

Economic Inequality and Voter Turnout in High-Income Democracies

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Author's Declaration

I, the undersignedHayley Chavarria..... hereby declare that I am the sole author of this thesis.

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Abstract

Voting is a fundamental form of political participation. It is vital for democracies to take into account the will of its citizens, and it is necessary for citizens from all segments of society to respond by voting. With economic inequality growing in many democracies, it is necessary to know how, if at all, this affects voting behavior. There is some evidence to suggest that economic inequality is a factor in whether or not people vote. This study will look at 22 elections in high-income democracies and assess a possible correlation between economic inequality and voter turnout. The elections occurred from 2010 to 2013. From this sample, no relationship was found between the Gini index measures and voter turnout.

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Introduction

Voting behavior is interrelated with the performance of a democracy. Democracy is a form of government in which people elect their leaders. It is characterized by free and fair elections for the most important offices in government, equality among citizens, and protection of human rights. One of the most important elements of democracy is the participation of its citizens. It must have the consent and participation of citizens to elect leaders that will run the government and create policies and laws that shape life in a country. It is the duty of those elected to respond to the needs to their citizens. Democracies depend on participation of citizens to make their needs and preferences known to the representatives. One of the most direct and important ways this occurs is through voting. Voting has been declining in democratic elections (Stockemer & Scruggs, 2012). With less participation, there is less representation of preferences in government. Therefore, it is worth exploring why voting is declining in democracies and the potential causes behind it. One of these includes the effect economic inequality has on political participation. The levels of economic inequality in many democracies has risen (Solt, 2008). It is worthwhile to explore if economic inequality is one of the reasons behind lower voter turnout because it is likely to increase if left unaddressed.

Some research has explored the issue and has found the two factors, economic inequality and voter turnout, to be negatively related; as inequality rises voter turnout declines. This is troublesome because the decline is not often found to decrease equally among social classes but occurs in the lower income classes (Solt, 2008). If this is in fact occurring in democracies, it translates to unequal representation in government. However, even though many studies find that a negative relationship exists between these two factors, there is no consensus found in the research. Consequently, this topic should continue to be explored. If economic inequality is indeed found to be a contributing factor, then democracies can be better able to address unequal participation among

citizens. Equal participation is needed to lead to policies that will be responsive to all segments of society. If one income class is being overrepresented and another underrepresented, then a democracy faces a challenge of becoming more and more unequal.

Attempting to explore this relationship will include a review of the existing theories regarding voting behavior and economic inequality. The first is power theory, which predicts a negative relationship between economic inequality and voter turnout. Conflict theory predicts that voter turnout would increase as economic inequality increases (Solt, 2008). This paper will assess the relationship between these two variables and test whether a significant correlation exists. Elections from high-income democracies that took place between the years 2010 and 2013 will be included in the sample, for a total of 22 elections. The countries include the following: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United States and the United Kingdom. As a measure of economic inequality, the Gini index measure will be used. Voter turnout will be measured as turnout among registered voters. Election data from the International Institute for Democracy and Electoral Assistance as well as data contained in the Quality of Government Database will be used. I hypothesize a negative relationship to be found between these two variables.

Chapter 1 begins by providing some general information that relate to topic including voter decline, political participation, and describing how economic inequality can be determined. Chapter 2 will have a review of the theoretical background relating to political participation and inequality, as well as the research that supports them. The last chapter will describe the data that will be used to assess the relationship between these two variables; the last section of the chapter will contain the results and discussion.

Chapter 1- Political Participation, Voting, and Economic Inequality

Political participation plays a vital role in a democracy as it allows citizens the opportunity to communicate their needs and preferences to their government. It can be defined as “...activity that leads to the intent or effect of influencing government action-either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies,” (Verba, Scholzman& Brady 1995: 38). There are several ways citizens can engage in political participation. These generally can include things such as voting, volunteering for campaign work, or donating money to a candidate or party. Voting in an election is one of the most basic forms of political participation. There has been a decline in voting in recent decades among established democracies; turnout has fallen by an average of 10 percentage points (Stockemer& Scruggs, 2012). This is a negative occurrence in a democracy for all citizens, because it means unequal representation and thus policies that favor one group over the other. Declining voter turnout can signify a lack of representation of certain groups of society or a general lack of engagement by citizens (Franklin, 2004). Representatives that serve the public are more likely to pay attention to those that communicate their preferences (Verba, Scholzman& Brady, 1995).

This decline in voter turnout does not affect all segments of society equally; the poor, the low educated, and the unemployed are less likely to engage in politics (Makszin& Schneider, 2010). Democratic responsiveness is hindered by unequal political participation; unequal voter turnout leads to unequal political influence. This relationship does not seem to be true with only voting behavior, but other forms of political participation as well. It has been found that in some countries the more advantaged citizens participate in political activities such as donating money to campaigns, working in election campaigns, or participation in demonstrations. Given the many forms of political participation, voting is less unequal but again vitally important as democracies depend on

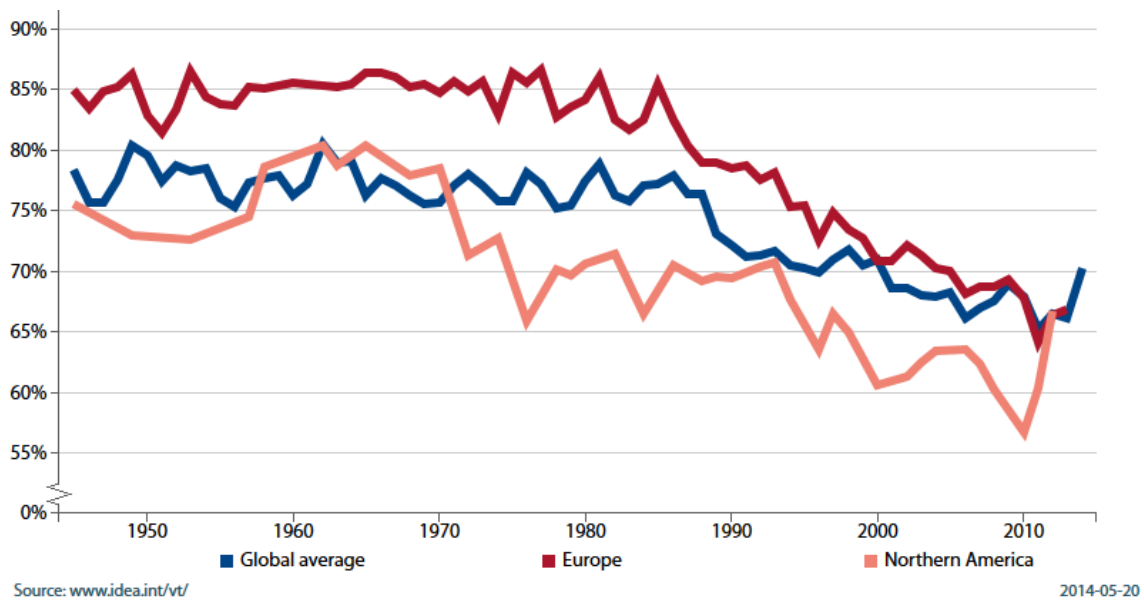
citizen participation. If levels of political participation among citizens is unequal and systematically bias against the less well-to-do, the effect this has on democratic representation should be explored further (Lijphart, 1996).

There are many options for ways to participate in democracy, and some forms of participation may depend on a range of factors. Some may volunteer to work on a campaign because they have more time, some may donate money because they are in a financial situation to do so, or some enjoy such activities. Though casting a vote usually requires at least some time, whether it be getting to a polling place or filling out a ballot to mail, it may be the simplest and most direct form of participation. For this reason, I focus on voting more specifically in this paper. Ideally every eligible citizen should be able to vote in elections in their country.

1.1 Voter Turnout

To look at the decline in voter turnout more closely, research shows countries vary in the amount of voter turnout seen. Voter turnout in general has declined in developed countries. The average European voter turnout has dropped, both in the Western European states and the Central-Eastern States (Horn, 2011). There are some countries that have experienced higher levels of participation such as Sweden, Norway, and Denmark compared to others such as the United Kingdom, the United States, and Canada that have experienced large falls in participation (Lister, 2007). Below is a chart showing voter turnout among registered voters in all of Europe and North America in parliamentary elections. There is a clear decline in turnout; the voter turnout in these regions follows with the decline in the global average. The chart contains data from elections starting in the year 1945 to the most recent election data available for the selected countries.

Figure: 1 Voter Decline in Europe and North America



Source: Institute for Democracy and Electoral Assistance (IDEA)

Looking more closely at voter decline in individual countries and regions, a report by the International Institute for Democracy and Electoral Assistance (IDEA) looked at elections in Western European countries after 1945 to June of 2003. The elections analyzed were for national political office in Western European countries including: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland the United Kingdom, and others. Average voter turnout among registered voters in Western Europe has declined from the early to mid-1990s in national parliamentary elections. Of these Western European countries, Austria has had the second highest voter turnout and a high voter turnout compared to other countries globally. However, there has been a decline in voter turnout in parliamentary elections beginning in the 1980s. The average rate of decline was 7% in the 1990s; in presidential elections the average rate of decline was 15% beginning in the 1980s. Belgium ranks even higher than Austria in the average percentage of voter turnout,

although it has a compulsory voting system. The rate of voter turnout in Belgium has not fallen below 90% since 1945. Denmark does not have a compulsory voting system, but has maintained relatively stable voter turnout with an average turnout of 86% in parliamentary elections. In Finland, voter turnout has declined in the 1990s but increased slightly, to 70%, in the 2003 elections. France has a lower turnout compared to some of the other Western European countries. Turnout in parliamentary elections has declined but is higher for the presidential elections held there. Germany's most recent parliamentary election analyzed in the report took place in 2002, with a turnout of 79%. Voter turnout has varied in German parliamentary elections, but it had a 91% turnout in 1972. Greece has compulsory voting laws in place, although they are not always strictly enforced. Turnout there has declined since the 1980s (IDEA, 2004).

Ireland has one of the lowest voter turnout rates of these countries, however it has had a more stable trend in turnout rates. The most recent election data in the report, which occurred in 2002, had the lowest turnout rate at 62%. Turnout for the presidential elections in Ireland has been lower compared to the parliamentary elections. Italy has one of the highest voter turnouts in the world at nearly 90%; though there has been a slight decline in parliamentary elections. Luxembourg also has a high turnout rate averaging around 90%, there has also been a slight decline there recently. The same is true for voter turnout in the Netherlands. The country had compulsory voting laws until the year 1967. Since then, there has been a decline in voter turnout, dropping from 95% with the compulsory voting laws in place to around 82%. Norway has had a declining voter turnout beginning in the 1990s, and the 2001 parliamentary elections saw a turnout of 75% of the registered voters. The average voter turnout is around 80% in Norway. Portugal as well has experienced a decrease in voter turnout since the 1990s. Turnout in Portugal has declined in every election since 1975. The average turnout in parliamentary elections is 62%, and presidential elections have a lower average; the 2001 presidential election only had 50% of registered voters cast a vote. Spain saw a

decline in voter turnout in the 2000 parliamentary elections compared to the existing national average of 75%. Sweden experienced a decline in voter turnout in national parliamentary elections in the late 1990s and 2000s. Voter turnout was 80% for the 2002 parliamentary elections while the average since 1945 was 86%. Switzerland has one of the lowest voter turnouts in Western Europe. In parliamentary national elections the average turnout since 1947 is 57%. There was a decline in the 1990s with a turnout of 42%; this drop was significant with a turnout at 72% in 1947. The United Kingdom showed a decline in turnout in the 2001 elections, it has declined in the last two elections. 59% of registered voters voted in the 2001 parliamentary elections. There is lower participation for European Parliament elections compared to national elections in the United Kingdom (IDEA, 2004).

The United States has lower voter turnout compared to many other Western European countries. Voter turnout on average has been higher in the presidential elections. The average amount of registered voters that voted since 1945 is 84.7% and 64.4% in midterm elections. Looking at numbers of the voting age population the numbers are 58.5% and 47.5% respectively (IDEA, 2014). Australia has a compulsory voting system, it has been in place since the year 1918. Voter turnout in Australian elections has not fallen below 90% since the year 1924 (Australian Election Commission, 2014). New Zealand has seen a decline in voter turnout among registered voters. Turnout was about 90% in the 1981 and 1984 elections, but the 2011 election had a turnout of 74.2% (Statistics New Zealand, 2012). Canada also has experienced a decline in voter turnout, with the 2011 election having some of the lowest turnout in Canadian history with a 61.1% turnout rate (Elections Canada, 2013).

1.2 Economic Inequality and Measurement

Simultaneous with this decline in voter turnout in is an increase in economic inequality in advanced industrial democracies (Solt, 2008). Much of the research assessing economic inequality uses the amount of income inequality to measure this concept. The measure of income inequality is commonly studied in terms of household income (Nolan, Marx & Salverda, 2011). Yet, there is some variation in how income inequality is calculated by different groups or agencies. First and foremost, there is more than one existing definition of income. There are three: market income, gross income, and disposable income. Nolan, Marx and Salverda (2011: 11) explain: market income, which can be defined as “...the sum, across all household members, of gross (usually excluding employer social insurance contributions) labour market earnings from employment or self-employment, with income from savings and investments such as rent, interest and dividends.” The second is gross income and is defined as “adds to market income cash transfers from the state such as social insurance or social assistance benefits, together with any private transfers received from other households such as gifts, alimony, or child support payments.” The third is defined as disposable income which “deducts from gross income the direct taxes and social insurance contributions paid, as well as any private transfers made to other households,” (Nolan, Marx & Salverda, 2011: 11).

There are several issues that arise from these three different definitions. One debated component refers to income from imputed rent. Rental income is not included by many countries when calculating income distribution statistics. The Canberra Group, a consensus group formed from the effort to reach an agreement on practical problems relating to household income statistics, recommends that this type of income can be attributed to individuals who own their own home or those who pay below-market rent. The reasoning being is that these individuals have an upper hand over others that pay rent. Yet imputed rent is not tantamount to cash; it cannot be used for other

needs. Including imputed rent as income may not always be adequate for this reason. Another item that is not always included when calculating income benefits are those from employers. These can include use of a company car, subsidized meals, free or subsidized housing, or payment of household expenses. In some countries, these are included due to the type of tax system, but not all of the items have been included consistently over time. Household transfers are often left out of measurement as well (Nolan, Marx & Salverda, 2011).

In addition to the discussion of what items should be included when calculating income, some information is obtained directly from a government's records while other information is estimated. In some cases income can be reported directly but things such as social insurance contributions are determined based on tax codes. An additional issue that arises when gathering information on income is that some respondents do not give all the requested information. Statistical agencies may estimate the missing values in one form or another, but the processes may vary and are often not known. Some datasets employ the practice of top-coding high incomes which can affect the levels of reported income. Some data is gathered from administrative sources and some using household surveys. Some countries have kept these records from tax records while others have used surveys. The length of time in which the income measurement took place is also a significant factor to consider. A longer collection time period might show less income fluctuations. Most countries measure income over the span of a calendar year. There is also the question of whether or not to measure income on an individual level or to add the incomes together of those contributing to the household. This can be an important factor for the living conditions of an individual because there can be more than one recipient of the income. It is often assumed that household resources are equally shared, which may not always be accurate. However, it seems to be superior to the alternative of assessing each income separately. Yet, the debate does not end there, as the same income level means different standards of living for a different number of household

members. Simply calculating the income per capita does not account for children and larger households that can benefit as the cost of housing one extra in an existing larger family is slight. Even the actual definition of what constitutes a household is debatable; some countries include those such as live-in domestic workers and others only include the nuclear family unit. These issues are sources of variability that exists when measuring income and should be taken into account when assessing measures of income. (Nolan, Marx & Salverda, 2011). With such differences in measurement of income existing, it is useful to be aware of how income levels were assessed in a study. As different measures of income can present varying pictures of what economic inequality looks like in a country, studying the effects of it can be quite challenging.

There are some existing measures that summarize the level of income inequality in a country and are often used in various areas of research. One commonly used measure is the Gini Index. The Gini Index “measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution,” (World Bank, 2014). The Gini Index is tied to the representation of income equality through the Lorenz Curve. “The Lorenz Curve plots the percentage of total income earned by various portions of the population when the population is ordered by the size of their incomes,” (Gastwirth, 1971: 1037). In this measure, 0 represents perfect equality and 100 represents perfect inequality. There are some disadvantages to using this method however, for instance the index varies as the distribution varies, regardless of whether the transfer of income occurred between the rich or the poor. Also, the values differ among subgroups and the society as a whole (World Bank, 2011). It is clear that there are many methods of assessing income inequality, which creates options for this measurement. Different methods of measurement can provide different outcomes when issues relating to economic inequality are studied. Yet, it is a useful tool for representing economic inequality in research and is often selected as a trusted measure.

Chapter 2- Theoretical Background

As the relationship between economic inequality and political participation has been explored previously, there are some existing theories on the matter that attempt to explain what inequality does to participation in a democracy. The first is power theory; it predicts a lower voter turnout in an unequal society. Then there are rational models, which lead to a more detailed explanation of the relationship provided by conflict theory; conflict predicts an increase in voting when inequality is high. There is generally more support for power theory compared to conflict theory. There is some research to support each theory and some that finds support for neither of these theories, finding no relationship between the variables.

2.1 Power Theory

One prominent theory that attempts to explain the relationship between economic inequality and voting behavior is power theory. Power theory predicts that economic inequality will have a negative impact on voter turnout and political engagement in general (Solt, 2008). It proposes a close relationship between the way income is distributed and the way power is distributed. Wealth can be seen as a means of power; such power can be used to influence the political process. This can occur through the giving of donations to a political party or candidate. As the wealth of a country become more concentrated, the power does as well, with the wealthier citizens gaining more power and influence compared to the poorer citizens. This allows those with higher incomes to be better able to relay their preferences to politicians and the political process generally; the wealthier population then will be more likely to see their preferences chosen (Stockemer& Parent, 2011). This influence extends beyond the elections of candidates. Power theory also adds that the wealthier citizens have a greater impact on agendas. This means that in some cases issues that are of interest to poor citizens are not recognized. This does not always occur intentionally, but as wealthier citizens

are better able to have their voices heard those issues that may be important to poor citizens are left off the agenda. The lesser amount of influence the poor have in the political process and setting of the agenda, the more discouraged they can become regarding seeing their political preferences enacted. The poor may disregard their own political preferences and for one reason or another, accept their position in society (Solt, 2008). There is some reasoning to suggest that this behavior, lower political engagement among the poor, is a reasonable response given the wealthy have great political power (Goodwin & Dryzek, 1980). Pateman writes, "...Given their experiences of, and perception of the operation of the political structure, apathy is a realistic response, it does not seem worthwhile to participate," (1971: 298). Poor citizens may choose not to participate politically, leading to more biased policies from lack of representation of all groups in society. If poor citizens are continually excluded from having issues they care about left off the agenda entirely, this could reinforce the behavior of abstaining from voting. (Stockemer & Parent, 2011). As the political system continues in this manner, of failing to include the preferences of poor citizens, choosing to avoid political participation is an increasingly rational option (Solt, 2008).

There are studies that provide support for this theory. Looking at individual cases, there is some support for power theory in the United States. One such study, conducted by Robert Freeman, reviews data that looks at the patterns of voter turnout among different socioeconomic groups in the United States. The author notes that the United States ranks 138th in voter turnout; it is far lower than many other advanced industrial democracies. Freeman looks at a number of variables behind this rate of turnout, including socioeconomic status. Freeman assess data from two surveys, the Current Population Survey data (CPS) and the American National Election Studies data (NES) and finds that there is evidence for inequality in voting. It is the lower income, less skilled, less educated, and younger generation where this drop has occurred. Regarding the relationship between voter turnout and socioeconomic status specifically, the author assess CPS statistics from

1964 to 1988 which measures the socioeconomic status by quintile of income and notes that “each measure of socioeconomic status show greater falls in turnout for lower status than for higher status groups,” (Freeman, 2004: 26). It is important to note that the data from the CPS surveys used to make this determination has varied over the years, with different numbers of people falling into the income quintiles. Therefore, the methods used in this study are arguable as the data on income has not been consistent (Freeman, 2004). This study faces some of the challenges discussed earlier that arise from measuring income. It is difficult to gather data on income, and variances in this measure can make it more difficult to assert the relationship between voter turnouts in different income classes. The income data from the CPS surveys was recorded as an exact amount but was put into categories of incomes. Still, Freeman finds some evidence over the time period of 1964 to 2000 in his review. He finds that income inequality and voting has raised the income level of the median income level voter in the United States; with more voters with higher incomes, policies are more likely to be in favor of the rich.

More support for power theory is found in a study conducted by Galbraith and Hale (2006). They looked at income inequality in the United States as well as the individual states. The election period examined is from 1969 to 2004. The authors create inequality measurements for the individual states, they use Gini coefficients. The data is collected from the Census Bureau Current Population Survey. The authors note that the Gini coefficient of family income level has increased in all the states over the period of time examined. The increase was around 20%, from .356% to .427% in 2004. After establishing the increasing income inequality in the states, the authors examine the elections from the years 1992 to 2004. They conclude that higher income inequality does indeed correlate with lower voter turnout. The dependent variable in the study is the percentage of the voting age population during presidential elections between 1992 and 2004. One of the explanatory variables consists of the state’s income inequality, which are the estimates of state Gini coefficient. It

is reported that for the last four presidential elections in the study, states with higher inequality have had a lower voter turnout. The findings also show that the link between inequality and voter turnout have been linked in the past since at least the year 1972. The authors state that the effect of state income inequality has remained present on voter turnout even as the level of income inequality has changed (Galbraith & Hale, 2006). These findings suggest support for the power theory as economic inequality is predicted to depress voter turnout. Though the study only assesses one country, the United States, the results show the same relationship in the individual states. One interesting aspect of this study is that the authors note that as inequality in the individual states has changed the effects on lower voter turnout have not changed much. This may lend some support to Pateman's (1971) statement that voter's perception of the system, for the poor, leads them to believe it is not worthwhile to participate and they may continue to do so from one election to the other.

In continuing to explore regions, a study by Mahler (2002) examines the relationship between income inequality and voter turnout on a regional level. The author notes that previous studies often use income inequality measures on a national level, but this has several disadvantages. The author points out that there is a great amount of variance in income inequality within a country; and the sources of income inequality within regions may be different. The author contends that investigating the regions, as opposed to voter turnout on the national level, will provide greater detail when attempting to answer this question. Data from the Luxembourg Income Study is used to determine subnational levels of income inequality. The study analyzes 12 developed countries consisting of 191 regions from the late 1980s to the early 1990s and data from 8 developed countries, consisting of 149 regions, in the mid 1990s. The regions in the countries examined consist of the existing states or provinces or by longstanding distinctions of administrative or electoral significance. To measure the level of income inequality in households, the author reports both the percentile ratio and the Gini index. The study finds a negative relationship between voter turnout and income inequality.

However, it is noted that the case of the United States alone has an effect on the overall results of the relationship; if the United States was removed from the group of countries analyzed then the results would no longer be statistically significant, yet still negative. The United States also had the greatest degree of income inequality and the lowest voter turnout of those in the sample and is an influential case in the study (Mahler, 2002). Still, examining regions specifically has great value; there is found to be support for power theory in the United States and the individual states. Support for power theory could increase if evidence was also found at the regional level because as the author notes economic inequality varies within a country. There may be a particular region that has a higher level of economic inequality, but when the country is measured as a whole it does not reflect individual regions.

A similar study by Solt (2008) evaluates the effect income inequality has on political engagement in higher income democracies. In addition to electoral participation, Solt also measures political interest and political discussion. For these three variables of political engagement, data is gathered from sources including the World Values Survey, the European Election Survey, and Eurobarometer, among others. Economic inequality is measured using the Gini index. Income is included as an independent variable, with the poorest income quintile coded as a 1 and the highest income quintile coded as a 5. The results of the study show that income inequality had a negative effect on political interest for lower income groups. Political discussion and electoral participation also showed the same relationship for all income groups with the exception of the rich. Each of the three dependent variables measuring political engagement had a negative relationship on political engagement, providing further support for the power theory (Solt, 2008).

While there are studies that show strong support for the power theory, there are some limits to the support for it. Stockemer and Scruggs (2010) explore the question of the impact of income inequality on electoral turnout, but with a larger sample of countries. They point out that many studies that explore the same question include only Western democracies in their case selections. The authors use a more representative sample of democracies; they use non-OECD democracies as well as Western countries. The sample consists of elections between 1970 and 2010; in total, 567 elections. The independent variable in the study is inequality, the Gini coefficient is used as a measure for economic inequality. The authors conclude that there is very little evidence that inequality has a significant effect on Western countries and found the same results for non-Western countries.

There are a number of studies that find support for power theory and a number that do not, which brings about the question why this is the case. One explanation for this could be the cases selected. Some studies look at individual countries, such as the United States, and find strong support for the power theory. There is less support in studies that have a wider sample of countries; this could be a phenomenon that occurs in high-income democracies, which my thesis will further explore. The various studies also include different time periods. Additionally, studies vary in the measurements used to assess economic inequality. As discussed earlier, the lack of consensus on a definition for income and the different sources of such information can provide different results.

2.2 Rational and Resource Models

An existing model in the area of explaining voter turnout is the Downsian rational voter model. It predicts that people will decide to vote or not to vote based on expected utility. The expected utility is the potential gain from having the candidate he or she voted for win, multiplied by the probability of the vote the individual casts as being decisive, and then the costs of voting are

subtracted from this. If many decide to cast a vote in the election, then the chance of one person's vote being decisive is less and the costs outweigh the benefit. On the other hand, if only a small number of people decide to vote in an elections the chance that one person's vote would be decisive increases (Horn, 2011). One theory that attempts to explain the relationship between economic inequality and voting behavior is called the conflict theory, which is discussed further in this chapter. Conflict theory evolved from the Downsian rational voter model (Stockemer& Parent, 2014).

One's own decision to vote or not to note can also potentially be explained by individual income level. Resource theory forecasts voting behavior based on whether or not someone is willing to pay the expected costs of participating. Participating in politics requires resources, time is needed to vote or money is used to contribute to campaigns. Individuals choose to participate based on the willingness to use such resources. It is expected that those with more resources (income) will participate more. So, in a country with inequality those with more resources, or income, are expected to participate more than those with lower incomes. Therefore, inequality should reduce political participation and voter turnout among those with lower incomes (Solt, 2008).

2.3 Conflict Theory

Conflict theory is related to rational choice theories and provides a more specific possible explanation for the relationship between economic inequality and political participation. It predicts that economic inequality will increase voter turnout because inequality increases the possible gains and losses of each group (Stockemer& Scruggs, 2012). It predicts that inequality will give the poor more incentive to engage in politics because of the chance of improving their circumstances. Although, any redistributive policies that might be favored by the poor incentivize the rich to engage in politics in order to oppose them. Due to the expected conflict between the preferences of these two groups, more participate in the political process (Solt, 2008). However, if inequality were to

decrease, there would be more of a consensus over policy because more equal individuals will have more equal preferences (Jaime-Castillo, 2009). It presumes that an individual's voting preferences are based on where they fall in the income spectrum (Stockemer& Parent, 2014).

One study that finds some support for this theory is by Jaime-Castillo (2009). The author looks at the relationship between income groups, voter turnout and measures of inequality that can be used to predict the turnout among income groups. He proposes that inequality affects voter turnout differently across income groups. Looking at a situation with high economic inequality, he explains that the wealthy will have more political power compared to the poor; just as in power theory the imbalance is in favor of the rich. In these circumstances, the middle classes would be more likely to side with the rich as the poor have a less likely chance of succeeding politically and the middle class can maintain their position. In this scenario inequality would increase as policies that favor the rich would prevail, and even if the rich do not participate in large numbers they can remain in power. This would also encourage the rich to participate less, as there is no threat to their political superiority. Alternatively, the author argues a different case in countries with lower inequality. He suggests that in lower inequality settings, the rich do not have as much power, therefore the middle class might not choose to side with the rich. In this case, if the middle class does decide to side with the poor the rich will be forced to participate more politically in order to maintain superiority. The author claims that power and conflict theories can occur as the rich act in accordance with conflict theory predictions and the poor act as is predicted by power theory. In the study, the percentage of turnout among the voting age population is measured. The countries in the study are developed with a wide range in GDP per capita incomes. Regarding the effect inequality has on voting behavior, the author's findings support his the claim that inequality does not have the same effect on all groups. Support for conflict theory applies when the rich have competition with the poor due the middle class supporting redistributive policies (Jaime-Castillo, 2009).

Jaime-Castillo's findings are interesting as he assesses the role of the middle class. Still, in areas where there is high economic inequality he argues for support of power theory. As economic inequality increases in a society the number of middle class citizens would fall, which could minimize the role of the middle class. If this were the case, it seems more likely that a power theory scenario, with a greater imbalance in political power, would continue because the poor have less of a chance to compete with the rich.

2.4 Other Factors That Influence Voter Turnout Rates

While there could be various explanations for why some studies seem to find support for the power or conflict theories and others do not, it is also important to note other possible intervening variables that can affect voter turnout or political participation in general. Geys (2006) discusses many of these factors. Population size can affect the likelihood of a citizen casting a vote. As the population increases, the probability of a vote making a difference in the outcome of the election is seen as less likely; the costs of voting overcome any expected benefits. The closeness of the race is a related factor here, the probability of affecting the result of the elections would increase if the race was close. Generally a larger population size lowers the prospect that one single vote will make a difference. Population stability can have an effect on voter turnout; a stable population can increase voter turnout. Residents that have resided in an area for a longer amount of time may become more familiar with candidates and local issues. A population might develop an identity as a group leads to more social pressure to vote. Population instability may decrease voter rates if some of the population is leaving the area, as those citizens may be more disengaged from local issues. Voting can be habit-forming. The habit of voting may be even more reinforced if a voter has the candidate they voted for win. Campaign expenditures can also have an effect on voter turnout. Campaigns can increase the amount of information available, making the gathering of information about the

elections easier, and can increase the likelihood of voting. Campaigns that do not endorse a candidate or party but focus on encouraging citizens to vote can increase the turnout rates. The number of political parties in the system may increase or decrease the voter turnout rates. A greater number of political parties could offer voters more choices at finding a party they support, which may increase voter turnout. Alternatively, the greater number of choices may make it more difficult for a voter to decide who to support. The last category of factors that might have an effect on voter turnout concern the institutional aspects. Some believe that proportional representation system leads to higher voter turnout or alternatively can reduce it due to coalition forming that takes place, which puts distance between a voter's choice and the outcome. Compulsory voting laws are known to increase voter turnout. Some studies have found compulsory voting laws to be a strong predictor of voter turnout (Geys, 2006).

Given the range of support for each of the theories that attempt to explain the relationship between these two variables, in the next chapter I will examine these variables in 22 high-income democracies. With the variety of methods available, using different ways to assess income and political participation, I will begin the next chapter by discussing which forms of measurement of voter turnout will be used.

Chapter 3 Data, Results, and Discussion

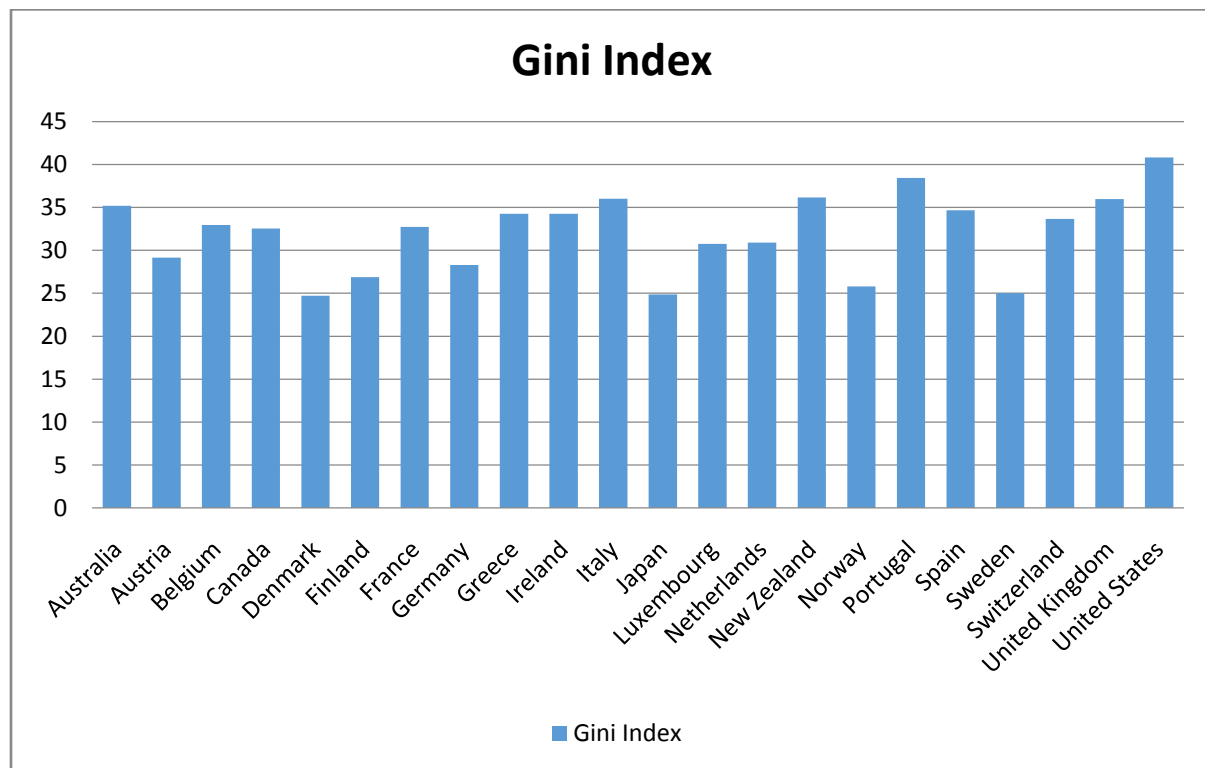
The existing research on this subject does not provide a clear consensus on what the relationship is between economic inequality and political participation. In order to see if a relationship between these two variables exists, I will explore the question in 22 high-income democracies. The Gini index will be used as a way to measure the level of economic inequality in each country. Again, a value of 0 would mean perfect equality and a value of 100 signifies perfect inequality. The data is from a database made available from the Quality of Government Institute. The Quality of Government Institute is a research entity within the University of Gothenburg that maintains datasets relating to a variety of issues. The Gini index measures were gathered from the standard time-series dataset. Below are tables that show the countries, the years the Gini index measures are from and the Gini index measure. A representation comparing Gini index measures across the countries in the sample is shown next.

Figure 2: Gini Index Tables

Country	Year	Gini
Australia	1994	35.19
Austria	2000	29.15
Belgium	2000	32.97
Canada	2000	32.56
Denmark	1997	24.70
Finland	2000	26.88
France	1995	32.74
Germany	2000	28.31
Greece	2000	34.27
Ireland	2000	34.28
Italy	2000	36.03

Country	Year	Gini
Japan	1993	24.85
Luxembourg	2000	30.73
Netherlands	1999	30.90
New Zealand	1997	36.17
Norway	2000	25.79
Portugal	1997	38.45
Spain	2000	34.66
Sweden	2000	25.00
Switzerland	2000	33.68
United Kingdom	1999	35.97
USA	2000	40.81

Figure 3: Below are the Gini index measures for the 22 High-Income Democracies



Source of Data: International Institute for Democracy and Electoral Assistance (IDEA)

The form of political participation I will examine in my study is voter turnout; there are several different ways this can be measured. The International Institute for Democracy and Electoral Assistance maintains databases with various measures to assess voter turnout. IDEA gathers data from national electoral management bodies. The first is called the voting age population or VAP. This is an estimated number of citizens in the country that are over the required age to vote. The most recent available figures on population in a country are used to calculate the VAP. The VAP turnout measure shows the percentage of the eligible voters that voted in the election. However, turnout can also be assessed using a different pool of eligible voters, the number of registered voters can also be used. IDEA gathers information regarding the number of eligible voters in a country

from electoral management bodies. Determining voter turnout from number of registered voters and from the voting age population have both advantages and disadvantages. As many countries have a voting registration requirement, the number of registered shows the number of people that would be able to cast a vote at the time of the election. So, in one sense it shows who is able to vote at a given time, but the voting age population shows all of the potential voters in a country. Still, there may be obstacles for some of voting age to be able to register. In some countries, the registration process might need to be completed in person at offices that are not conveniently located for all voters. Since the VAP is an estimate of the population that is of the required age to vote, it may also include those that are not eligible to vote; such individuals may be non-citizens, those incarcerated and are unable to vote, or those who have lost the right to vote for a period of time, as in some states in the United States strip convicted felons of this (IDEA, 2004). While a significant disadvantage of the voting age population measure is that it is an estimate, it can also be a better measurement to show a lack of involvement in the election process in general. Those who would want to vote and participate politically would take the necessary steps to register, which in some ways can show a level of political interest, if that country does not have compulsory voting laws and does not automatically register citizens to vote. Looking only at the number of registered voters, while more accurate in some ways, will exclude many citizens. Those citizens that choose not to vote, for whatever reason, would also choose not to register in many cases.

Another option for measuring the voter turnout is to use survey data. The study conducted by Freeman (2004) used survey data for his study of inequality and voter turnout in the United States. Some of the data was from the American National Election Studies, or NES. He notes that this is subject to measurement error because people often report that they voted when they in fact did not cast a vote. Although the names of the citizens that participated in the survey are checked against the names of registered voters, this does not verify with certainty that an individual voted.

Freeman also adds that those most inclined to report voting when they did not are often more educated citizens; this can lead to the data in the survey reporting higher turnout among the highly educated than actually occurred.

The countries to be analyzed are all high-income democracies. The reason for this choice rests on finding a more similar sample. For instance, assessing political participation in countries that are not democracies would not be helpful. In a country that is not a democracy, there may be little or no competition in an election and political participation would not have the same role as it may not be a way for citizens to express their preferences. A second aspect to consider when selecting the sample is the span of years of election data. IDEA has data available for some countries as early as 1945, but there are some changes that could affect turnout in many of these countries. Some experienced the introduction or dissolution of compulsory voting laws or had other changes in the electoral system occur. Furthermore, a sample that contains a longer time period will have more events throughout history, which could for a time motivate citizens to vote in a particular election. For these reasons, I will look only at more recent election data that is collected in the years after the Gini index measures were taken.

Some basic data about the voter turnout in these countries is presented below. The years the elections took place range from 2010 to 2013 and are from parliamentary elections.

Figure 4: Voter Turnout in Recent Parliamentary Elections

Country	Year Election took place	Voter Turnout(among registered voters)	VAP Turnout
Australia	2013	93.23%	79.67%
Austria	2013	74.91%	69.31%
Belgium	2010	89.22%	93.26%
Canada	2011	61.41%	53.79%
Denmark	2011	87.74%	81.83%
Finland	2011	67.37%	70.07%
France	2012	55.40%	46.08%
Germany	2013	71.55%	66.04%
Greece	2012	62.47%	69.36%
Ireland	2011	70.05%	63.78%
Italy	2013	75.19%	68.33%
Japan	2012	59.32%	59.67%
Luxembourg	2013	91.15%	55.12%
Netherlands	2012	74.56%	71.02%
New Zealand	2011	74.21%	69.83%
Norway	2013	78.23%	77.93%
Portugal	2011	58.03%	56.93%
Spain	2011	68.94%	63.26%
Sweden	2010	84.63%	82.63%
Switzerland	2011	49.10%	40.04%
United Kingdom	2010	65.77%	61.06%
United States	2012	67.95%	54.62%

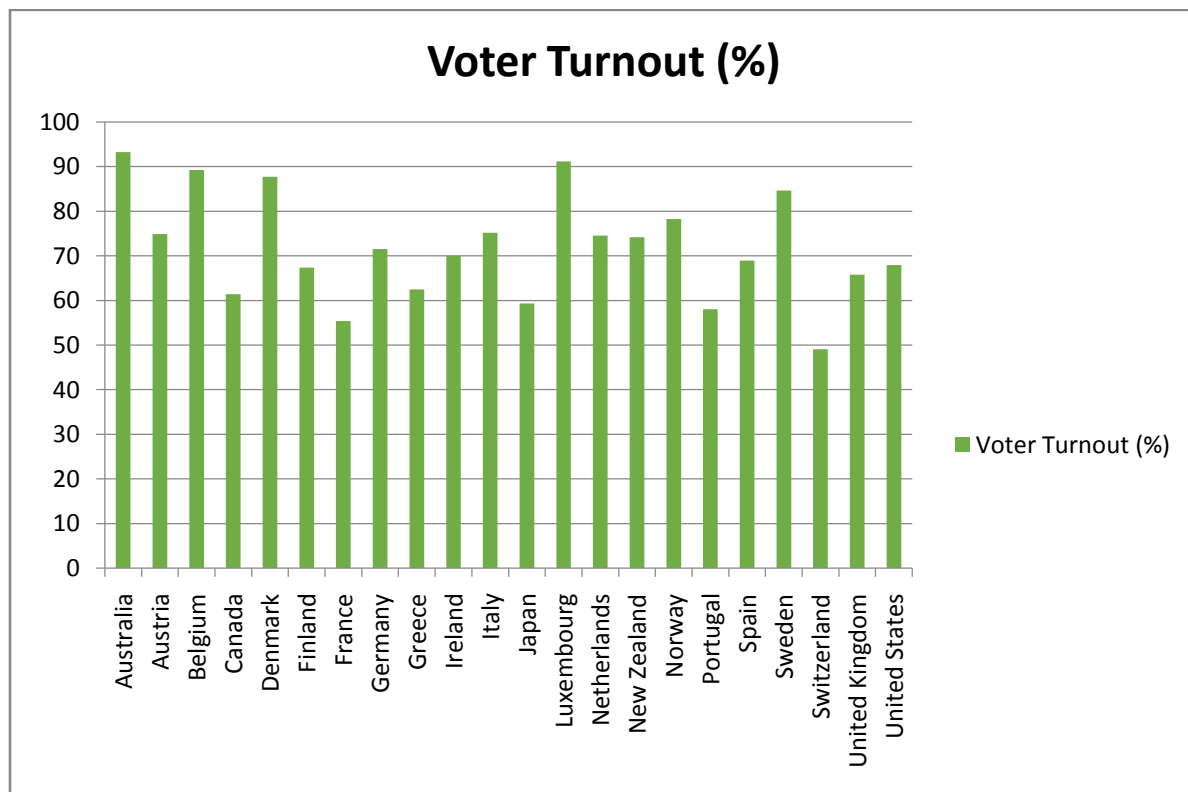
Source of Data: International Institute for Democracy and Electoral Assistance (IDEA)

As discussed above, the numbers are quite different in some countries between the two measures of voter turnout among registered voters and turnout among the voting age population. From this data, Australia has the highest turnout of registered voters of any of the countries. Australia is one of four countries in this sample that has compulsory voting laws in place. As Geys (2006) noted that compulsory voting laws do have an effect on voter turnout. According to the Australian Electoral Commission, voting is required under federal law and those who do not enroll and do not cast a vote will have to pay a fine. In order to vote, Australian citizens must enroll, but this can be done online. The VAP figure is 13.56% lower than the turnout among registered voters figure, but as stated earlier the VAP includes residents, non-citizens and others that are unable to vote (Australian Electoral Commission, 2014).

The countries with the next highest voter turnout among registered voters include Luxembourg, Belgium, and then Denmark. Luxembourg and Belgium have compulsory voting laws. Both countries enforce their laws with fines that increase if the offense is repeated. It is noteworthy to explain that the fourth country that has compulsory voting laws, Greece, has a lower turnout compared to other countries in the sample with compulsory voting laws. There could be several reasons for this. The laws in Greece allow those above the age of 70 that have limited mobility to abstain from voting. Citizens that reside more than 200 kilometers away from their polling station are also allowed to abstain from voting. Any citizen can submit a reason for not casting a vote to the authorities and will not face any penalties if the reason is accepted. If it is not, then the citizen could face penalties. However, many of the potential sanctions that non-voters can face are not strictly enforced, and the compulsory voting laws are more symbolic in this country. Austria does not have compulsory voting laws at the federal level but were previously regulated by the regions. The regions began abolishing these laws starting in the 1990s (Gratschew). While compulsory voting laws are important, they are not equally enforced in countries that have them which can make some more

effective than others. The lowest voter turnout rate among registered voters is in Switzerland with 49.10%. France and Japan have the next lowest turnout rates.

Figure 5: Voter Turnout Among Registered Voters Expressed as a Percent

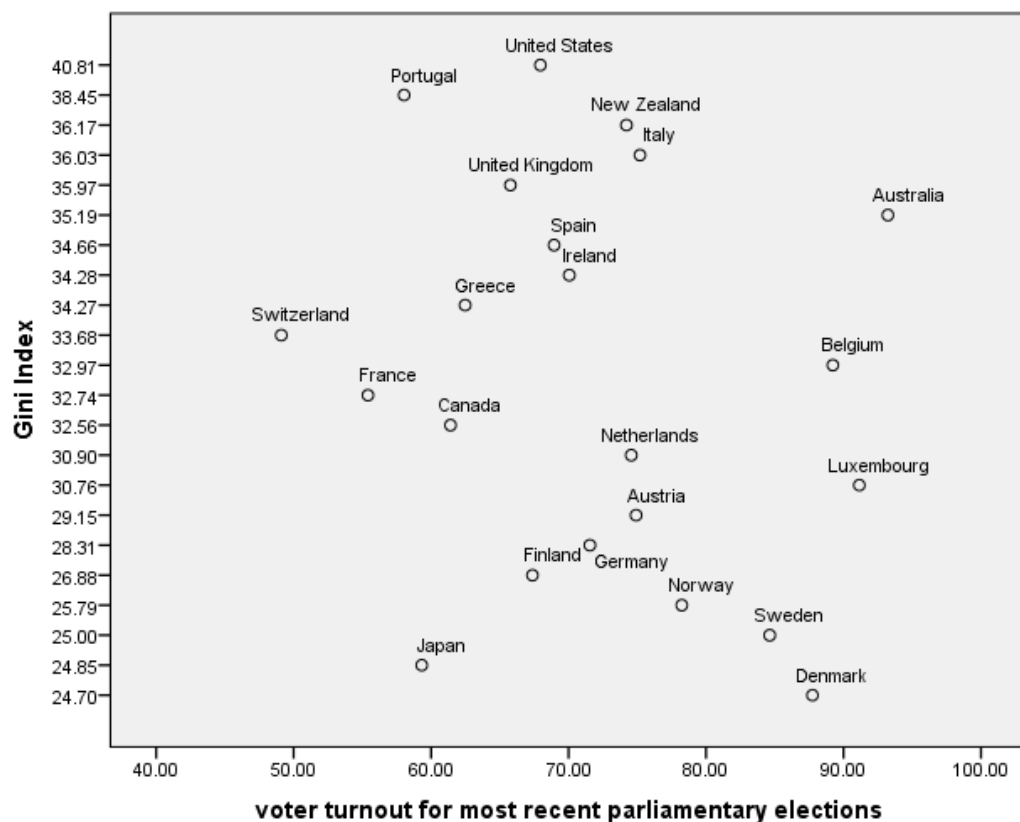


Source of Data: International Institute for Democracy and Electoral Assistance (IDEA)

3.1 Methods and Results

Now that the data for the most recent elections has been explored, the next step is to investigate a possible correlation between economic inequality, using the Gini index, and voter turnout are correlated in this sample. I hypothesize a negative relationship between these two variables consistent with power theory. A correlation (Pearson's r) will be used to test for a relationship between these two variables. First, a scatter plot of the 22 country sample is shown below.

Figure 6: Scatter Plot of 22 Country Sample



The scatter plot shows the effect compulsory voting laws have on turnout in Australia; the Gini index measure in Australia is 35.19 and the United States has a measure of 40.81, yet there is quite a difference between the turnouts in these two countries. Japan is an interesting case, while it has lower economic inequality it also has lower turnout than United States, the country with the highest degree of economic inequality in the sample. Then, a simple correlation (Pearson's R) was performed with this data. The results are below.

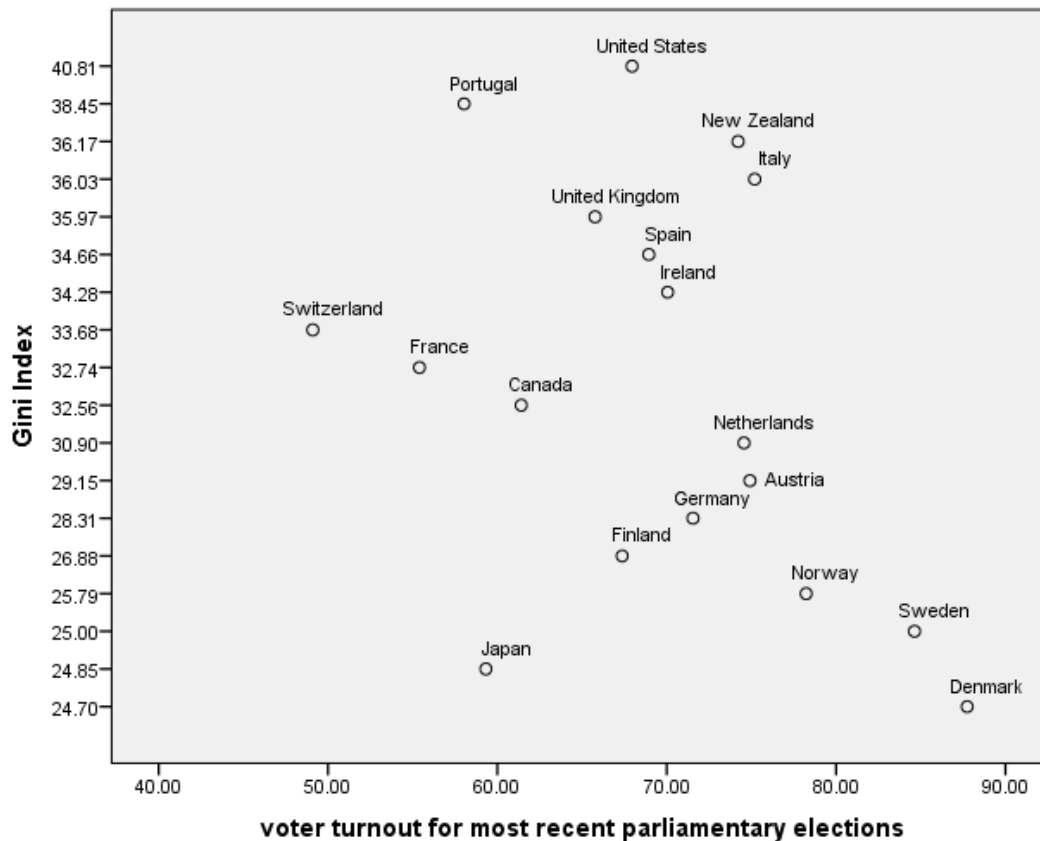
Gini Index and Voter Turnout Among Registered Voters, 22 High-Income Democracies

Significance	.253
Correlation	-.255

The data does not show a significant relationship between these two variables. The significance level is not close to the .05 level. This sample only looked at one round of elections in the 22 countries, so there were only 22 elections to analyze. Another potentially problematic point with this data is that the Gini index ranges from the year 1993 to 2000. If economic inequality has increased substantially in some of these countries, this Gini index measure used might not reflect that. The oldest Gini index measure in the data is from Japan in the year 1993 while the election took place in 2012.

Though no significant relationship was found in this sample, compulsory voting laws are known to have a strong effect on voter turnout. I would like to evaluate the relationship between these two variables without the countries that have compulsory voting laws, Australia, Belgium, Greece, and Luxembourg. Even though the compulsory voting laws in Greece are not strictly enforced, they could be enforced to some degree and therefore should also be removed from the sample. Power and conflict theories both attempt to explain why citizens in certain income groups participate politically or not. Compulsory voting laws are a strong intervening factor because the actions of citizens may then depend more on how willing they are to accept the consequences of not voting, whatever the penalties may be in their country. Even though the penalties for a first offense are quite small, given the high voter turnout rates in the countries where these laws are enforced, they seem to be effective. Past research has indicated that compulsory voting regulations are a factor that can increase voter turnout. This can intervene with the evaluation of the relationship between economic inequality and voter turnout. Below is a scatter plot of the 18 country sample as well as the correlation.

Figure 7: Scatter Plot of 18 Country Sample



Gini Index and Voter Turnout Among Registered Voters, 18 High-Income Democracies without Compulsory Voting Laws

Significance	.88
Correlation	-.413

The results are not significant in the sample of 18 countries. Removing the countries with compulsory voting laws also decreased the sample size from 22 elections to 18 elections.

3.2 Discussion

After looking at a sample of 22 recent elections in high-income democracies, I did not find a significant correlation between level of economic inequality, using the Gini index as the measure, and voter turnout among registered voters. As I discussed earlier, some of the weaker aspects of the evaluation of the relationship between these two variables includes a gap between Gini index measures and when the elections occurred and a sample size of just 22 elections. As compulsory voting laws are known to increase turnout, I then used a sample that included 18 countries without compulsory voting laws, yet there were no significant results. There could be a number of reasons that also influenced voter turnout in these countries. As Geys (2006) explained, decisiveness of the race, campaign spending, and individual habits of voting can all have an impact on voting behavior. In this sample, there was no evidence to show a negative relationship between economic inequality and voting and thus I find no support for power theory.

I believe a substantial difficulty that exists in attempting to explore the relationship between these two variables lies with the measurement issues. Beginning with the variable of voter turnout rates, there are measurement problems with nearly all the possible ways to assess this. As mentioned earlier, the voter turnout among the eligible population includes non-citizens and others who cannot vote. So, using this to measure voter turnout may overestimate the number of people that could cast a vote but do not. It would seem that using the voter turnout among registered voters is a more conservative one, as it appears less likely to be artificially higher. Though registration issues can cause inaccuracy in these numbers.

The number of registered voters in a country can be problematic in a similar way, as the requirements and hassle of registering varies country by country. For example, the United States is a country known to have voter registration issues, possibly due to the fact registration is a decentralized process in which each state has its own set of voter registration laws. Some citizens are

registered in more than one state and some deceased citizens are listed as registered voters. Some states collect voter registration on paper which is then manually entered into a database, this increases the chance for error and can cause a voter not to receive voter registration information. A report by the Voting Technology Project of the California Institute of Technology and the Massachusetts Institute of Technology found that during the 2008 election, 2.2 million votes were lost due to registration problems, Liptak of the New York Times (2012) reported. Clearly, the registration issues in the United States may affect the accuracy of the number of registered voters. Furthermore, some states have passed laws requiring proof of citizenship in order to register to vote; some argue this unfairly excludes some Americans from registering to vote because they may not have such documentation. Many other countries in the sample maintain national databases. For example voter registration in France is automatic when a citizen reaches the age of 18 (Assemblée Nationale, 2012). These variances between the administrative processes in countries make the data more difficult to interpret because the accuracy may, in part, depend on voter registration laws in each country.

Though there were no significant results in this sample regarding voter turnout, it would be useful to also discuss a possible negative relationship, in a larger sample, between economic inequality and other forms of political participation such as working on a campaign or level of political discussion an individual engages in. Recall the study by Solt (2008) also found that in many cases, those in lower income classes participated politically less than compared to those in higher income classes. Given there is support that things such as political discussion or interest occur at lower levels for the poor, voting maybe a symptom of lack of political interest. If power theory equates more concentrated money with power, the poor may be further disengaged from participating because it is seen as something the powerful, the rich, can control and therefore participate in. If those in lower income classes are discussing politics less and show lower interest in

politics, they are probably less likely to go out and cast a vote. The elements of political engagement in general seem to be self-reinforcing as explained by power theory. If the rich are able to keep issues the poor may value from being discussed, the poor might have less motivation to take a up a political interest because they would be less affected by any such policies on the agenda; similarly, if they are less interested in discussing political issues they are probably less interested in voting. Or perhaps, as power theory contends that the rich will more often win, this will leave the poor citizens feeling like there will be a not change in their situation, and thus decide not vote, and have less political interest in general.

Power theory equates money with political power, and possibly the reason strong support for this theory is found in the United States is because the extent to which money translates to political power is greater there than in other countries. Though the United States does not havethe most relaxed campaign laws, of these 22 countries one thing it lacks is spending limits on political parties. Parties are only subject to spending limits when they are coordinating with a candidate (IDEA, Public Finance Database). Political action committees, or PACs, can be a substantial mode for money to enter politics. One type of PAC is called a separate segregated funds committee, which are established by corporations, trade organizations or unions (Federal Election Commission). Through such PACs large amounts of money can be used to campaign for or against an issue on the agenda, so long as the PAC does not actually coordinate with that candidate. PACs can, for example, use money for advertisements in support of or against a candidate that better represents the preferences of the PAC. Though the rules state that these PACs cannot coordinate with a candidate, it is difficult to regulate. Being that the United States has a two party system, there are not very strict party lines so this can make a particular candidate a more preferred option for some. Thus, in the United States money is a powerful tool in nominating a candidate, and those with more money likely have a great deal of influence. Perhaps the party dynamics, the nature of PACs, and the fact the

television ads are an allowed expenditure together make elections in the United States more influenced by rich citizens. This could make poor citizens feel that they are less likely to be able to compete and further disengage from politics. Countries such as Belgium, which IDEA reports as limiting campaign contributions and spending, have better ways to limit the extent to which money enters politics. This could explain why the United States provides such a strong case in support for power theory.

Conclusion

Voter decline in democracies is a worrisome occurrence. Democracies depend on participation of citizens in order to create policies that represent their needs and preferences. The potential explanations for why this is occurring in democracies should be further explored. There is some literature that suggest economic inequality can be a factor in this decline, further it may affect different income groups disproportionately. In this paper, I have explored the possible relationship between economic inequality and voter turnout in 22 high-income democracies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United States and the United Kingdom. Twenty-two elections were included in the sample ranging from the years 2010 to 2013. Gini index data was used as a measure of income inequality. Voter turnout was assessed as the percentage of registered voters that voted in the election. I did not find support for my proposed hypothesis, a negative relationship between these two variables. After a simple correlation was performed, no significant results were found. After removing four countries from the 22 country sample, those that had compulsory voting laws in place, the same test was performed. Still, no significant results were found for the 18 country sample.

There were limits in this assessment; the sample contained just 22 countries and the correlation did not include other variables that may affect voter turnout, such as those discussed by Geys (2006) including decisiveness of an election or population stability. In addition to the inclusion of these factors in an analysis, measurement issues of both economic inequality and voter turnout make for greater complications. As previously elaborated on, income can be defined in a number of ways. The data can also be gathered from various sources, either from an administrative source or it is gathered from survey data. Since these different sources can provide a different picture on the amount of inequality existing in a country or region, the selection of one form of measurement over the other can affect results in a study. Similarly, voter turnout can be assessed in terms of number of registered voters that voted in an election or by the voting age population. These present challenges for studying the possible effect economic inequality has on voter turnout. Yet this topic has important policy implications and should continue to be explored.

Currently there is some support for both the power and conflict theories. It has not yet been shown why some studies find support for power or find no relationship, or why some individual cases, such as in the United States, strong support for power theory is found. Further explanation is needed; future research could include focusing on more detailed mechanisms to explain why a relationship is found in some countries and not in others. Research in this area may benefit from analyzing mechanisms in more detail to uncover how economic inequality may affect voter turnout or political participation in general.

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