

Another possible explanation for the statistically insignificant results is that this measure of inequality only accounts for pretax and transfer income. While past research has shown that government policies have an effect whether measured before or after taxation and transfers are accounted for (Kelly, 2005; Kelly & Witko, 2012; Stiglitz, 2012; Hatch & Rigby, 2015), Bartels (2008) points to direct transfers as the single most effective way to combat inequality.

It is also important to consider the importance of the 1994 midterm elections on the subject. After the Republicans gained control of Congress in 1995, much of the responsibility for income redistribution policies were shifted from the federal government to the states, which naturally increased the ability of the states to influence income inequality through their policies (Kelly & Witko, 2012). As 1995 falls exactly in the center of the time frame being considered, it is possible that the states' relative inability to take action on income inequality over the first decade and a half produced a much weaker result that would have been seen had I only examined years since this shift occurred.

The control variables also generally performed poorly. I found no evidence that economic growth, changes in the labor force, unemployment, or the percentage of the population with a college education influence income inequality. A change in the price

of oil does have an effect, albeit a weak one, with increasing oil prices counterintuitively being correlated with a very small decrease in income inequality.

Perhaps the most surprising finding, however, is the correlation between Democratic Presidents and *increased* income inequality, quite to the contrary to the findings of Bartels and virtually all other research on the subject¹¹. Moreover, the effect, which shows a 0.024 percent difference between Democrats and Republicans, is quite strong when considering the fact that the mean range of Gini across all 50 states is 0.12. Income inequality did increase more rapidly under Republican Presidents than under Democrats, however, this effect is not only neutralized, but reversed, by controlling for differences between individual states and years.

This is difficult to explain. One possible reason for this can be found by examining the specific Presidents in the study, specifically the fact that 8 of the 10 Democratic years came under Bill Clinton, with Carter and Obama serving for only one year each. There was little difference between the fiscal policy of the Clinton administration compared to the Bush and Reagan administrations, especially after the Republicans took control of Congress in 1995 (Kelly & Witko, 2012). Furthermore, the mid-1990s shift in responsibility for welfare policies from the federal government to the states could just as easily affect the accuracy of this variable as it could the accuracy of the governors' parties.

¹¹ With the exception of Barrilleaux & Davis (2008), who expressed surprise at their own results.

Conclusion and Implications

After examining the model, I was unable to find support for my hypothesis. I could find no statistically significant link between the party of a state's governor and changes in income inequality in that state. More perplexing was the fact that I found that Republican presidents were more effective at combating economic inequality than were Democrats, which conflicts with the studies that inspired this project in the first place.

These are odd results, considering how strongly they conflict with the existing literature, contradicting (either directly or indirectly) the findings of Alvaredo et al (2013), Bartels (2008), Bonica et al (2013), Hatch & Rigsby (2015), Hibbs & Dennis (1988), Jacobs & Skocpol (2005), Kelly (2005), Kelly & Witko (2012), Langer (2001) Schlozman et al (2005), and Volscho & Kelly (2012). Only Barrilleaux & Davis (2003) even partially agrees with my findings, namely that the party controlling state governments has little effect on income inequality. The result showing that Republican presidents are more successful at reducing income inequality cannot be found anywhere in the literature.

The differences in the economic philosophies of the two parties make this particularly surprising. As can be seen in the review of the literature, there is no consensus among academics as to whether income inequality is a problem at all, and this debate extends into the political arena. Republicans, who generally embrace supply-side, laissez faire, or trickle down economic theories are far less likely to view income inequality as a serious problem, or at the very least one that should be the concern of the government. Indeed, they would likely go so far as to argue that inequality is a good thing, as rising incomes

among the wealthiest citizens will lead to job creation and economic growth. However, even if this were to reduce inequality in the long run, it is almost inconceivable that the effects could be seen within a single year, and research has shown that the “trickle down” effects may in fact take more than a decade to materialize (Andrews, Jencks, & Leigh, 2009).

Democrats, on the other hand, are generally more concerned with bringing immediate relief to low-income individuals and households, which can be seen in their greater support for stronger welfare programs and a more progressive tax structure. Of course, the measure of income inequality used in this model does not take taxation and transfers into account, a fact which may alter both the results of this study and the practical reality of how partisan control of governments affects the well-being of the poor. Research has shown the importance of transfer payments for lifting the incomes of the poor (Bartels 2008; Kenworthy 2010), but it has also shown that the pattern of decreasing income inequality under Democratic governance holds up whether or not taxation and transfers are considered (Kelly 2005; Kelly & Witko 2012).

The practical implications of my model are far reaching. The statistically insignificant result for the dependent variable can mean two different things: either state governments have little ability to combat income inequality; or the two major parties are equally effective or ineffective at doing so through state offices. Further research is needed on this question, perhaps through an examination of the link between real welfare spending by party in state governments and changes in inequality.

In either case, the results have meaning. If it is the former, it casts the mid-1990s welfare reforms in a negative light. The federal government, which has the ability to reduce inequality, has handed off the responsibility for doing so to the states, which lack the power to accomplish this task. If it is the latter, and the policies of both parties are equally effective at reducing inequality, it reduces the importance of the issue in state politics. After all, if either party's philosophy will be equally helpful (or unhelpful) when it comes to reducing wealth disparity, then how can one vote based on a party's approach to combating wealth disparity?

There are several ways in which it may be possible to improve this model so that it might produce a statistically significant result. The most obvious would be extending the length of the lag between a governor's time in office and the year in which change in inequality was measured would allow the effects of policy changes to come to full fruition, thereby providing a more accurate representation of the consequences of these policies. Though my model found an effect with one year of lag at the federal level, it may take longer for state policies to produce measurable results. This idea is consistent with Hatch and Rigby (2015), who found that the longer lag time was allowed when examining the effects of policy on income inequality, the greater the effects became.

Another way to improve the model would be to use post tax and transfer data for the dependent variable. I found no evidence to suggest that either party is better at creating a more equitable economy through the actions of the state government, but a more progressive tax structure and a more generous welfare system would presumably benefit

those at the lower end of the income spectrum more than those at the higher end, thereby reducing inequality in a way that would not show up as I measured it. In fact, it could be argued that inequality measures based on post tax and transfer data would give a more accurate picture of the practical reality of income inequality.

It would also be possible to use different measures of inequality, which have different strengths and weaknesses. A particularly compelling possibility would be to use measures which would allow the researcher to examine the concentration of wealth at different points on the income distribution. For example, the Atkinson Index has a sensitivity parameter, which may be set anywhere between 0 and infinity, with higher values showing greater concern for those at the bottom of the income distribution. A more direct measure would simply be to examine the income shares of households at the top of each income quintile, as well as for the top 1% and top 0.1% of incomes.

More economic variables could also be included. The major industries present in a state could have an important effect. States in which larger portions of the population are employed in fields like construction or the oil industry should have a much more equal distribution of wealth than ones in which larger portions of the population work in retail and foodservice. On a related note, a particularly interesting variable would be union membership. Unions, by working to raise the wages of their members, would presumably have an equalizing effect on the income distribution. In fact, this relationship could be quite strong, given the possibility of a positive feedback loop. A state with powerful unions is more likely to elect officials, including governors, who favor policies

that strengthen the unions, thereby giving them further ability to influence both the political process and worker pay.

A related variable is the political leanings of the state. There are several ways that this could be measured in the states through time (Berry, et al 2007). In my model, I used census region to control for ideological differences between the states. This works for my model because my primary concern was that Southern Democrats might skew the results, but it would be possible to be more precise by using state-specific data. My method was quite broad, and grouped together states that had very little in common, particularly in the West region, which includes both incredibly red states, such as Utah and incredibly blue states, like Oregon. It would be reasonable to expect that the ideology of an elected official (which is, at least theoretically reflective of citizen ideology) is at least as important as their party identification to the policies that they pursue, and thus, the consequences of their governance.

Another set of variables that could be included are those measuring the degree of power that an individual governor has to implement the policies that they support. Would a governor with a great deal of power, whether it be formal or informal, have more ability to influence economic inequality than a weak governor? Controlling for factors laid out by Ferguson (2003), including both personal factors (popularity, margin of victory in their last election, political experience, and involvement in scandals) and institutional factors (eligibility for reelection, appointment power, power over the budget process, veto power, staff size, and the extent to which there is a professional state legislature) could

answer this question, and may help to sort out conflating variables which have made the results murkier.

Finally, changing the time period examined may also have an impact. As previously pointed out, the 1995 welfare reforms indicate a major breaking point in welfare policy in the United States, and the fact that it falls directly in the center of my 1980-2010 time period may be problematic. Looking at 1980 through 1995 and 1995 through the present separately may show what impact these reforms have had on inequality, and the ability of the states to combat it.

These results raise further questions. How do the priorities of each individual governor affect inequality? Given the concern that states with strong social welfare programs will become a “poverty sink,” attracting low-income individuals from nearby states, governors of both parties may have an incentive to reduce these programs. Are governors who make income inequality a focus of their campaign platforms and policy decisions able to have a significant effect?

It is also worth looking at each state individually. I found no link between the governors’ parties and inequality in the aggregate, but is it possible that such a relationship exists in some states, but not others? This is a particularly compelling question considering the fact that the literature suggests inequality grows more quickly under Republicans, but my model shows that inequality grows more quickly under Democrats (at the federal level). Could both parties be better at reducing inequality under certain circumstances, which

exist throughout the states in enough balance as to wash out when considered in the aggregate? If this is the case, in what situation is a Democrat or a Republican governor more suited to the task?

An examination of states with an even balance of Democratic and Republican governors would be particularly interesting. Despite the fact that the two parties governed over a fairly even number of state-years nationwide, in most states individually, one party held a significant advantage. Excluding the South, there are only 11 states in which neither party controlled the executive branch in more than 60% of years between 1980 and 2010¹². Interestingly, 9 of the 11 states are not generally considered swing states in Presidential elections, with only Nevada and New Hampshire failing to vote for one party more than 4 times in the 7 elections between 1980 and 2008. A more detailed study examining the link between partisan control of state governments and inequality would be particularly interesting in these places. How does a Montana Democrat address income disparity compared to a Massachusetts Republican? Are the policies of governors in competitive swing states like New Hampshire more effective or less effective at accomplishing their stated goals when compared to governors in states dominated by their party or by the opposition party?

A final question to consider is to what extent the superrich (a group vital to any discussion about income inequality) have in the calculation of income inequality at the state level. According to Forbes, California is home to 111 billionaires, while another 88

¹² Arizona, Indiana, Massachusetts, Michigan, Missouri, Montana, Nevada, New Hampshire, New Jersey, Pennsylvania, and Vermont.

live in New York. Together, these two states account for more than 4 in 10 billionaires in the United States (and more than 1 in 10 in the world), while 10 states do not have a single citizen that falls into this category (Forbes, 2015). Extremely high incomes will inevitably skew any measure of inequality. In a national study, this isn't a problem, as the concentration of wealth among the superrich is an important part of question of inequality. However, billionaires are concentrated in certain specific areas, which may have little to do with the policies pursued by the states. California and New York have so many billionaires because Silicon Valley, Hollywood, and Wall Street generate and attract billionaires. This is a particularly interesting question when looking at smaller states. Take Wal-Mart heir Jim Walton, for example. In 2014, Walton, the wealthiest person in Arkansas, had a net worth of \$34.7 billion, which was more than one-third the size of that state's GDP of \$93.9 billion (Forbes, 2015). If he were to move one state over to Mississippi (which has no billionaires), his departure would likely create a measurable reduction in inequality in Arkansas and an increase in Mississippi, despite the fact that nothing had actually changed. Making this even more problematic is the fact that Walton, as is presumably the case with most billionaires, earns income from across the country, not just in his home state. This means that the policies pursued by all governors will impact his wealth, but the net effect of all of those changes will be attributed only to his home state.

Works Cited

- Alesina, A., & Rodrick, D. (1994). Distributive Politics and Economic Growth. *Quarterly Journal of Economics*, 109(2), 465-490.
- Alvaredo, F., Atkinson, A. B., Piketty, T., & Saez, E. (2013). The Top 1 Percent in International and Historical Perspective. *Journal of Economic Perspectives*, 27(3), 3-20.
- Andrews, D., Jencks, C., & Leigh, A. (2009). Do Rising Top Incomes Lift All Boats? *Harvard Faculty Research Working Paper Series*.
- Asafu-Adjaye, J. (2004). Income Inequality and Health: A Multi-Country Analysis. *International Journal of Social Economics*, 31(1/2), 195-207.
- Autor, D. H., Katz, L. F., & Kearney, M. S. (2008). Trends in U.S. Wage Inequality: Revising the Revisionists. *The Review of Economics and Statistics*, 90(2), 300-323.
- Bagnall, J. (2010, October 29). Income Inequality is Reaching Dangerous Proportions; John D. Rockefeller Wouldn't Have Made the Top-25 List of Today's Super Rich. *The Gazette*.
- Baker, P. (2015, January 28). In State of the Union Address, Obama Vows to Act Alone on the Economy. *New York Times*. Retrieved from http://www.nytimes.com/2014/01/29/us/politics/obama-state-of-the-union.html?_r=0

- Barrilleaux, C., & Davis, B. C. (2003). Explaining State-Level Variations in Levels and Change in the Distribution of Income in the United States, 1978-1990. *American Politics Research*, 31(3), 280-300.
- Bartels, L. M. (2008). *Unequal Democracy: The Political Economy of the New Gilded Age*. New York: Russell Sage Foundation.
- Beckfield, J. (2008). Income Inequality. In D. Carr, R. Crosnoe, M. E. Hughes, & A. M. Pienta (Eds.), *Encyclopedia of the Life Course and Human Development*. Macmillan Reference USA.
- Berry, W. D., Fording, R. C., Ringquist, E. J., Hanson, R. L., & Klarner, C. E. (2010). Measuring Citizen and Government Ideology in the U.S. States: A Re-appraisal. *State Politics and Policy Quarterly*, 10(2), 117-135.
- Bonica, A., McCarty, N., Poole, K. T., & Rosenthal, H. (2013). Why Hasn't Democracy Slowed Rising Inequality? *Journal of Economic Perspectives*, 27(3), 103-124.
- Bound, J., & Johnson, G. (1992). Changes in the Structure of Wages in the 1980's: An Evaluation of Alternative Explanations. *The American Economic Review*, 82(3), 371-392.
- Brux, J. M. (2005). *Economic Issues and Policy* (3rd ed. ed.). Mason, OH: Thomas South-Western.
- Caplin, A. (2010, December 3). The Hazards of Focusing on Inequality. *New York Times*.

- Carsey, T. M., & Harden, J. J. (2010). New Measures of Partisanship, Ideology, and Policy Mood in the American States. *State Politics and Policy Quarterly*, 10(2), 136-156.
- Cifuentes, M., Sembajwe, G., Tak, S., Gore, R., Kriebel, D., & Punnett, L. (2008). The Association of Major Depressive Episodes with Income Inequality and the Human Development Index. *Social Science & Medicine*, 67(4), 529-539.
- De Maio, F. G. (2007). Income Inequality Measures. *J Epidemiol Community Health*, 61(10), 849-852. Retrieved August 27, 2014
- De Vogli, R., Mistry, R., Gnesotto, R., & Cornia, G. A. (2005). Has the Relation Between Income Inequality and Life Expectancy Disappeared? Evidence from Italy and Top Industrialized Countries. *Journal of Epidemiology and Community Health*, 59(6), 158-162.
- Dollar, D., & Kraay, A. (2002). Growth is Good for the Poor. *Journal of Economic Growth*, 7(3), 195-225.
- Elgar, F. J. (2010). Income Inequality, Trust, and Population Health in 33 Countries. *American Journal of Public Health*, 100(11), 2311-2315.
- Erikson, R. S., Wright, G. C., & McIver, J. P. (2007). Measuring the Public's Ideological Preferences in the 50 States: Survey Responses Versus Roll Call Data. *State Politics and Policy Quarterly*, 7(2), 141-151.
- Ferguson, M. R. (2003). Chief Executive Success in the Legislative Arena. *State Politics and Policy Quarterly*, 3(2), 158-182.

- Forbes. (2010). *Forbes*. Retrieved from The Richest Americans:
<http://money.cnn.com/galleries/2007/fortune/0702/gallery.richestamericans.fortune/index.html>
- Forbes. (2015, August 6). *The World's Billionaires*. Retrieved from Forbes:
<http://www.forbes.com/billionaires/list/>
- Fording, R. C. (2015, 3 19). *State Ideology Data*. Retrieved from RC Fording:
<https://rcfording.wordpress.com/state-ideology-data/>
- Frank, M. W. (2009). Inequality and Growth in the United States: Evidence from a New State-Level Panel of Income Inequality Measures. *Economic Inquiry*, 47(1), 55-68. Retrieved August 7, 2014
- Frank, M. W. (2014). *U.S. State-Level Income Inequality Data*. Retrieved August 8, 2014, from www.shsu.edu: http://www.shsu.edu/eco_mwf/inequality.html
- Hatch, M. E., & Rigby, E. (2015). Laboratories of (In)equality? Redistributive Policy and Income Inequality in the American States. *Policy Studies Journal*, 43(2), 163-187.
- Hibbs, D. A., & Dennis, C. (1988). Income Distribution in the United States. *The American Political Science Review*, 82(2), 467-490.
- Jacobs, L. R., & Skocpol, T. (2005). American Democracy in an Era of Rising Inequality. In L. R. Jacobs, & T. Skocpol (Eds.), *Inequality and American Democracy* (pp. 1-18). New York: Russell Sage Foundation.

- Jayadev, A. (2013). Distribution and Crisis: Reviewing Some of the Linkages. In *Handbook on the Political Economy of Financial Crises* (pp. 95-112). New York: Oxford University Press.
- Kahn, R. S., Wise, P. H., Kennedy, B. P., & Kawachi, I. (2000). State Income Inequality, Household Income, and Maternal Mental and Physical Health: Cross Sectional National Survey. *British Medical Journal*, *321*, 1311-1315.
- Kaplan, S. N., & Rauh, J. (2013). It's the Market: The Broad-Based Rise in the Return to Top Talent. *Journal of Economic Perspectives*, *27*(3), 35-56.
- Kelly, N. J. (2005). Political Choice, Public Policy, and Distributional Outcomes. *Journal of American Political Science*, *49*(4), 865-880.
- Kelly, N. J., & Witko, C. (2012). Federalism and American Inequality. *The Journal of Politics*, *74*(2), 414-426.
- Kenworthy, L. (2010). Rising Inequality, Public Policy, and America's Poor. *Challenge*, *53*(6), 93-109.
- Klarner, C. E. (2013). *Carl Klarner Dataverse*. Retrieved June 2015, from Harvard Dataverse: <https://dataverse.harvard.edu/dataverse/cklarner>
- Kortez, G. (1997, November 10). The Unhealthy U.S. Income Gap. *Business Week*.
- Krugman, P. (1994). Technology's Revenge. *The Wilson Quarterly*, *18*(4), 56-64.
- Kuznets, S. (1955). Economic Growth and Income Inequality. *The American Economic Review*, *45*(1), 1-28.

- Lamis, A. P. (1999). The Two-Party South: From the 1960's to the 1990's. In A. P. Lamis, *Southern Politics in the 1990's* (pp. 1-49). Baton Rouge: Louisiana State University Press.
- Langer, L. (1999). Measuring Income Distributions across Space and Time in the American States. *Social Science Quarterly*, 80(1), 55-67.
- Langer, L. (2001). The Consequences of Economic Development Strategies on Income Distribution in the American States, 1976 to 1994. *American Politics Research*, 29(4), 392-415.
- MacKenbach, J. P. (2002). Income Inequality and Population Health: Evidence Favouring Negative Correlation Between Income Inequality and Life Expectancy has Disappeared. *British Medical Journal*, 324(7328), 1-2.
- Martin, J. (2015, February 5). On Economy, Jeb Bush Tests Divergent Message. *New York Times*. Retrieved from <http://www.nytimes.com/2015/02/05/us/politics/in-detroit-jeb-bush-tests-campaign-message-on-economy.html>
- Maxwell, N. (1990). Changing Female Labor Force Participation: Influences on Income Inequality and Distribution. *Social Forces*, 68(4), 1251-1266.
- Moore, S. (2006). Peripherality, Income Inequality, and Life Expectancy: Revisiting the Income Inequality Hypothesis. *International Journal of Epidemiology*, 35, 623-632.
- Muller, E. N. (1988). Democracy, Economic Development, and Income Inequality. *American Sociological Review*, 53(1), 50-68.

O'Sullivan, A., & Sheffrin, S. M. (2003). *Economics*. Needham, MA: Pearson-Prentice Hall.

oxfam.org. (2014). *Working for the Few: Political Capture and Economic Inequality*. Retrieved from <https://www.oxfam.org/sites/www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequality-200114-summ-en.pdf>

Pabayo, R., Kawachi, I., & Gilman, S. E. (2014). Income Inequality among American States and the Incidence of Major Depression. *Journal of Epidemiology and Community Health*, 68(2), 110-115.

Pickett, K. E., & Wilkinson, R. G. (2015). Income Inequality and Health: A Causal Review. *Social Science & Medicine*, 128, 316-326.

Piketty, T., & Saez, E. (2003). Income Inequality in the United States, 1913-1998. *The Quarterly Journal of Economics*, 118(1), 1-39.

Schiller, B. R. (2008). *The Economics of Poverty and Discrimination* (10th ed. ed.). Upper Saddle River, NJ: Pearson Prentice-Hall.

Schlozman, K. L., Page, B. I., Verba, S., & Fiorina, M. P. (2005). Inequalities of Political Voice. In L. R. Jacobs, & T. Skocpol (Eds.), *Inequality and American Democracy* (pp. 19-87). New York: Russell Sage Foundation.

Stiglitz, J. E. (2012). *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W.W. Norton & Company.

- U.S. Energy Information Administration. (2015, June). *Short-Term Energy Outlook Real and Nominal Prices*. Retrieved June 30, 2015, from eia.gov:
http://www.eia.gov/forecasts/steo/realprices/real_prices.xlsx
- Volscho, T. W., & Kelly, N. J. (2012). The Rise of the Super-Rich: Power Resources, Taxes, Financial Markets, and the Dynamics of the Top 1 Percent, 1949 to 2008. *American Sociological Review*, 77(5), 679-699.
- Weiss, M., & Garloff, A. (2011). Skill-Based Technological Change and Endogenous Benefits: The Dynamics of Unemployment and Wage Inequality. *Applied Economics*, 43, 811-821.
- Wen, M., Browning, C. R., & Cagney, K. A. (2003). Poverty, Affluence, and Income Inequality: Neighborhood Economic Structure and its Implications for Health. *Social Science & Medicine*, 57(5), 843-860.
- Williams, J. A., & Rosenstock, L. (2015). Squeezing Blood From a Stone: How Income Inequality Affects the Health of the American Workforce. *American Journal of Public Health*, 105(4), 616-621.
- World Bank. (2015, August 6). *GDP*. Retrieved from World Bank:
<http://data.worldbank.org/indicator/NY.GDP.MKTP.CD>
- Zinn, H. (2003). *A People's History of the United States*. New York, NY: HarperPerennial.

CURRICULUM VITAE

Jake Alexander Wolf

Education

2015 MA Political Science, Indiana University-Purdue University Indianapolis

2010 BA Political Science, Indiana University-Purdue University Indianapolis
History, Indiana University-Purdue University Indianapolis

Professional Experience

2010-2013 Todd Academy, Inc. (Indianapolis, IN)

In my time at Todd Academy, I worked as a teacher for students grades 3-12 in Social Studies, Math, and English. I also held several different administration positions. I was Lead Teacher from June 2010 until my resignation in June 2013, which included a position on the Board of Directors as Staff and Student Liaison. I was named Deputy Director in August 2011, and held the position until I left the school in June 2013. The responsibilities associated with these positions include preparing curriculum and class materials for the particular needs of high-IQ students; writing and editing important school documents, including student, staff, and parent handbooks; mediating problems that arose with parents, staff and/or student, managing report cards and transcripts; scheduling all

courses; and providing assistance and tutoring to students having difficulty in any subject.

2007-present Barnes & Noble Booksellers (Avon, IN and Plainfield, IN)

I have worked for Barnes & Noble either part-time or full-time since 2007. I was Head Cashier between February 2010 and August 2010, and was responsible for handling thousands of dollars in cash daily, preparing register tills for each shift, and preparing end of day deposits. I was also responsible for training new employees on store policies and procedures, both in my time as head cashier and as a bookseller.

2014-present Private Tutor

Even after leaving Todd Academy, I have intermittently served as a tutor for a number of my former students, specifically helping them prepare for the Algebra I End of Course Assessment

Internship

2011 Melina Kennedy for Indianapolis Mayoral Campaign

My responsibilities included canvassing; phone banking; registering people to vote; and participating in campaign events, such as IPS Back to School Night.

Conferences and Symposia Attended

- 2008 Bulen Symposium: Gender, Race, and Religion in the 2008 Elections
(Indianapolis, IN)
- 2012 Association for Supervision and Curriculum Development Summer
Conference (St. Louis, MO)
- 2012 GenCon Trade Day (Indianapolis, IN)
- 2013 GenCon Trade Day (Indianapolis, IN)
- 2015 Truth Be Told: Alternative Narratives for Teaching about Columbus Day
and Thanksgiving (Indianapolis, IN)