A Perpetuating Negative Cycle:
The Effects of Economic Inequality on Voter Participation

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"The flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent."[1] - Elmer Eric Schattschneider

Introduction

The United States government is based on the concept of representative democracy - a government by the people for the people. Through voting, citizens elect politicians to represent them, their ideas, and their beliefs within government. But what happens if factors such as economic inequality affect a person's ability to vote? The government would not be a comprehensive representation of all the citizens within a nation, making the policies enacted potentially skewed, unfairly favoring some groups of citizens over others. The United States government would not truly be a government by the people for the people.

In this paper, I examine the effects of economic inequality on voter participation within the United States. As economic inequality rises, voters may become unmotivated to vote during elections due to decreased levels of trust in government or skepticism that the government could create policies that would be able to alleviate the current conditions of economic inequality (Solt, Habel & Grant 2011). Therefore, if economic inequality rises, it would be those who have a lower socio-economic status that would become less inclined to participate.

[1] Schattschneider, Elmer Eric. 1975. *The Semi-Sovereign People: A Realist's View of Democracy in America.* Cengage Learning.

The lowered voter participation could be an indicator that elected officials are not adequately representing the totality of the demographics within their district or state. When examining the concept of a representative democracy, the very goal of democracy is to serve as a liaison between the government and the people it serves, ultimately connecting the two so that the government is a representation of the people it functions to represent. If economic inequality decreases voter participation within the lower socio-economic classes of society, it would be the upper socio-economic classes that elect candidates, candidates that may not have policies favoring the lower socio-economic classes, or enact policies that could be harmful to the lower socio-economic classes. Therefore, if increased economic inequality does significantly suppress voter participation, it would be those within the lower socio-economic class that would be affected the most by the elected government officials that provide skewed representation of their district or state.

In light of the information above, this study is significant in that it can produce findings that will provide necessary insights to policy-makers. If increased economic inequality lowers voter participation within lower socio-economic classes, those classes would be under-represented within legislatures. The unequal representation may lead elected officials to oppose policies beneficial to the lower classes, which in turn can lead to increased economic inequality, therefore perpetuating a cycle. If the negative relationship between economic inequality and

voter participation is found to be significant, this can influence policy change, either in the direction of alleviating economic inequality, thereby increasing voter turnout rates, or enacting policies that will counter the lowered participation rates within the lower class, thereby breaking the cycle.

In order to evaluate the relationship between economic inequality and voter participation, I conduct both a longitudinal analysis and a cross-sectional analysis in order to analyze the effects of increased economic inequality on voter turnout rates. The longitudinal analysis will provide insight if changes in economic inequality over time are associated with changes in turnout rates. The cross-sectional analysis will show if varying levels of economic inequality directly affect voter turnout. That is to say, if states with higher levels of economic inequality have lower levels of voter turnout rates compared to states with lower levels of economic inequality.

The methodology implements a combination of variables for the operationalization of economic inequality. Economic inequality is represented by the GINI coefficient and then also reexamined using the SIDD coefficient. This collaborative methodology, incorporating a combination of variables for the purpose of reconfirming or refuting prior outcomes, is intended to lead to more definitive conclusions and the implications that are derived from them.

Before I conduct analysis, I will review previous studies that have examined this relationship, determining if such literature reveals a relationship between economic inequality and voter participation. I will further provide a more detailed discussion of my methodology and research design, followed by the results of my research and analysis of the data. I will conclude this paper by providing discussion of the possible implications of the results of the study.

Literature Review

Many studies have examined the relationship between economic inequality and voter turnout. Although some research efforts have found that economic inequality had a negative effect on voter turnout (Solt 2008), many studies found no effect (Slater et al. 2014, Teorell 2010, Stockemer and Parent 2014, Plungis 2014). The literature review below provides a synopsis of the most relevant literature concerning the relationship between economic inequality and voter turnout, organized by theoretical framework.

Theory

Three dominant theories are often discussed when addressing the impact of economic inequality on voter participation. These include Resource Theory, Relative Power Theory, and Conflict Theory. While these all have a rationale for the mechanisms that influence voter participation as a function of economic inequality, they differ in their assumption of the mediating variables and the correlation of the relationship.

Resource Theory: A Negative Relationship

Resource Theory (also called Power Resource Theory) asserts that when inequality increases, it produces a greater discrepancy in economic resources, as well as social resources, between the contrasting social classes. This subsequent variation can deter voting in the lower classes where resources are sparse. This can result in an indifference to voting that emerges as a function of insufficient knowledge concerning the election or voting procedures. Decreased voter turnout could also be caused by a lack of transportation or the absence of other necessary resources for participation in the lower class. Those on the disadvantaged end of inequality lack the circumstances and time needed to invest in promoting a candidate or proceeding to vote when they cannot afford an absence from work (Karakoc 2013, Solt 2008). As a result, Resource Theory assumes that there is a negative relationship between economic inequality and voter turnout.

Solt (2008) used Resource Theory as the explanation for the negative relationship he found between higher levels of economic inequality and decreased levels of political engagement. Using the GINI coefficient as a measure of economic inequality separated by economic quintiles, his analysis examined its association with political discussion and voter turnout within the United States. He found a negative relationship between economic inequality and political discussion across all quintiles and found a negative relationship between economic

inequality and voter turnout with the exception of the richest quintile. As income inequality increases, political engagement among the lower quintiles declines. Resource Theory suggests this is due to civic indifference among lower economic quintiles.

Relative Power Theory: A Negative Theoretical Relationship, No Effect in Actualization

Comparable to Resource Theory, Relative Power Theory also supports the negative relationship between economic inequality and voter turnout. Relative Power Theory asserts the negative impact of economic inequality on political engagement, such as voting, is essentially a function of the power distribution in society. If the money within a society is concentrated among a specific population, then representative power will be concentrated among the same population as well. This power emerges in the form of the wealthy providing more substantial campaign funds for candidates or parties that will implement policies in their favor. This is used to negate the political engagement efforts of those outside of this population. Over time, this leads to lower political participation for those in the lower-income segment of society. (Solt et al. 2011)

Relative Power Theory is supported by the findings of Slater et al. (2014) who conducted a comparative cross-sectional correlational study, involving 139 countries, in order to examine the effects of the efforts to reduce economic inequality, such as redistribution, on the support and strength of the federal government, measured by approval rating. They found that taxation

associated with redistribution was negatively correlated with the approval of a democratic government. Although Slater et al. (2014) did not directly test Relative Power Theory in the context of economic inequality and voter turnout, their analysis provides support that the wealthy within society have a strong influence on governmental approval, which could potentially be used to negate the political engagement efforts of those with lower socio-economic statuses, upholding the theoretical basis for Relative Power Theory.

In actuality, Relative Power Theory was not found to support a negative relationship between economic inequality and voter engagement. Teorell (2010) tried to assess Relative Power Theory in the context of economic inequality by examining the relationship between economic inequality and political participation within 165 countries. His results indicate that economic upturns have a substantial positive influence on participation, while downturns decrease levels of participation due to disconnect and detachment between the wealthy and the state. As a theory, Relative Power Theory would explain Teorell's (2010) results, since it was the disconnect of the wealthy that influenced political participation; however, Teorell (2010) contended the status of the economy within a nation does not specifically measure the presence of economic inequality, leading to his conclusion of no effect. Theoretically speaking, Relative Power Theory would significantly show increased levels of economic inequality lead to

decreased levels of voter participation, but this theory has not been supported in the context of the relationship between economic inequality and voter turnout.

Conflict Theory: A Positive Theoretical Relationship, No Effect in Actualization

In contrast to Resource Theory and Relative Power Theory, Conflict Theory assumes increased economic inequality will motivate individuals to engage in voting in order to stimulate change. With increasing economic inequality, the lower socio-economic classes of society become more disadvantaged, leading them to favor redistribution policies as a means of assisting their situation. In opposition, those at the upper socio-economic classes will continue to favor the policies that led to the increased economic inequality. Therefore, as the inequality gap increases, voter participation in elections should also increase as each group becomes more invested in their situation and the policies to improve it (Stockemer and Parent 2014).

Stockemer and Parent (2014) examined Conflict Theory in the context of economic inequality and voter turnout. Using a global sample of 161 representative democracies with presidential elections as their unit of analysis, Stockemer and Parent (2014) examined if economic inequality, measured by the GINI coefficient, increased electoral turnout. When controlling for compulsory voting, semi-presidentialism, federalism, regime type, development, and population size, they failed to find a significant relationship. They rejected Conflict Theory's predictions on the relationship between economic inequality and voter turnout, since controlling

for mediating factors results in no significant relationship between economic inequality and voter turnout to be found.

Plungis (2014) also found a relationship of no effect when testing Conflict Theory. Using the nation of his unit of analysis, and operationalizing economic inequality with the GINI coefficient, Plungis (2014) theorized that nations with high levels of economic inequality would have a higher participation rate within elections, while nations with low levels of economic inequality a larger portion of the lower income population would not be as invested within the electoral system. However, he ultimately found no relationship between economic inequality and voter turnout, thereby not supporting Conflict Theory.

As Conflict Theory purports a positive relationship between economic inequality and voter participation, in actuality, the studies examining this theory failed to find an effect (Stockemer and Parent 2014, Plungis 2014). Likewise, the studies examining Relative Power Theory - a theoretical negative relationship between economic inequality and voter participation, also failed to find an effect (Slater et al. 2014, Teorell 2010). Within the context of the effects of economic inequality on voter turnout, Resource Theory was the only theory that was supported through analysis (Solt 2008). However, this relationship is not a definitive finding due to the numerous studies that failed to find a significant relationship, necessitating the need for further research.

Theoretical Framework for This Study

I hypothesize an increase in economic inequality results in a decrease in voter turnout, using Resource Theory as my underlying theoretical framework. Although both Resource Theory and Relative Power Theory posit a negative relationship between economic inequality and voter participation, they present slightly different reasons for this outcome. As Relative Power Theory assumes those in the higher-income segment of society suppress voter participation of those in the lower-income segment of society, Resource Theory assumes lack of economic funds decreases motivation to vote, providing a more direct association between increased economic inequality and decreased voter turnout rates. As a result, Resource Theory is presented as the predominant framework underlying my analysis, as I aim to show increases in economic inequality directly results in decreases in voter turnout.

There is a direct, positive linear relationship between income levels and political participation. Those within the lower socio-economic classes of society participate in elections less than those within the higher socio-economic classes of society (Boix and Stokes 2003). This affects the government's ability to address those within the lower socio-economic classes of society. Government's ability to extract information from citizens, which can promote policies such as redistribution of wealth, thereby minimizing economic inequality, is determined through elections (Soifer 2009). Therefore, those in the lower socio-economic classes of society that are

less likely to vote are less likely to have adequate government representation promoting policies beneficial to their economic status.

This can perpetuate a cycle, increased economic inequality could lead to a decrease of voter turnout of the lower socio-economic classes, which would lead to inadequate government representation for these classes. Inadequate government representation for the lower socio-economic classes within society can lead to policies that increase economic inequality – and the cycle continues. The results of my research could disclose the effects economic inequality has on voter participation, having implications that could potentially be valuable for policy-makers who may enact policies to break the cycle.

Research Design

I examine the effects of economic inequality on voter participation within the United States, hypothesizing that if economic inequality increases over time, there would be a decrease in voter participation overtime as well. As economic inequality rises, voters may become demotivated to vote during elections due to decreased levels of trust in government, or skepticism that the government could create policies that would be able to alleviate the current conditions of economic inequality, consequently leading to decreased voter participation rates.

Conceptualization of Variables

The main variable that I believe to affect voter turnout is economic inequality. The GINI coefficient serves as a measure of economic inequality. Data for historical nationwide and statewide GINI coefficients is derived from Mark Frank (2008) who created a database of GINI coefficients for the years 1960 to 2012 (Frank 2008). The GINI coefficient provides the proportion of the total income of the population based on distribution; it ranges from a scale of 0 to 1, with 0 being complete equality with equal distribution of income and 1 being complete inequality with unequal distribution of income.

Table 1 (*end of section*) shows the data for economic inequality has a mean of 0.575 and a variance of 0.1171. The typical state, for all years examined, has a GINI coefficient of 0.575 with a variance of 0.1171. Economic inequality within states are, on average, 0.1171 GINI points from the mean of .0575. Within the years examined, West Virginia reported the lowest GINI coefficient in the year 1988 with a 0.50 GINI coefficient, and Alaska reported the highest GINI coefficient, also in 1988, with a GINI coefficient of 0.72. These numbers indicate states within the United States tend to have more unequal distribution of income, since the minimum GINI coefficient is 0.5013, and the mean is slightly higher, 0.575.

The GINI coefficient is generally used in most conventional analyses as a measure of economic inequality, therefore allowing for comparison of the results I produce with relevant

literature and studies that employed the GINI as a measure of economic inequality. I plan to additionally use the SIDD as a measure of economic inequality to reconfirm the results of analysis using the GINI coefficient, and to establish validity and consistency if both outcomes arrive at the same conclusions.

The SIDD coefficient is based upon the Standardized World Income Inequality Database (SWIID). This SIDD coefficient differs from the GINI coefficient in that measures net income, opposed to gross income, and controls for the number of individuals that comprise a household when considering household income. While the GINI coefficient is sufficient for examining the economic inequality of individuals in a societal capacity, the SIDD coefficient is more adequate for considering the various costs associated with different households of different sizes. Instead of replicating past studies that analyzed the GINI coefficient with political participation, using the SIDD brings an additional level of analysis that past literatures examining the relationship between economic inequality and political participation have not done.

The SIDD could also be more accurate than the GINI coefficient. The GINI coefficient is intended to evaluate gross income as opposed to net income and does not consider the number of individuals that comprise a household when measuring household income. The GINI coefficient is sufficient for examining the economic inequality of individuals at the societal level, but the SIDD measure is more adequate for considering the various costs associated with different

households of different sizes, as well as other factors. To ensure the compatibility of using the SIDD versus the GINI coefficient, I will conduct analysis to identify how much the two measures of economic inequality correlate, for validity of the findings and the accuracy associated with their potential interchangeability. Data for historical nationwide and statewide SIDD coefficients are derived from Frederick Solt (2009) who created a database of SIDD coefficients (Solt 2009).

Voter participation data is collected from the United States Elections Project, which provides a dataset of national and state turnout rates based on the percentage of the voting-eligible population that voted (McDonald 2014). The possible values for this data could range from 0%-100% voter turnout rate within a specific state, or the nation as a whole.

Table 1 (*end of section*) shows the data for voter turnout has a mean of 54.14% and a variance of 0.5689%. This means the typical state, for all years examined, has 54.14% of the voting-eligible population vote during presidential elections, with the typical variance being 0.5689%. The percentage of voter turnout within states are, on average, 0.5689% from the mean of 54.14%. Within the years examined, South Carolina had the smallest voter turnout rate in 1988 with 40.2% of their voting-eligible population voting. Minnesota had the highest percentage of voter participation with 78.4% of their voting-eligible population voting in 2004. The mean voter turnout rate of 54.14% shows, during presidential election years, slightly more

than half of eligible voter are actually participating in elections. This fact may be concerning, lending importance to examining the relationship between economic inequality and voter turnout.

I control for education, as those who have a higher education may be more aware of their civic responsibilities, the current political environment, election dates and procedures. By controlling for education, I hope to remove the linear effect education may have from the relationship between economic inequality and voter participation. The data for my control of education is measured by the percent of the total population within a state that completed 4 years of high school or more. The data is also presented as a combined national. The data comes from the United States Census Bureau (The United States Census Bureau 1980-2004).

Table 1 (*end of section*) shows the mean for the percent of the total population within a state that completed 4 years of high school or more, for all years examined, is 82.72%; with a variance of 0.33%. This means, for all years examined, the typical state had 82.72 % of its population complete 4 years of high school or more, with the typical variance being 0.33%. The total population within a state that completed 4 years of high school or more is, on average, 0.33% from the mean of 82.72%. Within the years examined, Alabama had the smallest percentage of the total population within their state that completed 4 years of high school or more with only 63.2% of their total population completing 4 years of high school or more in

1988. Minnesota had the highest percentage of the total population within their state that completed 4 years of high school or more with 92.3% of their total population completing 4 years of high school or more in 2004.

I also control for levels of trust. Trust in government may be a variable that strongly correlates with voter turnout. If national levels of trust in government are low, this may correlate with decreased voter turnout due to skepticism in the political/electoral process or demotivation to turnout to vote. By controlling for levels of trust, I hope to remove the linear effect trust may have from the relationship between economic inequality and voter participation. (Hetherington and Rudolph 2008)

Table 1 (*end of section*) shows the mean level, for all years within the data set, was 38.8%; out of all the persons surveyed only 38.8% reported they were confidant in United States government institutions. The percentage of public trust in government was highest in 1964, with 59.4% of persons reporting they were confidant in United States government institutions, and lowest in 2012, with only 25.8% of persons reporting they were confidant in United States government institutions. The standard deviation for this variable is fairly large with an average deviation from the mean of 38.8% being 11.1%.

Table 1: Univariate Summaries of Variables

	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	SD
Voter Turnout	.365	.483	.542	.541	.597	.739	.075
Economic Inequality	.501	.553	.569	.576	.592	.716	.034
Education	.632	.792	.836	.827	.871	.923	.058
Trust	.258	.299	.377	.388	.411	.594	.111

Methodology and Hypothesizes

The primary goal of this study is to determine if economic inequality affects voter turnout and in what way any effect may emerge. The methodology employed throughout this analysis is presented in detail below, beginning with the analysis utilized for examining voter turnout as a function of economic inequality in the United States over time.

Economic Inequality (GINI) Effects on Voter Turnout – Longitudinal Analysis

In order to examine the relationship between economic inequality and voter turnout in the United States, the first segment of this analysis will use the GINI coefficient as a measure of economic inequality. The GINI coefficient is recorded for each year between 1960 and 2012, while also recording the national voter turnout for each of these years, creating the data set for this segment of analysis. Only election years are used in order to control for variance in voter turnout between primary and midterm elections. The GINI coefficient and voter turnout rate for each year will then be paired creating a set of ordered pairs for regression analysis, controlling for education. The results produced contribute to the identification of any longitudinal

relationship between economic inequality and voter turnout. The goal of this segment of analysis is to support Hypothesis 1, which assumes the following:

- **Hypothesis 1**: In the United States, higher levels of economic inequality, measured by the GINI coefficient, lead to decreased voter turnout rates.

Economic Inequality (SIDD) Effects on Voter Turnout – Longitudinal Analysis

The same process of analysis will be facilitated substituting the SIDD coefficient for the GINI coefficient as a measure of economic inequality. This will be done in order to reconfirm prior results, lending credibility to their validity and consistency should both outcomes arrive at the same conclusions. The SIDD coefficient and voter turnout rate for each year will be paired to create a set of ordered pairs for regression analysis, using the formula for a standard Pearson's correlation analysis, controlling for education. The goal of this segment of analysis is to support Hypothesis 2, which assumes the following:

- **Hypothesis 2**: In the United States, higher levels of economic inequality, measured by the SIDD coefficient, lead to decreased voter turnout rates.

Supplemental Analyses for Confirming Credibility of the Prior Findings

To ensure the compatibility of using the SIDD versus the GINI coefficient, a regression analysis will be executed to identify how much the two measures of economic inequality do or do not correlate for validity of the findings and the accuracy associated with their interchangeability.

Economic Inequality Effects on Voter Turnout – Cross-Sectional Analysis

The next segment of analysis will examine the relationship between economic inequality and voter turnout in a cross-sectional capacity by using a data set comprised of all the states individually at one point in time, rather than the nation as a whole over time. The GINI coefficient for each state and the associated voter turnout of the respective state will be paired to create the data set for this segment of analysis. The data will be used in a Pearson's correlation analysis for the purpose of examining the potential relationship between the GINI for each state and the associated voter turnout, controlling for education. The correlation coefficient produced will represent the degree to which economic inequality and voter turnout are related in the United States, as well as the direction of this potential relationship. The goal of this segment of analysis is to support Hypothesis 3, which assumes the following:

- **Hypothesis 3:** In the United States, states with higher levels of economic inequality have a lower voter turnout rate compared to states with lower levels of economic inequality.

The culmination of all of the analyses and their respective findings will lead to implications pertaining to how economic inequality affects voter turnout. The following chapter presents the results produced from the analyses, followed by the discussion of the interpretations and implications of the results.

Results

Results: Economic Inequality (GINI) Effects on Voter Turnout – Longitudinal Analysis

A correlation test between the year and the GINI coefficient was conducted to determine if there was any longitudinal trend in inequality over the years. The results demonstrated a statistically significant and positively correlated relationship between the year and the GINI coefficient, with a correlation of 0.856. The distribution of income has been significantly increasing in range between 1960 and 2012, becoming more disproportional. This reflects that economic inequality, measured by the GINI coefficient, has significantly increased between the years 1960 and 2012. Table 2 below illustrates the specifics of this analysis.

Table 2: Results of Correlation Analysis between Year and SIDD Coefficient

	Voter Turnout	GINI	Significance
Economic Inequality (GINI)	.856	1	.000
Voter Turnout	1	.856	.000
N			14

The regression analysis testing hypothesis 1 (in the United States, higher levels of economic inequality, measured by the GINI coefficient, lead to decreased voter turnout rates) produced a correlation coefficient of -0.138. The result was statistically significant to the 0.01 alpha level. There exists a negative relationship between economic inequality, measured by the GINI coefficient and voter turnout. As income becomes more disproportionately distributed, measured by a 0.10 unit change in the GINI coefficient, voter turnout decreases by 0.138%. Table 3 below illustrates the specifics of this analysis.

Table 3: Unequal income distributions, measured by the GINI coefficient tend to decrease voter turnout – controlling for whether or not an individual attended 4 years of high school or more and levels of trust

	Voter Turnout	Significance
Economic Inequality (GINI)	-0.138	.000
Education	.720	.000
Trust	-0.116	.009
Constant	.222	.005
N		14
Pseudo R-Squared		.072

Results: Economic Inequality (SIDD) Effects on Voter Turnout – Longitudinal Analysis

A correlation test between the year and the SIDD coefficient was conducted to determine if there was any longitudinal trend in inequality over the years. The results demonstrated a statistically significant and positively correlated relationship between the year and the SIDD coefficient, with a correlation of 0.975. Reconfirming the prior results, the findings demonstrate a positive correlation between the year and the SIDD coefficient. Inequality, measured both by

the GINI coefficient and the SIDD coefficient has increased as time has progressed. Table 4 illustrates the specifics of this analysis.

Table 4: Results of Correlation Analysis between Year & SIDD

	Voter Turnout	SIDD	Significance
Economic Inequality (SIDD)	.975	1	.000
Voter Turnout	1	.975	.000
N			14

The regression analysis testing hypothesis 2 (in the United States, higher levels of economic inequality, measured by the SIDD coefficient, lead to decreased voter turnout rates) produced a correlation coefficient of -0.559. The result was statistically significant to the 0.05 alpha level. As income becomes more disproportionately distributed, measured by a 0.10 unit change in the SIDD coefficient, voter turnout decreases by 0.559%. This reaffirms the findings above. There exists a negative relationship between economic inequality, measured both by the GINI coefficient and the SIDD coefficient, and voter turnout. Table 5 below illustrates the specifics of this analysis.

Table 5: Unequal income distributions, measured by the SIDD coefficient tend to decrease voter turnout – controlling for whether or not an individual attended 4 years of high school or more and levels of trust

	Voter Turnout	Significance
Economic Inequality (GINI)	-0.559	.017
Education	.720	.000
Trust	-0.270	.001
Constant	.222	.005
N		14
Pseudo R-Squared		.068

Results: Supplemental Analyses for Confirming Credibility of the Prior Findings

To ensure the compatibility of using the SIDD versus the GINI coefficient, a correlation analysis was executed to identify how much the two measures of economic inequality correlate for validity, and the accuracy of interchanging them. As indicated below in table 6, the correlation between the two measures was significant and positive. As the SIDD increased, the GINI did as well.

Table 6: Results of Correlation Analysis between GINI & SIDD

	GINI	SIDD	Significance
Economic Inequality (GINI)	1	.840	.000
Economic Inequality (SIDD)	.840	1	.000
N			14

A second analysis was undertaken to reconfirm the credibility of these findings. The variation between mean scores was tested between the SIDD and GINI variables, using voter turnout as the constant dependent variable for the purpose of identifying if a substantial and significant variation existed. Since the SIDD and GINI were identified as strongly correlated in the prior analysis, reaffirming this finding would require a result of little variation between the two when examining their relationship with a t-test analysis. Table 7 illustrates this result. The GINI coefficient and the SIDD coefficient do not significantly vary from one another.

Table 7: Results from T-Test Analysis: SIDD & GINI

	t	Significance
SIDD	-4.821	.001
GINI	3.604	.004
Constant	2.767	.018

Results: Economic Inequality Effects on Voter Turnout – Cross-Sectional Analysis

Within the full sample of 50 states, plus the District of Columbia (N=51), the minimum GINI coefficient was recorded as 0.419, while the highest recorded GINI was 0.532, demonstrating the range of this variable, with a mean of 0.454 (SD= .021) across the entire state data set. An examination of the voter turnout in these states found a minimum recorded turnout of 26.2% and a maximum voter turnout of 54.3%, representing the range of this variable. As a result, the subsequent mean for the state sample voter turnout was 40.25% with a standard deviation of 6.38 (SD=6.38).

The regression analysis testing hypothesis 3 (in the United States, states with higher levels of economic inequality have a lower voter turnout rate compared to states with lower levels of economic inequality) produced a correlation coefficient of -0.552. This relationship is significant to the 0.01 alpha level. States with a more disproportional distribution of economic inequality experience a decrease of voter participation within that state by 0.552%. Table 8 below illustrates the specifics of this analysis.

Table 8: Results of Correlation Analysis between GINI for each state and Voter Turnout

	State GINI	State Voter Turnout	Significance
State GINI Coefficients	1	-0.552	.000
State Voter Turnout	-0.552	1	.000
N			51

In order to examine if this relationship is consistently strong across all states or whether a variation existed between higher inequality states and lower inequality states, the dataset is categorized into two subgroups: high inequality states and low inequality states. The mean GINI score (0.454) was used as the cut-off point with all states presenting with a lower GINI coefficient comprising the Low Inequality Group and all states presenting with a GINI coefficient above 0.454 being categorized in the High Inequality Group. Due to length, the dataset illustrating the two resulting subgroups of data and the states that comprise each can be found in the appendix.

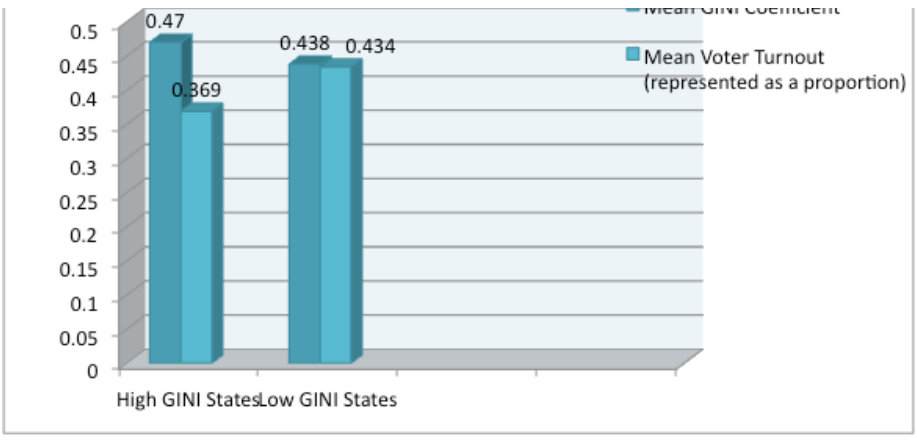
A regression analysis was first run within the High Inequality Group, producing a correlation coefficient of -0.474. As inequality increased in the high inequality group, the voter turnout decreased by 0.474%. The resulting p-value was 0.0167, which is statistically significant at an alpha level of 0.05. In contrast, the regression analysis in the Lower Income Inequality Group produced a correlation of -0.087, indicating a negatively correlated relationship, but one that was much weaker than that which presented in the high inequality group. This correlation was not statistically significant. This analysis shows the effect of economic inequality on voter

turnout has greater propensity in accordance with the level of inequality within the state being examined.

In an effort to identify if the apparent discrepancy between low and high economic inequality groups is genuinely significant, the mean GINI scores for each group, as well as mean voter turnout results, were examined within a t-test analysis. The mean voter turnout in the high inequality group was 36.95% with a standard deviation of 4.91, while the mean voter turnout in the low inequality group was 43.42% with a standard deviation of 6.07. The t-test proved statistical significance between the two means.

The mean GINI coefficient for each group was also calculated, resulting in a mean of 0.470 for the high inequality group with a standard deviation of 0.016 and a mean of 0.438 in the lower inequality group with a standard deviation of 0.009. These descriptive statistics were run through a t-test analysis, which showed a statistically significance between the two means. Figure 1 illustrates this variation between the two groups, as well as the relationship between the two variables within each group for comparison.

Figure 1 Illustration of the Gap between GINI & Voter Turnout in each Group



Discussion and Implications

The purpose of this study was to examine the impact of economic inequality on voter turnout in the United States. This was comprehensively achieved by examining different measures of economic inequality on voter turnout both longitudinally, examining national levels of voter participation, and cross-sectionally, examining state-wide levels of voter participation.

In a longitudinal capacity, both the GINI coefficient and the SIDD coefficient have shown that inequality has profoundly increased over the years. The increase in economic inequality has led to a correlated decrease in voter participation when controlling for levels of education and trust. This outcome is significantly consistent, regardless of whether the SIDD or the GINI was used, or a longitudinal versus a cross-sectional analysis was conducted. The results are consistent with the three main hypotheses within this study.

Theoretical Implications

The t-test analysis conducted using the cross-sectional data explained the mechanisms of the decrease of voter turnout accompanying increased economic inequality. Dividing the dataset into a High Inequality Group (states with a GINI coefficient above the mean) and a Low Inequality Group (states with a GINI coefficient below the mean) reflected that, although the Lower Income Inequality Group had a negatively correlated relationship between economic inequality and voter turnout, this relationship was one that was much weaker than the

relationship in the High Inequality Group. States that have more income inequality have significantly lower voter turnout rates than state with lower income inequality.

Making the assumption that individuals who compose a state are an accurate reflection of the state as a whole, the results of such data can be extrapolated to state that individuals that experience more income inequality have significantly lower voter turnout than individuals that experience lower income inequality. The implications of such an assumption stand in opposition to Conflict Theory. Conflict Theory purports when economic inequality increases, those within the lower socio-economic classes of society will have an incentive to vote, increasing voter turnout rates. This results in a positive relationship between economic inequality and voter turnout. Not only is there a significantly negative relationship between economic inequality and voter turnout, tested multiple ways, the assumption refutes Conflict Theory by showing individuals that experience more income inequality have significantly lower voter turnout rate than individuals that experience less income inequality, not higher.

Although Resource Theory and Relative Power Theory both support the negative relationship between economic inequality and voter turnout reflected within the results, Relative Power Theory is supported by the analysis. Relative Power Theory states that an increase in economic inequality increases political participation of the upper socio-economic classes of society in order to negate the political efforts of those in the lower classes and to retain power.

This increase in voter turnout within the upper classes of society leads to a decrease of voter turnout of the lower socio-economic classes over-time, due to demotivation or indifference.

If Relative Power Theory were correct, states with high economic inequality would experience a decrease in voter turnout since the upper classes within the state would have increased efforts of voting in order to decrease political participation within the lower classes. This would lead to an indifferent lower class demotivated to participate in voting, and on overall decrease in state-level voter participation. In states with lower levels of economic inequality, the upper classes would not have as much of an incentive to negate the vote of lower classes due to more equal distribution of income, therefore, according to Relative Power Theory states with higher levels of economic inequality will experience lower levels of voter participation than states with lower levels of economic inequality. As per the results of the t-test analysis conducted using the cross-sectional data, the data reflects exactly this. The Low Inequality Group of states experienced a weaker correlation between economic inequality and decreased voter turnout than the High Inequality Group of states. States that have more income inequality have significantly lower voter turnout rates than state with lower income inequality.

Resource Theory states that increases in economic inequality fosters indifference for voting within the lower classes of society due to lack of resources needed to participate in voting. The results of this study do not support nor discredit this theory since this study measured

economic inequality, and not individual economic levels. However, the results of Solt's 2008 study, which used Resource Theory as its underlying theoretical framework, could be better used to support Relative Power Theory. Solt (2008) divided the population of the United States into quintiles, based on income, and examined the effects of economic inequality on political discussion and voter turnout within each quintile. He found a significant negative relationship between economic inequality and voter turnout in every quintile with the exception of the richest quintile. As income inequality increases, political engagement among the lower quintiles declines, but the political engagement of the upper class increases. This not only supports Relative Power Theory, but also supplements the results found within this study. The effect of Relative Power Theory can result in significant political and societal implications within the United States.

Political and Societal Implications

Due to the results of this study, and the results of prior literature, Relative Power Theory is assumed to be true. With increasing economic inequality, it is the upper-classes within the United States that participate in voting while the voter turnout participation decreases within lower-classes of society. This could fundamentally result in political representatives winning elections based on an un-proportional electorate, representing and promoting policies beneficial

only to the upper classes within society. This has potential to increase policy made that results in an increase of economic inequality, perpetuating this negative cycle.

Politically, the effects of un-proportional representation that result from economic inequality could undermine the conceptual framework the United States' government was founded on. The government is supposed to be a representative democracy, equally representing all citizens. Elected representatives are elected in order to represent the entirety of their district or state, not just a certain demographic. The effects of economic inequality on voter turnout undermine the system of a representative democracy and the ideals that the government was based upon. It would be inequitable if such a system of government were to only represent the wealthy and present policy in their favor only.

In a societal capacity, such an un-representative government that promotes policies benefiting the upper class could result in non-compliance within society. As resource theory explains, the increased voter participation seen within the upper class of society is due to the group's initiative to retain their political power. Due to this, it is the lower economic classes that become discouraged to vote. This discouragement could reflect lack of trust in the electoral process, lower classes of society could realize the results of the increase of voter participation within the upper classes, or realize the policies made by congress benefit the upper class, and loose faith in elections and the government. Such negative altitudes are important beyond the

societal level as they could not only result in non-compliance of the political process, realized by the results in this study, but non-compliance in political laws, policy, or government. This non-compliance could prove to be important to all classes within society and the political system, therefore making the results of this study significant to all demographics.

Possible Solutions

In order to combat non-compliance in the electoral process within the lower class and facilitate a representative congress with policies beneficial to all demographic, policy solutions could be introduced in order to alleviate the negative impacts economic inequality has on voter turnout. Such solutions could combat 1) the increasing economic inequality or 2) the lowered voter turnout.

The result of introducing policies that aim to impede economic inequality could stop the continually decreasing voter participation within the lower economic classes. However, if policymakers are aiming to increase voter participation, policy should be focused on not only halting the growth of economic inequality, but also reversing it. Such policies could include promotion of free education for the lower economic classes in order to increase household income, welfare policies, or income distribution policies. Such a reversal of economic inequality could increase voter participation – supported by the results of the t-test conducted within this study. The t-test reflected states with lower economic inequality had higher statewide levels of

voter participation. Therefore, alleviating economic inequality should result in increased voter participation.

Policies could also be introduced in order to combat the lower voter participation within the lower class, which is the result of economic inequality. Such policies could include providing an incentive to vote (for example a tax-credit), establishing Election Day as a national holiday or promoting media campaigns in order to combat the demotivation seen within the lower class. A proportional representation electoral system could also be implemented within the United States in order to motivate lower classes within society to vote, due to the large impact each individual vote has within a proportional representation system versus winner-takes-all. By combating the lowered voter turnout, elected officials would become more representative and reflective of the demographics within society. This itself could also lead to better policies that reflect society as a whole, leading to more representational policy to be made, breaking the negative cycle seen between economic inequality and voter turnout.

Conclusion

The purpose of this study was to examine the effects economic inequality has on voter turnout within the United States. This was tested by longitudinal and cross-sectional analyses using two different measures of economic inequality, the GINI coefficient and the SIDD coefficient. It was also tested with two different units of analysis, the nation as whole and

individual states. The results of the analyses showed an increase of inequality over time significantly leads to a decrease of voter turnout and states' with higher levels of economic inequality have a significantly lower voter turnout compared to states with lower levels of economic inequality.

Data was collected and analyzed for the years 1960-2012. Controls used included levels of education and levels of trust within the national government. The results of this study stand to support Relative Power Theory, which purports increases in economic inequality result in increases in voter turnout rates within the upper classes of society but decreases in voter turnout rates within the lower classes of society. The results of this study show that increases in economic inequality significantly result in decreases in voter turnout, but more specifically, states that have higher economic inequality experience a larger decrease in voter turnout rates compared to states with lower economic inequality.

This study has profound societal and political impacts. Literature has shown those within the lower socio-economic classes of society participate in elections less than those within the higher socio-economic classes of society (Boix and Stokes 2003). Since economic inequality decreases voter turnout rates, it would be those within the lower socio-economic classes of society that would be affected the most by this decrease. This can lead to inadequate representation of the lower socio-economic classes within government bodies, leading to policies

that are harmful to the lower class, further increasing economic inequality, perpetuating a negative cycle. Therefore, the effects of the relationship between economic inequality and voter participation can be seen as affecting the nation as a whole, as it affects the electoral system, classes within society, and the national economic environment.

This study is a necessary component for the formulation and realization of solutions to ameliorate the negative cycle lowered economic inequality can have on unequal representation within government. The results can influence policy change either in the direction of alleviating economic inequality, thereby increasing voter turnout rates, or enacting policies that will counter the lowered participation rates within the lower class. Overall, improving the intended functions of a representative democracy.

Limitations and Future Areas of Study

Among the potential limitations of this study is the sample size. A larger sample size would have presented a greater advantage, particularly pertaining to extrapolation. The dataset was limited to the years 1960-2012, since 1960 was the earliest year where data is available for the GINI coefficient and the SIDD coefficient. Throughout these years it has been shown that economic inequality has been increasing within the United States. It would pose an interesting question to examine the effects of economic inequality on voter participation within the United States when economic inequality was decreasing. The results of such an analysis would be useful

to examine if the relationship observed within this study was correlation or causation. If the relationship between economic inequality and voter turnout was causational, a decrease of economic inequality should lead to an increase of voter turnout. For lack of data available before 1960, this analysis could not have been done within this study. In addition, there may be other means of measuring economic inequality beyond the GINI coefficient or the SIDD coefficient.

Data and the resources needed were also unavailable in order to conduct analysis on the individual level. The variables used in this study to measure economic inequality were limited to national measures of the GINI and SIDD coefficients or statewide measures of the GINI and SIDD coefficients. If resources were unlimited, surveys could be conducted in order to measure voter turnout, perception of economic inequality, levels of trust in government and education levels, at the individual level. This would lead to more accurate analysis and extrapolation of the data. Individual level analysis is also needed in order to support the theoretical mechanisms as to why economic inequality may affect voter turnout.

As a result of the possible limitations mentioned above, future studies should replicate these findings, supplementing the data available and incorporating additional measures of the variables used. Future areas of study should also conduct surveys as a mean of acquiring individual analysis, this would prove useful in order to examine the theoretical mechanisms as to

why economic inequality, or an individual's perception of economic inequality, would lead to decreased voter turnout.

Appendix

The two resulting subgroups of data used in the cross-sectional analysis and the states that comprise each are reflected below.

High GINI (inequality) Group

State	Voter Turnout (%)	GINI
Alabama	40.8%	.472
Arizona	35.9%	.455
Arkansas	35.3%	.458
California	35.8%	.471
Colorado	46.5%	.457
Connecticut	41.7%	.486
D.C.	26.2%	.532
Florida	36.3%	.474
Georgia	35.5%	.468
Illinois	38.3%	.465
Kentucky	40.7%	.466
Louisiana	36.8%	.475
Massachusetts	44.6%	.475
Mississippi	35.5%	.468
Missouri	42.4%	.455
N. Jersey	31.4%	.464
N. Mexico	38.8%	.464
New York	30.8%	.499
N. Carolina	36.4%	.464
Pennsylvania	40.1%	.461
Rhode Island	41.2%	.467
S. Carolina	37.6%	.461
Tennessee	32.8%	.468
Texas	26.9%	.469
Virginia	35.4%	.459

Low GINI (inequality) Group

State	Voter Turnout (%)	GINI
Alaska	48.5%	.422
Delaware	44.1%	.440
Hawaii	36.0%	.433
Idaho	39.4%	.433
Indiana	35.6%	.440
Iowa	47.9%	.427

Kansas	**39.2%**	**.445**
Maine	**54.3%**	**.437**
Maryland	**41.8%**	**.443**
Michigan	**42.7%**	**.451**
Minnesota	**52.1%**	**.440**
Montana	**46.8%**	**.435**
Nebraska	**35.5%**	**.432**
Nevada	**35.3%**	**.448**
New Hampshire	**44.2%**	**.425**
N. Dakota	**45.3%**	**.433**
Ohio	**43.6%**	**.452**
Oklahoma	**36.4%**	**.454**
Oregon	**48.7%**	**.449**
S. Dakota	**51.5%**	**.442**
Utah	**33.6%**	**.419**
Vermont	**48.5%**	**.444**
Washington	**48.4%**	**.441**
W. Virginia	**36.1%**	**.451**
Wisconsin	**49.7%**	**.430**
Wyoming	**43.8%**	**.423**

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