The Effect of Economic Inequality on Voter Turnout in Canadian Federal Elections, 1979-2011

by

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Abstract

Since the 1990s, voter turnout in Canadian federal elections has decreased considerably. During the same period, economic inequality significantly increased. Although there is much theoretical work, there have been few empirical studies examining the effect of economic inequality on voter turnout. Using data collected from both national and international sources, I conducted an aggregate level, time series analysis of national turnout and economic inequality for Canadian federal elections between 1979 and 2011. Moreover, this thesis tests Schattschneider's (1960) hypothesis, which argues that increasing rates of voter abstention are a result of economic inequality magnifying differences in relative power between affluent and non-affluent citizens. The findings indicate that economic inequality has a strong negative effect on voter turnout.

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Chapter 1: Introduction

Over the last three decades, turnout in national elections has declined in many countries, with a vast majority of Western democracies seeing significantly lower electoral participation in recent years than in the post-war era (IDEA, 2011; Blais, 2009). Canada, in particular, has experienced an extraordinary decline since the 1990s, such that, within a 20-year period Canada's turnout rate dropped a full 15 percentage points (Elections Canada, 2013). Although several other countries, including the United States, the United Kingdom, Ireland, and Japan, have all witnessed the same phenomenon, Canada's experience has been one of the most dramatic in terms of rapid and sustained decline (IDEA, 2011). Because voting is considered to be the primary form of political participation in a democracy, voter turnout is often used as an indicator to assess the health and viability of democratic political systems. Consequently, declining voter turnout raises several questions and concerns. In particular, what has caused electoral participation to decline?

According to Blais (2009), several hypotheses have been proposed in an attempt to explain why voter turnout has declined. However, three explanations have come to dominate the voting behaviour literature. The first explanation argues that electoral participation has declined due to generational replacement. Specifically, those born since the mid-1960s, the post-baby-boomer generation, vote at much lower rates than the previous two generations. Consequently, generational replacement has changed the character of voters and society. The second explanation argues that voter turnout has declined because group mobilization has declined. Namely, groups that previously mobilized voters, such as unions and labour parties, have declined. As a result, voters are

no longer mobilized to participate. The final explanation argues that electoral participation rates vary not because voters or society have changed, but because the character of elections changes from one election to the next (Franklin, 2004). Consequently, electoral context, specifically the degree of electoral competitiveness, matters greatly for turnout (Franklin, 2004; Johnston et al., 2007).

Despite some empirical evidence supporting each of these hypotheses, on the whole, it appears that they only partially explain the phenomenon of declining voter turnout (Blais, 2009; Smets and van Ham, 2013). Moreover, the fact that so many Western democratic countries have experienced the same phenomenon of declining electoral participation over the same period, suggests that something has changed that not only has occurred in any one particular society, but also has, similarly, transpired throughout the world (Niemi and Weisberg, 2001).

Interestingly, economic inequality has increased in most Western democracies over the past several decades, with the majority observing higher inequality rates in recent years than 30 years prior (Solt 2008; Gornick and Jantti, 2013; Dallinger, 2011; Horn, 2011). Canada, particularly, has experienced immense changes since the early 1980s. Specifically, economic resources have become highly concentrated amongst affluent Canadians (Yalnizyan, 2010; Fortin et al., 2012). Indeed, since the 1980s, the share of disposable income going to the richest 20 percent of Canadians increased almost 10 percent (Statistics Canada, 2013f). The growth in the share of income is even more impressive the richer the income group. For instance, the richest 10, 5, and 1 percent of Canadians increased their share of disposable income by 15, 25, and 50 percent, respectively (Statistics Canada, 2014).

In contrast, the remaining 80 percent of Canadians experienced stagnating economic growth (Yalnizyan, 2010). As a result, in a fifteen year span between 1995 and 2011, the difference in average disposable incomes between the bottom-20th percentile and the top-20th percentile of income earners grew by over 40 percent; simultaneously, the difference between the middle-60 percent and the top-20 percent of earners increased by over 47 percent (HRSDC, 2013).

These changes were reflected in Canada's Gini coefficient – a standard measure of income inequality that varies between 0, which means that everyone has the same amount of income (perfect equality), to 1, which means that one person has all the income and everyone else has none (perfect inequality). Since the 1980s, Canada's Gini coefficient for market and disposable income increased by 20 and 10 percent, respectively (Statistics Canada, 2013g). Notably, market income inequality started rising in the early 1980s, whereas much of the increasing inequality in disposable income did not begin until the early 1990s. In fact, in a five-year span between 1995 and 2000, the Gini coefficient for disposable income grew 8 percent. Canada's economic inequality growth rate has been among the most dramatic amongst OECD countries (Banting and Myles, 2015; OECD, 2014b).¹ Indeed, due to the growth rate of income inequality, by the late 2000s Canada ranked 24th out of 35 OECD countries for disposable income equality (Sharpe and Capeluck, 2012).

In short, since the 1980s, affluent Canadians have made enormous economic gains while the rest experienced stagnating growth, which has resulted in an hyperconcentration of economic resources (Osberg, 2008; Yalnizyan, 2010). As a result, not only have the rich gotten richer, but the middle and poor have lost substantial ground

¹ See Figure A1 in the appendix.

in relative terms (Banting and Myles, 2013: 33). Consequently, affluent Canadians have pulled away from the rest.

Accordingly, several questions arise over the potential implications associated with rising economic inequality. One of the primary concerns, however, is how growing economic disparities have adversely affected other forms of equality, particularly political. That is, according to numerous scholars including Schattschneider (1960), Dahl (1961; 1998; 2006), Bartels (2008), and Green and Kesselman (2006), economic affluence is interconnected with political influence. Specifically, economic affluence results in economic and political power, meaning increasing economic inequality has magnified the unequal distribution of power. Consequently, the more unequal the distribution of economic resources become, the further unequal the distribution of power and political influence becomes.

From the above, the major question about how economic inequality influences political engagement in Canada arises. The fact that economic inequality has increased over the same time frame that voter turnout has decreased, and given the concerns for economic inequality's impact on the distribution of power and that the explanations for the phenomenon of declining voter turnout are insufficient, one begins to question what effect growing economic inequality has had on the behaviours of voters. Moreover, the fact that these two trends are not unique to Canada, but have similarly transpired in other Western democracies, including the United States and the United Kingdom, raises the question of whether or not there is a relationship between the two phenomena (Gornick and Jantti, 2013). Specifically, is economic inequality another factor contributing to declining voter turnout rates? Thus, the research question I seek to answer is this thesis is

what effect has growing national economic inequality had on voter turnout in Canadian federal elections?

The focus of this chapter is to summarize the argument presented in this thesis. It begins by providing a brief overview of the causal mechanism first by explaining Schattschneider's hypothesis and second highlighting the processes within the Canadian political system that enable economic inequality to affect voter turnout. It then presents the three major theories that explain the relationship between economic inequality and voter turnout, which is followed by my hypothesis. It subsequently presents the methodology and data and findings. Fundamentally, the purpose of this thesis is to examine the effect that increasing economic inequality has had on voter turnout.

1.1 Defining the Causal Mechanism - Schattschneider's Hypothesis

In 1960, in his important analysis of the American political system, political scientist E.E. Schattschneider hypothesized that the political system was responsible for nonvoting. Namely, the operation of, and the processes within the political system depressed political participation. Specifically, he argued that voter abstention resulted from the bias and limitations of the political system that were caused by differences in the relative power of different groups to influence the system (111). Schattschneider contended that differences in relative power were caused by economic affluence and, as such, were magnified by economic inequality. Consequently, the more unequal the distribution of power and political influence, resulting in a political system that is biased towards the economically affluent.

Furthermore, Schattschneider argued that "[voting] has something to do with the way in which large areas of need and interest are excluded from the political system" (106). Consequently, he suggested that "the key to the problem [of nonvoting was] to be found in the nature of public policy and the organization of public support for policy" (104). As such, Schattschneider contended, "[*abstention* reflected] the suppression of the options and alternatives that [reflected] the needs of the nonparticipants" (105). In essence, the relative power of the affluent enables them to control the level of response of the system to the needs of the non-affluent. As a consequence, large segments of the population are not adequately represented by the political system and, as a result, abstain from participating in the political process.

Moreover, as economic inequality increases, political systems are increasingly biased in favour of the affluent, which, in turn, increases the system's limitations with regard to adequately responding to the needs of the non-affluent. Consequently, nonaffluent citizens disengage from the political system as they realize that not only are they not adequately nor accurately represented by the system, but they also have little ability to influence the system. Thus, declining voter turnout is due to economic inequality exacerbating the relative power of the affluent to control the political system.

1.2 Justifying the Canadian Case

Although Schattschneider was hypothesizing about the causal mechanisms existing within the American political system that caused voters to abstain, his hypothesis can be applied to Canada. Further, despite the debate about the comparability of Canada and the United States, the Canadian and American political systems are fundamentally similar in several aspects, particularly in regards to their political cultures, political

economies, and their party and electoral systems. Accordingly, the process through which public policy is created in the Canadian political system operates comparable to the process in the American system.

Indeed, both Canada and the U.S. are pluralist societies, where nongovernmental institutions, particularly pressure groups, play important roles in creating public policy. Moreover, both countries are liberal-welfare systems, where the interests of capital dominate those of labour. As such, the political left has remained relatively weak in both countries, especially when compared to corporatist and social democratic European countries, such as Germany and Sweden. Furthermore, both countries' electoral systems are based on the single-member-plurality system and the effective number of parties has historically been approximately two.

The mechanism that enables economic affluence and power to translate into political power primarily operates through these factors. Consequently, the unequal distribution of economic resources, exacerbated by economic inequality, not only results in unequal political influence, but also increases the relative power of the affluent and their control over the system. Thus, the causal mechanism emphasized by Schattschneider's hypothesis is likely to function similarly in both countries. Fundamentally, declining voter turnout in Canadian federal elections is due to increasing national economic inequality.

1.3 Theorizing the Relationship

There are three major theories that imply a relationship between economic inequality and political participation. They are the theory of relative power, the conflict theory, and the resource theory. The first theory, the *theory of relative power*, is derived

from Schattschneider's argument and, accordingly, hypothesizes the relationship to be negative. Specifically, economic affluence contributes to political influence and power; meaning economic inequality exacerbates the relative power of the affluent to control the political system. Consequently, electoral participation declines when economic inequality increases. In contrast, the second theory, the *conflict theory*, hypothesizes the relationship to be positive, meaning as economic inequality increases, conflict between the affluent and non-affluent increases, which results in higher turnout rates. The final theory, the *resource theory*, hypothesizes the relationship to depend on the level of economic resources voters have. That is because resources are thought to lower the cost of participating, meaning those that have adequate resources participate, while those who lack sufficient resources, abstain. Consequently, economic inequality only matters in so much as it contributes to the absolute level of resources a voter has, meaning, the effect that economic inequality has on voter turnout disappears once absolute economic resources are accounted for. Thus, it is not about relative power, but about absolute economic means at a voter's disposal.

1.4 My Hypothesis

Given the features of Canada's political system, I hypothesize that the relationship between economic inequality and voter turnout will be negative, supporting both the *theory of relative power* and Schattschneider's hypothesis. In essence, declining voter turnout in Canadian federal elections is due to increasing economic inequality exacerbating the relative power of the affluent to control the Canadian political system.

1.5 Methodology

In order to analyse the relationship between economic inequality and voter turnout, I conducted an aggregate level, time series analysis of voter turnout and economic inequality for Canadian federal elections between 1979 and 2011. All byelections and referendums were excluded during this period. An aggregate level analysis was chosen for the purpose of understanding overall patterns of economic inequality. In addition to understanding aggregate patterns, a time-series analysis is necessary to understand where economic disparities have grown, as well as how they have (or have not) influenced participation in elections. A simple "snapshot" of one election is not sufficient to understand trends in voting behaviour, nor how inequality has affected voter turnout. Consequently, each federal election was analyzed by national level data for voter turnout, economic inequality, absolute income, electoral competitiveness, economic contexts, and the rate of union density in each election year.

Two potential problems with time series analysis must be addressed in order to allow valid causal inference: *trending* and *serial correlation*. *Trending* occurs when the variables being analyzed naturally move, in the same or opposite direction, together over time and are seemingly related. However, they may simply be "trending" together, and as such, assuming a true relationship exists (i.e., inferring a causal effect) would be incorrect. Thus, in order to permit causal inference regarding the relationship between variables and to ensure the results are not spurious, a time trend variable, *T*, was added to the regression equations.

The second potential problem that must be addressed is *serial correlation*, which occurs when errors in two or more periods are correlated. Thus, in order to satisfy the

Gauss-Markov assumptions, the assumption that all errors are uncorrelated (i.e. the error term is a white noise process) is adopted. Naturally, there is a certain level of uncertainty with this assumption; thus, a white noise test is applied. Specifically, *Portmanteau's Q* test is used to assess the distribution of the residuals of each model to ensure the error terms do, in fact, conform to a white noise process.

1.6 Data Limitations

I must note that because there are only 11 federal elections between 1979 and 2011, my sample size is limited to those elections, i.e. n=11. Consequently, due to the limited sample size, it is difficult to conduct multiple linear regression, meaning analyzing the effects of more than one independent and one control variable at once is problematic. For that reason, only one independent variable, alongside one control variable, was analysed at a time. Furthermore, due to the limitations on the inequality data – e.g., changes to survey types, how Statistics Canada measures inequality, and simply lack of data – I only used inequality data from 1976 to 2011. As such, my analysis on voter turnout was limited to these years. Despite these limitations, the time period analysed is highly interesting as both voter turnout and economic inequality experienced considerable changes.

1.7 Hypotheses

In order to adequately analyse economic inequality's effect on voter turnout, four hypotheses were tested - a null hypothesis and three alternative hypotheses, which test the competing theories of relative power, conflict, and resources. The null hypothesis, H_0 , is accepted when the regression coefficient on the independent variable – throughout the analysis, this is a measure of economic inequality – is not significantly different than

zero. The first alternative hypothesis is accepted when the regression coefficient on the independent variable is positive and statistically significant. This suggests economic inequality is said to have a positive effect on turnout, meaning turnout rises when inequality increases, as per the conflict theory. The second alternative hypothesis is accepted when the regression coefficient on the independent variable is negative and significant, regardless of the control variable added. This means voter turnout is negatively correlated with turnout, indicating that turnout falls when inequality increases, which supports both the theory of relative power and the resource theory.

The third alternative hypothesis is thus used to distinguish between the competing relative power and resource theories. Accordingly, if the regression coefficient for the independent variable is substantively smaller than the coefficient on absolute income, then we can conclude that individual resources matter more than inequality for voter turnout, supporting the resource theory. However, if the regression coefficient for the independent variable is greater than that of the control variable, we can conclude that inequality has a greater effect than absolute resources, supporting the theory of relative power.

1.8 Findings

According to the results of the aggregate-level, time series analysis, economic inequality has a strong negative effect on voter turnout in Canadian federal elections. These findings are consistent with only the theory of relative power, suggesting that, contrary to conflict theory, inequality does not encourage participation. Moreover, no measure for absolute income was found to be statistically significant, nor significantly different from zero. Consequently, although national income has increased over the last

three decades, the absolute level of economic resources was not found to be as important as relative resources for determining voter turnout. Fundamentally, the context of economic inequality is crucial for Canadian voters.

1.9 Outline

This thesis is structured into 8 subsequent chapters. Chapter 2 explains the phenomenon of growing economic inequality, defining what economic inequality entails, the three main frameworks used to analyse economic inequality, the importance of framing, and what has occurred in Canada over the last few decades. Chapter 3 proceeds to explain the phenomenon of declining voter turnout, explaining the three main voting behaviour theories, the six individual-level theoretical models, the three main explanations for why turnout has declined, and presents my research question. Chapter 4 explains Schattschneider's hypothesis, that is, the causal mechanism that enables economic inequality to affect voter behaviour, and presents the three main theories that hypothesize the relationship between economic inequality and electoral participation. Chapter 5 provides a brief argument on the democratic implications of rising economic inequality. Chapter 6 situates the Canadian case by explaining the processes within the Canadian political system that enable Schattschneider's causal mechanism to operate. It also defines my hypothesis and provides a brief literature review of relevant empirical studies that analyse the effect of economic inequality on voter turnout, highlighting the lack of Canada-focused research. Chapter 7 outlines my methodology and data and chapter 8 presents my analysis. The final chapter is my conclusion.

Chapter 2: Understanding Economic Inequality

Economic inequality has been increasing in numerous Western liberal-democratic states for much of the last three decades. Canada, in particular, has seen substantial changes occur since the 1980s. In fact, it appears that a *hyperconcentration* of economic resources has transpired over this period (Fortin et al., 2012; Yalnizyan, 2010; Banting and Myles, 2013). Indeed, the most affluent Canadians have seen enormous economic gains since the 1980s, which has resulted in an extreme concentration of economic resources in the hands of a small segment of the Canadian population.

Moreover, it appears that other Canadians, i.e. the *non-affluent*, have experienced stagnating economic growth and, in fact, have lost substantial ground in relative terms. That is according to Yalnizyan (2010), since the late 1970s, growth in average incomes essentially collapsed for all Canadians *except* the most affluent. Consequently, in a fifteen year span between 1995 and 2011, the difference in average disposable incomes between the bottom-20th percentile and the top-20th percentile of income earners grew by over 40 percent; simultaneously, the difference between the middle-60 percent and the top-20 percent of earners increased by over 47 percent (HRSDC, 2013).

In addition, since the 1980s, Canada's Gini coefficient – a standard measure of income inequality –increased. For instance, the Gini coefficient for market income increased 20 percent since the early 1980s. Furthermore, the Gini coefficient for disposable income increased approximately 10 percent; however, most of the rise in disposable income inequality occurred after 1995. Indeed, in a 5-year span between 1995 and 2000, the Gini coefficient for disposable income grew 8 percent. Accordingly, due to the growth rate of income inequality, by the late 2000s Canada ranked 24th out of 35

OECD countries for disposable income equality (Sharpe and Capeluck, 2012). Consequently, Canada's economic inequality growth rate has been among the most dramatic amongst OECD countries (Banting and Myles, 2015).

Accordingly, several questions arise over the potential implications associated with rising economic inequality. In particular, one of the main concerns regarding rising economic inequality is how it has adversely affected other forms of inequality, particularly, political. Indeed, numerous scholars – such as Dahl (1961; 2006; 1998), Bartels (2008), Green and Kesselman (2006), Osberg (1991), Champernowne and Cowell (1998) – argue that *economic affluence* is directly linked to *political influence*. However, prior to answering how economic inequality contributes to other forms of inequality, we need to understand what exactly it is we are analyzing. Specifically, what is economic inequality and how is it defined, conceptualized, and measured?

This chapter is structured in four sections. The first defines economic inequality, specifying the differences between income and wealth inequality. The second section proceeds to explain the three main frameworks used to analyse economic inequality, which are: the *poverty framework*; the *affluent versus the rest*; and the *middle class*. The third section provides a brief explanation of the importance of framing. The final section provides evidence on Canada's growing economic inequality.

2.1 Defining Economic Inequality

Economic inequality, in its most basic sense, occurs when disparities in economic resources exist in a given population (Janmaat, 2008). In other words, economic inequality exists, when there are contrasting economic conditions, specifically economic well-being, among individuals or between groups within a society, meaning there exists

an imbalance in how economic resources, including income and wealth, are distributed within a population (Champernowne and Cowell, 1998; Osberg, 1991).² Accordingly, defining economic inequality is quite difficult, as it is a large and somewhat cumbersome concept to describe, measure, and analyze.

Moreover, although inequalities in consumption and economic mobility can be used to assess overall economic well-being, the study of economic inequality is predominantly concerned with the unequal distribution of income and wealth within a population. *Income inequality* is defined as "the uneven distribution of earnings among the population of a country, region, or entity" (Arvin, 2006: 532). Income inequality is fairly simple to analyse, especially when compared to other forms of economic inequality, including wealth. As such, it is the primary indicator used when analyzing economic inequality, including in the present thesis.

Wealth inequality, in contrast, is much more difficult to define than income, and depends much on the theoretical lens used. Moreover, Wolff (1991) argues "there is no unique concept or definition of wealth that is satisfactory for all purposes" (94). The Canadian Government, for instance, defines wealth as *net worth*, which is calculated as "the difference between the value of total asset holdings and the amount of total debt" (HRSDC, 2013). Consequently, an economic definition of wealth is usually associated with assets, liabilities, capital gains, and other economic means that contribute to a person's overall economic well-being (Wolff, 1991; Morisette and Zhang, 2006; Walsh, 2006).

² It is important to note that this is a working definition of economic inequality as the concept is continually evolving.

Atkinson and Brandolini (2013) argue further that in order to delineate wealth, one must understand the differences between income and asset poverty. *Income poverty* is where one's "income is insufficient to maintain the minimally accepted living standard" (Atkinson and Brandolini, 2013: 89). *Asset poverty*, on the other hand, captures the exposure to risk that one cannot maintain this standard for a set time period if income suddenly declines (89). Clearly, wealth inequality is quite difficult to define in comparison to income. Moreover, as wealth is highly correlated with income, it suffices to focus on the unequal distribution of income; consequently, wealth inequality is not the primary concern of this thesis.

Fundamentally, economic inequality entails the existence of an unequal distribution in economic resources, which translates into unequal command over economic means and resources, resulting in substantial differences in *economic power*. How these differences translate into other inequalities, specifically political and social inequality, matters greatly for democratic political systems. Accordingly, understanding the dynamics of economic inequality is crucial for understanding changes to political systems. However, in order to fully understand how economic inequality has changed, economic inequality must be placed within a working framework that gives us the necessary parameters to analyse economic inequality's dynamics. Specifically, the framework that is used not only determines how economic inequality is defined, but also determines how it is measured and analysed, which in turn matters for explaining the causes and consequences of economic inequality.

2.2 Framing Inequality

In Canada, economic inequality is typically analyzed through one of the three following frameworks: *poverty*, the *affluent versus the rest*, and the *middle class*. All of these frames have different purposes and highlight various power dynamics associated with economic inequality. Consequently, the framework employed determines the measurement tools, analysis, and results obtained, which directly affect our understanding of the causes and consequences of inequality. This section is divided into three parts, each of which defines the framework, as well as measurement tools and analysis associated with each.

2.2.1 The Poverty Framework

The first, and oldest, framework, *poverty*, or as Banting and Myles (2015) describe it, the *anti-poverty framework*, analyzes the conditions associated with poverty rather than inequality per se. Historically speaking, this lens has provided the foundation for numerous government policies, especially those seeking to "eradicate poverty" (Banting and Myles, 2013). Despite the prominence of this framework, defining poverty is not simple, as there are several competing interpretations as to what poverty entails.

To begin, Sanders (2006) argues that poverty is generally "thought of as a state of deprivation [where] individuals lack [the basic necessities] to maintain a decent standard of living" (2). However, what entails a "decent standard of living" varies by country and region, as well as by individual beliefs and values, notwithstanding the fact that a higher standard of living corresponds to "higher quality and quantity of goods and services available [which contributes] to material [and overall economic] well-being" (HRSDC, 2013). Sekhar Rath and Odekon (2006), thus, suggest two definitions of poverty: a

narrow one that focuses primarily "on the lack of material goods," and a broader one that encompasses "numerous factors such as living conditions, health, transportation, and community life" (284). In addition, there are three economic concepts of poverty: *absolute, relative,* and *subjective* (Sekhar Rath and Odekon, 2006).

Absolute poverty is defined as occurring when an individual, family, or household lacks sufficient resources to physically survive (Sekhar Rath and Odekon, 2006; Hagenaars, 1991). *Relative poverty* is defined as when the available income is not sufficient to attain a society's acceptable standard of living (Sekhar Rath and Odekon, 2006; Hagenaars, 1991). *Subjective poverty* is defined as occurring when an individual lacks sufficient income to meet their personal needs and desires (Sekhar Rath and Odekon, 2006: 284). Both absolute and relative poverty are objective concepts and are measured through established poverty lines or thresholds that are based on a set income level (Hagenaars, 1991). On the other hand, because subjective poverty is based on an individual conception of poverty, there is no established threshold. Consequently, it is near impossible to measure and analyse, and as such, is often disregarded.

Beyond the above definitions and types of poverty, there exist both *absolute* and *relative* income measures of poverty. *Absolute income measures* of poverty are primarily concerned with whether or not basic needs are being met (Shantz, 2006). As such, absolute income measures "provide a [minimum] monetary figure as a cutoff for being counted among the poor, [which] is generally referred to as the poverty line" (Sanders, 2006: 2). Conversely, *relative income measures* of poverty measure the distance from the median income within a specific population (Shantz, 2006). As a result, relative income measures are "characterized by comparing one income [to the income] of a reference

group, commonly the mean or median national income of a similarly structured household" (Sanders, 2006: 2).³

Accordingly, Hagenaars (1991) contends "an absolute poverty line is chosen to reflect some fixed level of resources needed to sustain life and health [whereas] a relative poverty line is directly derived from the income distribution in society, reflecting a definition of poverty as a state of relative, rather than absolute, deprivation" (136). Shantz (2006) adds further that relative income measures capture both the prevalence of poverty and the degree of inequality within a population. This, Shantz (2006) continues, is because these measures provide insights on the degree of poverty that exists within a society by highlighting the income distribution and the gap that exists between individuals, families, and households in relation to the median income. Consequently, an analysis of the income distribution provides insights into what a society deems as an acceptable level of income inequality. Hence, the purpose of having some form of "poverty threshold" is that it not only provides a benchmark of the minimum income required to live, but it also shows the distribution of a society's standard of living.

Although the poverty framework is essential for understanding changes in the poorest segment of an economic distribution, there are a few limitations. First, in absolute terms, poverty levels may not have increased, as is the case in Canada (Banting and Myles, 2015). However, poverty is almost always relative, especially when it comes to the argument that economic power results in political influence. As such, poverty rates

³ A note must be made regarding the differences between mean and median incomes. According to the Government of Canada, median income is obtained by selecting the value that falls in the middle of an income distribution after it is numerically ordered from lowest to highest or vice versa. Mean income, on the other hand, is the average income in a distribution; as a result, it is affected by extreme values, meaning the value is likely to be skewed towards higher incomes resulting in an inaccurate picture in the distribution of income. The government of Canada primarily uses median income when assessing the Canadian income distribution (HRSDC, 2015).

are not accurately captured through absolute income measures alone. Hagenaars (1991), consequently, suggests that both consumption and welfare should be taken into consideration when assessing whether or not a person, family, or household is identified as "poor".

Moreover, because the poverty framework only analyzes one extreme of the income distribution, overall economic inequality dynamics are not fully captured or understood. Namely, what is happening to the rest of a population is almost entirely missed, as the focus is solely on the bottom third or less. Banting and Myles (2015) add further that a strict focus on poverty does not adequately capture the new economic reality of most societies, Canada included. Another framework is, consequently, needed.

2.2.2 The Affluent versus the Rest Framework

The second, and newest, framework used to analyse economic inequality predominately focuses on the rising share of income and wealth captured by the *affluent*. Primarily, it seeks to understand how and why this stratum has gained economically, and how they differ from the rest of a population. Although it has existed for some years, this lens, often termed the *99 percent versus the 1 percent* or the *rich versus the rest*, gained widespread prominence during the 2011 Occupy Movement (Banting and Myles, 2015; McBride and Whiteside, 2011; Gornick and Jantti, 2013; Fortin et al., 2012). It was highlighted during this movement that an accumulation of income and wealth by a very small minority of the American and Canadian populations has occurred in recent years. Notably, the vast majority of economic gains have, for the most part, gone to the already affluent strata, which becomes more concentrated the richer the income group. Accordingly, a *hyperconcentration* of economic resources has occurred (Statistics

Canada, 2013f; Statistics Canada 2014; Yalnizyan, 2010; Osberg, 2008; Fortin et al., 2012).

Consequently, Banting and Myles (2013) argue that this framework has "[generated] intense debate about the division between the rich and the rest" (27), suggesting that we have now entered a "New Gilded Age", as we have returned to the concentration of income and wealth that existed during the "Roaring Twenties" and "Gilded Age" of the late 1800s (Piketty, 2014; Banting and Myles, 2015). In essence, this frame accentuates the accumulation of income and wealth, and to an extent *power* (both economic and political), in the hands of the already affluent segment of a population.

As is the case with defining poverty, there are several definitions and measurements that are used to define the rich, which are somewhat arbitrary. To begin, Smeeding (1991) defines the affluent, or the *well-to-do*, as those whose incomes are at least 1.5 times the national median income (43). That is, the basic income required to enter the top 20 percent⁴ is 150 percent of the median income (Atkinson and Brandolini, 2013: 83). According to Atkinson and Brandolini (2013), an implicit *richness line* would equal 167 percent of the median income if one calculated an "*upper middle class* as incomes between 125 percent and a quarter less than the income level that identifies the rich" (83).⁵ Naturally, as one increases the percentage above the median income, the more affluent one gets.

A second and more commonly interpreted definition contends that the affluent comprise the *fifth quintile* of an economic distribution, meaning any individual or family whose income falls in at least the 80th percentile is considered affluent. Hence, the rich

⁴ See below.

⁵ Middle class is defined in the following section

are often discussed in the term, the *top 20 percent*. The top 20 can be further brokendown into the *top 10 percent* (*decile*), the *top 5 percent* (*vingtile*), the *top 1 percent* (*centile*), the *top 0.1 percent*, and the *top 0.01 percent*. These may also be referred to as the 90th, 95th, 99th, 99.9th, and 99.99th percentiles, respectively. Moreover, the 99th, 99.9th, and 99.99th are considered as the *economic elites* or *economic notables* (Dahl, 1961; Bartels, 2008). Consequently, these terms become paramount for understanding power relations within a society, especially if *economic affluence* results in *political influence*.

Affluence, or the change in income and wealth captured by the affluent, can be measured in several ways. First, one of the simplest methods of measurement is to analyze the share of income captured by the fifth quintile. Moreover, this can be compared with shares of other quintiles in the distribution. Osberg (2008), however, argues any changes that have occurred in the top 20 percent have masked what has occurred in the top 10, top 5, top 1, top 0.1, and even the top 0.01 percent, as the lower half *pulls-down* the group average. This is due to the fact that when changes in income shares or average incomes are calculated, changes in the top 1 percent are included in the incomes of the top 5 percent, which are, themselves, included in the top 10 and top 20 percent (Osberg, 2008: 11). Thus, dividing the fifth quintile into deciles, vingtiles, centiles, the top 0.1, and top 0.01 percentiles is crucial for understanding where economic gains have been most concentrated.

Piketty (2014) argues that, in addition to understanding how the affluent are broken down, we also need to know how many people fall into each level. This, Piketty (2014) continues, is "because it reflects not just the existence of extremely high incomes or extremely large fortunes, but also the number of individuals who enjoy such rewards"

(253). Accordingly, understanding the share of income and wealth going to the top percentiles is not only important for measuring and analyzing the dynamics of economic inequality, but by adding the amount of people benefitting we are able to judge a society's general level of equality.

Another method, and according to Osberg (2008) the more accurate measurement, is to analyze the tax data of the 80th percentile and above. By analyzing tax data, both income and wealth accumulation can be assessed. Furthermore, both measurements of income shares and tax data allow us to compare the amount of economic growth that the affluent have seen over the last few decades with that of the non-affluent, or the rest of a population. Essentially, they provide a measure of *relative* economic well-being.⁶

Finally, the affluent may be measured through a *P ratio*, which takes the income threshold of a certain percentile and compares it with the median income, thus providing an indication of the relative standing of the percentile to the median. For instance looking at the P₉₀ and P₁₀ would reflect "the state of the rich and poor relative to the median in the population" (Kesselman and Cheung, 2006: 358). Moreover, by dividing the P₉₀ by the P₁₀ yields a *social distance*, providing evidence of the degree of inequality existing. In addition, Kesselman and Cheung (2006) argue that P ratios are useful for time series analysis as they provide a quick standard for comparison (358).

Although this framework is crucial for understanding changes in the top portion of the economic distribution, there are a few drawbacks. To begin, it does not give us much insight into what has occurred to the remaining 60 percent of the population. In short, both the affluent and poverty frameworks analyze the extremes of the economic

⁶ The idea of *relative economic well-being* is central to understanding *relative power*. This idea is explored in chapter 3.

distribution, meaning they are useful for understanding these areas, as well as who has power, but they do not give us any insight into the remaining segment, which is the majority of the population.

Banting and Myles (2015) argue further that an exclusive focus on the top 1 percent, or even the top 10 percent, is unlikely to result in much response from governments. This, they contend, is primarily due to the fact that they comprise such a small proportion of the population. In addition to this, if one applies the argument that economic affluence is directly connected to political influence then it should be no surprise that challenging the status quo would be incredibly difficult. Moreover, understanding what has occurred to the majority of any population is crucial for the underpinning of democratic ideals. Accordingly, this is where the third, and final, frame, analyzing the middle class, comes in.

2.2.3 The Middle Class Frame

The final frame is associated with the *middle class*, specifically, what has happened to the middle and largest segment of a given population. The interest in this group is multifold; the primary interest, however, developed in recent years over the concern that income polarization is causing the middle class to disappear (Dallinger, 2011). *Income polarization* is defined as occurring when households move out of the middle of the income distribution either by *upgrading* - moving towards the top of the income distribution - or by *downgrading* - moving towards the bottom of the distribution - resulting in the middle, essentially, "hollowing out" or disappearing. Accordingly, the major question associated with this phenomenon, is whether the majority is upgrading and joining the affluent, or whether they are mainly downgrading and joining the poorest.

The prospect that the middle class may be disappearing becomes quite disconcerting for proponents of democracy. Indeed, a large middle class is arguably essential for the health and viability of democracies. This is because historically the middle class played a crucial role in the development of Western democratic political institutions (Easterly, 2001; Foster and Wolfson, 2010). Moreover, the middle class has traditionally been the mediator between the rich and poor, often providing a voice to those without one (Dallinger, 2013). In addition, Chauvel (2013) argues that because the middle class is by far the largest income group, "its fortunes play a correspondingly major role in determining those of society as a whole" (145). Consequently, a large middle class is essential for economic growth and prosperity (Easterly, 2001; Foster and Wolfson, 2010).

Despite these concerns, Gornick and Jantti (2013) argue that very little inequality scholarship has focused on the economic status of this group (24). Fundamentally, understanding how this segment of a population is faring economically is not only key to understanding what has occurred, but is also essential to understanding the overall dynamics of economic inequality. Thus, defining who and what the middle class consists of is central for measuring and analyzing it, as well as for understanding the dynamics of economic inequality. Defining the middle class is, however, challenging, as there is no consensus on a definition, in addition to multiple theoretical lenses used to define this class. Nonetheless, the two most well-known approaches are embedded in economic and sociological theories (Gornick and Jantti, 2013).

An *economic approach*, according to Gornick and Jantti (2013), primarily identifies the middle class in relation to a country's economic distribution. As such,

Gornick and Jantti (2013) argue, "the middle class equals those households that fall in the 'middle'... of [an] income distribution" (9). That is, the middle class comprises the middle 60 percent of the distribution, with the affluent comprising the top 20 percent and the poor in the bottom 20 percent.

In addition to this, median income can be used to delineate the middle class. Accordingly, Smeeding (1991) argues that incomes between 0.625 and 1.5 times the national median income can be classified as middle class, meaning, middle class incomes range between 62.5 and 150 percent of the median income (43). Gornick and Jantti (2013), in contrast, suggest that the interval income range is actually "between 75 and 125 percent of the national median income" (10). This, they continue, means that there is a cutoff as to what is considered "middle class". Atkinson and Brandolini (2013) argue that this, thus, entails a definition that identifies the middle class as "those 'comfortably' clear of being at-risk-of-poverty" (83).

Furthermore, several scholars, including Gornick and Jantti (2013) and Atkinson and Brandolini (2013), suggest the middle 60 percent should be divided into three distinct groups, resulting in a *lower-middle class*, a *middle-middle class*, and an *upper-middle class*. Dallinger (2013) contends that by differentiating the middle class into three groups, the middle class becomes analytically useful, as patterns of growth in income or disparities are not necessarily uniform or constant across the broad middle class.

Again, we can use median income to delineate the ranges for each of these middle class groups. As such, incomes ranging between 60 and 75 percent of the national median income would be classified as *lower-middle class*; incomes ranging between 75 and 125 would be *middle-middle class*; and incomes ranging from 125 percent to the percentage

needed to enter the 80th percentile would be considered *upper-middle*. Needless to say, the upper limit in the upper-middle class is quite variable, as incomes can fluctuate from year to year. Moreover, those whose incomes fall below 60 percent of the national median income would be considered at risk of poverty, if not poor.

In addition to using median income to define the middle class, quintiles can be used in a similar fashion to the how they are used in the second, rich-vs.-the-rest framework. Accordingly, the second, third, and fourth quintiles would constitute the *lower-middle*, the *middle-middle*, and the *upper-middle* classes, respectively. By dividing the middle class into these three groups, we have at least five quantiles (assuming the 80th percentile has not, itself, been divided) to work with for analyzing the distribution of income. As a result, we are able to determine, with better accuracy, who has, and has not, benefitted economically over the last several decades (Gornick and Jantti, 2013).

There are several benefits associated with a purely economic approach of defining the middle class. First, it allows citizens to link the idea of the middle class to the economy, which is fundamental to most individuals, as well as to politicians. Second, the definition itself allows researchers to gain an insight into what most people term the "growing gap", that is, the rising disparities in income shares accrued by the rich versus the rest, which is often referred to as income polarization. Third, this approach is the simplest in terms of understanding and explanation.

Gornick and Jantti (2013), moreover, suggest there are two further advantages to an income-based definition of the middle class. First, they contend that most data sources are suited to this approach, meaning it is relatively easy to measure and analyze this group. Second, they argue that there is a high level of comparability due to the use of a

clearly quantifiable framework (10). In short, an economic approach enables a comparison of middle class characteristics, including, absolute income levels, wealth holdings, and political behaviour, across time, countries, and even income definitions (Gornick and Jantti, 2013: 10).

Despite these benefits, Atkinson and Brandolini (2013) argue "income alone [is insufficient] to identify the middle class [since] it fails to [capture] the full amount of resources on which individuals rely" (88). Moreover, they suggest that "middle class status [is] closely linked to the possession of real and financial assets" (89), meaning, middle class status is linked to the accumulation of wealth. As such, they contend that by accounting for wealth, income-based definitions can be enhanced, as can the understanding of what middle class means (91). Furthermore, Atkinson and Brandolini (2013) argue that by accounting for wealth, the upper limit of the middle class is much easier to define (89). Similar to defining income, percentage intervals of the median can be used to delineate the middle class. Interestingly, the range happens to be relatively similar to the income range; i.e. a range of 75 to 200 percent of median wealth is found to be sufficient to capture the middle class.

Beyond economic means, the middle class was traditionally, according to Atkinson and Brandolini (2013), defined in relation to control over resources and labour. However, they continue, this perspective has received insufficient attention in recent years, prompting criticisms from sociologists concerning the neglect of "fundamental social stratification embodied in labour market relations" (78). Thus, a *sociological approach*, according to Gornick and Jantti (2013), generally "invoke[s] definitions that
extend beyond income measures, often incorporating educational attainment and occupational characteristics, with the overarching aim of capturing power relations" (9).

Moreover, understanding the concept of *relative power* is crucial for explaining power relations, as well as how the middle class fares in regards to relative standing in the income distribution. As a result, in order to fully define middle class, not only should economic measures of income and wealth be used, but occupational status, educational attainment, and relative position in the distribution should also be incorporated. However, for the purpose of this thesis, the primary definition used will be associated with the economic approach. Moreover, since wealth and income are highly correlated, I mainly use income measures to assess the economic inequality of the middle class.

Now that we have a working definition of the middle class, we can begin to measure and analyze economic inequality. One of the primary measurement tools employed is the Gini coefficient. The *Gini coefficient*⁷ is a measure that assigns a numeric value to disparity, and is derived from the Lorenz curve (Kesselman and Cheung, 2006). It ranges from 0, *perfect equality*, where everyone has the same income and no disparity exists, to *1*, *perfect inequality*, where one person or household has all the income and everyone else has none (Kesselman and Cheung, 2006). Accordingly, one of the major benefits associated with the Gini index is that it enables relatively easy over-time and cross-country comparisons to be conducted.

Despite the prominence of the Gini coefficient, Osberg (2008) argues that the Gini index is best at capturing what is occurring in the middle of the income distribution and, consequently, is insufficient to capture changes at the extremes. In particular, when changes occur at either end of the income distribution, they "are only weakly reflected in

⁷ Index may be used in lieu of coefficient.

the shares of [middle class] income quintiles, or in the Gini index of inequality" (12). Consequently, Osberg (2008) contends that the severity in trends in inequality is often understated by the Gini coefficient.

Thus, in addition to analyzing the Gini, changes in income shares held by the second, third, and fourth quintiles should also be measured (Dallinger, 2013). Similar to the Gini, analyzing income shares of the middle enables over-time comparison, as well as, providing a picture of who has and has not benefitted in regards to economic growth. Essentially, by analyzing changes in shares in the second, third, and fourth quintiles we can observe not only where inequality has grown, but also assess whether or not income polarization has occurred, and if it has, determine whether it is mainly due to upgrading or downgrading.

In addition, if we extend this analysis to include both the bottom 20 and top 20, in a similar fashion to approaches used the second framework, we can have a truly holistic picture of who has benefitted most economically, as well as where inequality has grown in the income distribution (Gornick and Jantti, 2013). Interestingly, there is a considerable amount of empirical evidence, including from the OECD, the LIS, the LWS, and the World Top Income database, indicating economic inequality is primarily due to a growth in incomes and shares of the affluent. Consequently, Kenworthy (2013) argues when there is a 'top-heavy' rise in income inequality there is a reduction of middle class households' *relative incomes*. This, he continues, leads the middle class to lag further behind those at the top of the distribution, resulting in the affluent pulling away from the rest (101).

2.2.4 Conclusion

In short, it appears that using only one of these frameworks to analyze economic inequality yields an inadequate and distorted picture of the reality faced by populations in a country. As such, it is best to use multiple frameworks and measures to ensure that the dynamics of economic inequality are fully understood. However, for the purpose of this thesis, the second and third frames are most important. Indeed, understanding how the affluent have done with respect to the rest of the income distribution is conceptually necessary to understand how economic inequality has contributed to other forms of inequality, specifically, political inequality.

2.3 The Importance of Framing

The framework for understanding economic inequality that one uses is important for two distinct, yet essential reasons. The first is analytical, meaning the framework used determines the type of analysis conducted. In particular, how we frame economic inequality will determine the type of measurement tools used, the analysis itself, and the overall understanding of the dynamics of economic inequality that is obtained - whether inequality is seen as increasing, decreasing, or neither. Consequently, the framework employed emphasizes certain aspects of economic inequality, all the while hiding other potentially important factors contributing to the dynamics of economic inequality. Indeed, as there are several types of inequality, such as social and political, which are often interrelated, the framework greatly influences our understanding of how these various inequalities are connected to one another.

The second fundamental reason the framework is important is conceptual. Specifically, how we frame economic inequality affects its interpretation, which in turn,

influences whether or not governments respond. It is, thus, *politically consequential* (Bartels, 2008: 19). Indeed, whichever framework comes to dominate the debate and discourse shapes our understanding of what is occurring and how we respond. Essentially, how we come to define and interpret economic inequality will influence if, and how, governments, institutions (both political and non-political), and the overall political system responds to the issue. Consequently, whoever has the *power* to shape the conceptual understanding of what is occurring fundamentally controls the response, and to a degree, the political system.⁸

2.4 Growing Economic Inequality

Beyond the three frameworks used to analyse economic inequality, movements in income can be measured in three ways: market, total, and after-tax-and-transfers (disposable). *Market income* refers to income before taxes and transfers, i.e., it is a sum of all earnings (Statistics Canada, 2013f). *Total income* refers to income post transfers (redistribution), but prior to taxes, i.e., it is the sum of all income received including transfers before the deduction of income taxes (Statistics Canada, 2013f). *After-tax-and-transfers income* is total income minus taxes, i.e., after redistribution and taxes have occurred (Statistics Canada, 2013f). It is also referred to as *disposable income*, as it is what people have at their disposal. By analyzing income in separate categories we can see exactly where changes have occurred, including whether growth in inequality is due to the market or government policies.

Now that we have an understanding of the three main frameworks used to study economic inequality and the three primary measures for capturing income movements,

⁸ The idea of *power* and political systems is explained in Chapter 3.

we can parcel out what has occurred in Canada over the last few decades. Since the 1980s, Canada has seen dramatic changes in economic inequality. Specifically, what appears to have occurred over this period is a *hyperconcentration* of income. As a result, economic resources have become concentrated among affluent Canadians. Further, the remaining Canadian population has lost substantial ground in terms of economic resources, which has resulted in declining relative position, both in the income distribution and in society as a whole. Consequently, affluent Canadians have gained not only in economic power, but also in relative political power.

Although all three income measures are important for understanding economic inequality, market and disposable income are especially crucial for understanding how the political system, itself, has changed. Indeed, by analyzing changes to both market and disposable income inequality, we gain an insight into the causes and consequences of economic inequality, which is vital for understanding why and how economic inequality is related to political inequality, as well as how political participation has been affected. As such, the following section primarily focuses on the changes in market and disposable income since the 1980s.

2.4.1 Market Income

Between 1982 and 2011, the top 10 percent of Canadians increased their share of market income by approximately 25 percent (Statistics Canada, 2013f). The growth in the share of market income is even more astounding the higher the income group, providing evidence that there has been a *hyperconcentration* of income. Indeed, the top 5 percent increased their share by 30 percent and the top 1 percent saw an increase of well over 50 percent (Statistics Canada, 2014). Moreover, both the top 0.1 and 0.01 saw over 100

percent increases in their share of market income, resulting in their share more than doubling in 30 years.

As a result, by 2011, the richest 10 percent of Canadians' share of market income was almost 40 percent (Statistics Canada, 2014). However, the share of income captured by the top 10 percent is skewed towards the even more affluent. Specifically, the top 5 percent share of market income was 27 percent, meaning the bottom 5 percent of the top 10 percent was less than 13 percent. Equally important is the share of market income captured by the top 1, top 0.1, and top 0.01 percent, which were 12, 4.3, and 1.5 percent, respectively, in 2011 (Statistics Canada, 2014.

Furthermore, in 2006 when the richest 10 percent captured their highest share of market income in the last 30 years, the 99.99th percentile captured almost 2 percent of market income. This is a threefold increase in 25 years for the top 0.01 percent of Canadians, whose share was 0.6 percent in 1982 and 2 percent by 2006. In addition, the top 0.1 percent captured 5.4 percent of market income, which was over 2.5 times greater than in 1982, when they held 2 percent. Moreover, the 99th, 95th, and 90th percentiles captured 14, 28, and 40 percent, respectively, of market income for 2006; all the while the remaining 90 percent of Canadians captured less than 60 percent.

In contrast, the remaining 90 percent of Canadians saw a decrease of over 12 percent in their share of market income occur between 1982 and 2011 (Statistics Canada, 2014). Indeed, in 1982 the bottom 90's share was 68 percent, however, by 2011 it was only 60 percent. Put another way, the bottom 90 percent of Canadians' share of market income in 2011 was 89 percent of what it was in 1982. However, the share of market income captured by the bottom 90 is skewed in the direction of the more affluent. In

particular, the share of market income captured by the bottom 50 percent of Canadians was less than 10 percent in 2011. Consequently, in 30 years, the bottom 50 saw a decrease of over 40 percent in their share, which was 14 percent in 1982 (Statistics Canada, 2014).

In addition, when analyzing the bottom 50 percent of Canadians, we see their share of market income is substantively smaller than the richest 10 percent. Indeed, in 2011 the 90th and 95th percentiles' share of market income was four and three times that of the bottom 50 percent of Canadians, respectively (Statistics Canada, 2014). Furthermore, the bottom 50's share of market income was less than the 99th percentile, 10 and 12 percent, respectively (Statistics Canada, 2014). In other words, not only does 10 percent of the Canadian population hold a larger share of market income, but the concentration of market income is so unequal that 1 percent of Canadians captured more income than 50 percent of the population.

Although income shares captured by the top 10 percent decreased slightly after 2007, the share of the bottom 50 continued to fall and was smaller in 2011 than in 2006, when the top 10 captured the largest share of market income in the past 30 years (Statistics Canada, 2014). Clearly, market income has increasingly become concentrated in the hands of an already affluent minority. Consequently, not only are the rich are getting richer, but they have pulled away from the rest, meaning they have gained substantial ground in relative position. Due to the hyperconcentration of market income, the Gini coefficient for adjusted national market income increased approximately 20 percent since the early 1980s (Statistics Canada, 2013g).

2.4.2 Total Income

According to data from the *World Top Incomes Database*, the share of total income captured by the 90th percentile increased from approximately 34 percent in 1985 to over 40 percent in 2010. The 95th and 99th percentiles saw their shares increase by over 6 and 4 percent, respectively, going from 21 to over 27 percent and 8 to over 12 percent between 1985 and 2010. During this same period, the 99.9th percentile more than doubled their share of total income, which increased from 2 to 4 percent (Alvaredo et al., 2015).

2.4.3 After-tax Income

Despite the enormous gains accrued by the affluent in market income since the 1980s, there was not much movement in disposable income inequality until the 1990s. Moreover, the growth rate in disposable income inequality increased rapidly after 1995 (Statistics Canada, 2014). Indeed, according to the Government of Canada, in a 15-year span, between 1995 and 2011, families at the 20th percentile saw their after-tax incomes increase by roughly 13 percent, while families at the 80th percentile saw an increase of 37 percent. As a result, the difference between these two groups rose by approximately 41 percent, increasing from \$88,000 in 1995 to over \$124,000 in 2011. Similar outcomes were reported for the middle 60, whose disposable incomes increased 23 percent. The difference in average incomes of the middle 60 and the top 20 grew by almost 48 percent (HRSDC, 2013).

Furthermore, during the 1980s, the Gini coefficient for disposable income inequality remained relatively stable, at approximately 0.286. Although the mid-1980s (1983 to 1986) did see a jump in the Gini index, by 1987, the Gini had returned to its stable rate of approximately 0.287. It continued to decline further until 1989, where it hit

a low of 0.281, reversed, and once again increased. As such, the period between 1990 and 2000 saw a dramatic rise in disposable income inequality. Consequently, during the1990s the Gini coefficient for disposable income inequality increased by over 10 percent, going from 0.286 in 1990 to 0.317 in 2000 (Statistics Canada, 2013g).

Moreover, it was not until the second half of the 1990s, after 1995, that the Gini began to increase at an astonishingly high rate. Indeed, between 1995 and 2000, the Gini index for disposable income increased by 0.024 units, moving from 0.293 in 1995 to 0.317 in 2000 (Statistics Canada, 2013g). Consequently, an increase of 8 percent occurred in a 5-year span. Furthermore, the Gini continued to increase in the early 2000s, reaching a high of 0.322 in 2004. It did, however, decrease to 0.317 in 2005, but has remained relatively stable at this level since. As such, this new level is over 10 percent higher than it was 30 years prior.

Interestingly, the share of disposable income going to the different quantiles, including the top decile, and bottom 90, remained fairly stable throughout the 1980s. Indeed, it appears that it did not begin changing until after 1993, and with the rate of change increasing after 1995. Specifically, the share captured by the bottom 90 remained around 73 percent during the 1980s (Statistics Canada, 2014). However, it began decreasing in the early 1990s, and continued to do so throughout the 1990s and early 2000s. Moreover, the decline that occurred appears to have increased at a faster pace after 1995. As a result, the share of disposable income declined by approximately 6 percent. Put another way, the share of after-tax income received by the bottom 90 in 2011 was 94 percent of what it was 25 years earlier.

Additionally, by the late 1990s, the share of disposable income captured by the top 5 percent was almost equal to the share going to the bottom 50 (Statistics Canada, 2014). Moreover, in 2000, the shares received by those at or above the 95th percentile and bottom 50 switched, meaning, the share of disposable income accrued by the top 5 percent surpassed the share going to the bottom 50. Indeed, the shares went from 19.5 to 20.2 for the top 5 percent, and 20.1 to 19.6 for the bottom 50 (Statistics Canada, 2014). Further, up until the late-1990s, the share captured by those above the 95th percentile was a minimum of 3 percent less than that of the bottom 50. Now, however, the richest 5 percent of Canadians consistently capture more income than the poorest 50 percent of Canadians. Fundamentally, in less than 20 years, the bottom 50 effectively saw a loss of over 15 percent in their share of disposable income, all the while the richest 5 percent saw an increase of 25 percent (Statistics Canada, 2014).

It evidently appears there was a major transformation in the 1990s in a mechanism that had successfully limited increases in disposable income inequality in the 1980s. Furthermore, this transformation not only enabled inequality in after-tax income to increase, it effectively allowed the growth to occur at a substantially higher rate. Accordingly, Banting and Myles (2013) argue that the reason disposable income inequality increased in the 1990s was primarily due to the Canadian government restructuring policies, specifically policies associated with redistribution. As such, one begins to question why government policies changed in the 1990s.

2.4.4 Conclusion

In short, Canada has seen considerable changes occur over the last three decades. Specifically, the affluent have made remarkable economic gains since the early 1980s,

first in market income, then in disposable income. As a result, the affluent are pulling away from the rest of Canadians. Consequently, the rest of Canadians have lost substantial ground both in terms of economic resources and in relative position, resulting in considerable transformations in the Canadian political system. In essence, not only have disparities in economic resources increased, but also disparities in power, both economic and political, have, consequently, increased.

2.5 Conclusion

Since the 1980s, Canada has experienced substantial growth in economic inequality. Economic inequality is defined as the unequal distribution of economic resources, particularly in regards to income. In Canada, economic inequality is typically analyzed in one of three frameworks: poverty, which is concerned with the economic well-being of the poor; the affluent versus the rest, which analyses the richest quintile; and the middle class, which is concerned with the economic well-being of the middle 60 percent of the income distribution.

The framework used is important for both analytical and conceptual reasons. Specifically, the framework employed determines how economic inequality is conceptualized, analyzed, and understood, which in turn affects the type and level of response. In other words, how economic inequality is framed influences if, and how, governments, institutions (both political and non-political), and the overall political system responds. Accordingly, the two most important frameworks for this thesis are the second, the affluent versus the rest, and the third, the middle class, as they enable us to identify the causes and consequences of economic inequality.

In addition to the frameworks, economic inequality can be analyzed by measuring movements in three types of income: market, total, and disposable. The most important of these, however, are market and disposable incomes as they provide insight into where economic inequality has grown, as well as what has caused it to change. Indeed, what appears to have occurred in Canada over the last three decades is that inequality has grown in both market and disposable incomes. Moreover, market income inequality began rising in the early 1980s, whereas inequality in disposable income did not occur until the 1990s.

Domestic politics has been central to the changes in economic inequality. That is because, according to Banting and Myles (2013), "changed politics generate changed policies" (3). Indeed, during the 1980s, the Canadian government's redistributive policies were among the strongest of OECD countries; however, by the late 1990s, they were among the smallest (2). Accordingly, the policies that had offset the growth in market income inequality changed significantly in the 1990s, which led to the rapid increase in disposable income inequality.

Fundamentally, economic inequality is intertwined with other forms of inequality, particularly, political inequality. As such, understanding the transformation of economic inequality is crucial for understanding what has happened, how and why it has occurred, and who has been affected. The fact that economic resources have become highly concentrated among affluent Canadians raises concerns about political influence and power. In essence, if economic affluence results in political power, what does this mean for democratic political systems, such as Canada?

Chapter 3: Understanding Voter Turnout

Over the last three decades, voter turnout has declined in the vast majority of Western democracies (IDEA, 2011). Canada, in particular, has seen a dramatic decline since the 1990s. Indeed, within a 20-year period, Canada's turnout rate dropped 15 percent (Elections Canada, 2013). Because voting is considered to be the primary form of political participation in a democracy, voter turnout is frequently used as an indicator to assess the health, viability, and overall performance of a democratic political system (Uppal and LaRochelle-Cote, 2012; Franklin, 2001). Consequently, declining voter turnout raises several questions and concerns.

To begin, what has caused turnout to decline? Is it something about individuals, societies, or institutions or has the political system, itself, changed? Furthermore, if voting is such an integral part of maintaining a democratic political system, what does the drastic decline in electoral participation signify? In other words, has electoral participation declined simply because people no longer feel the need to vote? Or has the system, itself, become unresponsive to the needs of the electorate and, as such, caused widespread disillusionment, disengagement, and self-disenfranchisement amongst the electorate?

Although several hypotheses have been proposed in an attempt to explain the phenomenon of declining voter turnout, three explanations have come to dominate the voting behaviour literature (Blais, 2009). The first explanation, *generational change*, argues that electoral participation has declined because the character of voters has changed. The second explanation, *declining group mobilization*, argues that turnout has declined because voters are no longer being mobilized to vote. The final explanation

argues turnout has declined because the *characteristics of elections* have changed, specifically, *electoral competitiveness* has declined.

Prior to explaining these three hypotheses, it is necessary to first situate them within the voting behaviour literature. There are three overarching theories (paradigms) and six-individual-level theoretical models. The three major theories are the *sociological paradigm*, the *social-psychological paradigm*, and the *rationalist* or *economic paradigm*. The six individual-level theoretical models are: the *resource model*; the *mobilization model*; the *socialization model*; the *rational choice model*; the *psychological model*; and the *political-institutional model* (Smets and van Ham, 2013).

This chapter is structured into four sections. The first discusses the three paradigms, the second explains the six theoretical models, the third examines the different explanations for declining turnout, and the final presents my research question. It is worth noting that there is crossover between the paradigms and models; thus, the following discussion is meant to highlight the existing literature on voting behaviour in order to present the three hypotheses explaining declining turnout and to help situate my research question.

3.1 Voting Behaviour Paradigms

The study of voting behaviour began in the United States in the first half of the 20th century. Three paradigms explaining the behaviour of voters came to dominate the field of voting behaviour. The first, the *sociological paradigm*, emphasized the process of social influence, arguing the behaviour of individuals was a product of their social context (Kanji and Archer, 2002). The second, the *social-psychological paradigm*, moved beyond the "social" and focused, instead, on psychological explanations, arguing that

individuals were autonomous beings whose behaviours were partially independent of surrounding contexts (Anderson, 2009). The third, the *rationalist paradigm*, argued people were motivated by self-interest and acted "rationally" by conducting a calculus of the costs and benefits associated with participating in the political system. Consequently, as these paradigms developed, there was a shift from viewing voters as individuals whose decisions were a part of the collective, to individuals whose decisions were based on psychological factors, to individuals whose decisions were based upon self-interest and maximizing personal benefits.

3.1.1 Sociological Paradigm

The first major theory, the *sociological paradigm*, resulted from the *Columbia study* of the 1940 US presidential election, and dominated the field of political behaviour in the 1940s (Dennis, 1991; Niemi and Weisberg, 2001). This theory emphasized the "processes of social influence" (Heath, 2009: 610) connecting voters' socioeconomic status, specifically their education, income, and class, as well as religion and place of residence, to their votes (Niemi and Weisberg, 2001: 14). As such, the sociological paradigm primarily focused on social, demographic, and geographic variables of voters (Dennis, 1991: 57). Accordingly, voters' political awareness was built upon their social experiences, and hence the decisions they made were best understood when depicted as part of a larger group decision (Dennis, 1991: 58). Social contexts were, therefore, pivotal for understanding individual voting behaviour.

Despite these seemingly noteworthy arguments, there are several critiques regarding this approach. One of the major drawbacks of the sociological paradigm is that it did not explain why differences among social groups appeared. Furthermore, when the

Michigan researchers (Campbell et al., 1960) applied this model to their 1948 national study, it did not hold, suggesting there were other factors at play influencing participation (Niemi and Weisberg, 2001: 14). Consequently, a new approach developed.

3.1.2 Social-psychological Paradigm

As a result of the critiques surrounding the sociological paradigm, the *socialpsychological paradigm* was developed. This paradigm moved beyond the "social" and extended the sociological thinking of social influences, arguing that it was insufficient in explaining electoral participation. The social-psychological tradition, also referred to as the *Michigan Model*, resulted from a series of electoral studies conducted by Campbell et al. in the late 1940s and early 1950s (Dennis, 1991: 59). Although Campbell et al. agreed to an extent with the Columbia study's findings that group forces were important, they argued that factors that were personal and political, were more important (Kanji and Archer, 2002). Accordingly, they distinguished between long- and short-term influences and developed a model explaining how these factors interacted with one another, ultimately shaping "the vote" (Dennis, 1991: 59).

Campbell et al. (1960) described their model in terms of a "funnel of causality", the axis of which was constituted by time. At the mouth of the model were characteristics pertaining to an individual's sociological background, social status, and parents (Niemi and Weisberg, 2001: 15). These foundational characteristics were pushed to the periphery of the explanatory system and were only considered important in how they interacted with subsequent factors (Dennis, 1991: 59). The next part of the funnel, considered as the main variable, was *party identification*, which was followed by the next two key factors, *candidates* and *issues*. Closer to the tip of the funnel, in succession were the election

campaign, conversations the voter has with friends, family, and other peer groups, and, finally, the vote (Niemi and Weisberg, 2001: 15).

Campbell et al. further divided the factors of the funnel into long- and short-term. Party identification was thought to be a long-term factor, whereas candidates and issues were classified as short-term, pertaining to the specific election (Niemi and Weisberg, 2001: 15). Dennis (1991) contends that by forming the funnel in this fashion, Campbell et al. moved the study of voting away from "what appeared to [be] less potent, more indirect, relatively static effects of membership in social groups to the more dynamic, individual, attitudinal determinants of voter intentions and decision" (59). As a result, we see a shift from social or group based action to one that is more individually based and focused on psychological factors.

Despite the relative success of Campbell et al.'s arguments, one of the major drawbacks of this approach is the centrality of party identification. Accordingly, Heath (2009) argues that the applicability of this model, specifically the role of party identification, varies across countries (612). As such, partisanship cannot be assumed to play a central role in contexts outside the United States. Moreover, there have been several arguments suggesting that partisanship has, in fact, declined, contributing to an increasing importance of other factors, specifically, candidates and issues (Dalton and Klingermann, 2009: 10-11).

Furthermore, the relatively recent development of growing economic inequality gives rise to questions of how the foundational social and demographic characteristics will affect the rest of the funnel of causality. In other words, although these are considered to be relatively static and indirect influences, what would happen if inequality

(economic, social, and political) increases to the point where shifts in one's membership in social groups occurs? Despite these criticisms, the *social-psychological paradigm*, especially the *funnel of causality*, continues to be the dominant paradigm for analyzing electoral behaviour.

3.1.3 Rationalist/Economic Paradigm

The third paradigm developed somewhat separately from the previous two, and is rooted in Anthony Downs's (1957) *An Economic Theory of Democracy* (Dennis, 1991; Niemi and Weisberg, 1993). The *economic*, or *rationalist paradigm*, however, did not gain prominence until the 1970s (Niemi and Weisberg, 2001). By applying economic theory to the behaviour of voters, Downs argued that voters were *rational*, and as such, were primarily motivated by their self-interest (Dennis, 1991; Niemi and Weisberg, 1993). Accordingly, the assumption is that voters seek to "maximize their expected utility" (Niemi and Weisberg, 1993: 13) or benefit. Consequently, this perspective argues that voters conduct an analysis of the costs and benefits when deciding whether or not to vote. As such, individuals will only vote if the expected benefits outweigh the cost.

Moreover, Downs argued that it might, in fact, "be *irrational* for people to vote, because the costs of voting outweigh the benefits derived from it" (emphasis added; Niemi and Weisber, 1993: 14). In other words, because the costs attached to voting are primarily accrued in time, both in the act itself and becoming informed, and exceed the benefits, such as the probability of one's vote making a difference, it becomes unreasonable and illogical for individuals to vote. Furthermore, because voters are rational individuals it is assumed that they are free from social and group pressures and are, thereby, wholly individualistic decision-makers (Dennis, 1991: 62). Accordingly, the

rationalist paradigm differs dramatically from the sociological and social-psychological paradigms as it completely separates the individual from greater society.

There are several critiques of this perspective. To begin, one major criticism of the rational choice tradition is that it is an oversimplification of the factors influencing electoral behaviour (Dalton and Klingermann, 2009). Specifically, opponents of the rationalist perspective argue that individuals behave not in their own self-interest, but as members of a collectivity (Blais, 2000:14). As such, when analyzing voting behaviour, social contexts must also be accounted for. Moreover, as this paradigm is American centric, how applicable is this perspective to contexts outside the US? Are voters in other countries rational to the same degree as American voters? Or are social groups more important?

Furthermore, Blais (2000) argues that voting presents a rather complex "paradox". The paradox is that despite the low probability of an individual casting the decisive vote, a majority of citizens still vote. This suggests there are other factors contributing to an individual's decision to vote, or not, than a simple analysis of costs and expected benefits. As such, rationalists have "extended" the model to include sense of civic duty (Smets and van Ham, 2013). In this view, individuals not only consider personal benefits, but also those of others (Smets and van Ham, 2013: 344). Despite the added aspect of civic duty, Blais (2000), among others, argues that the rationalist paradigm provides, at best, a partial explanation for electoral behaviour (11).

3.1.4 Conclusion

On the whole, it appears that each paradigm only partially explains electoral behaviour. Furthermore, the fact that these paradigms developed by analyzing American

voters and elections in the mid-20th century raises questions regarding their applicability to contemporary elections and other electoral, political, institutional, and social contexts. Moreover, what happens when conditions within a country change, such as the recent phenomenon of increasing economic disparities? Can these paradigms adequately capture the changing nature of individuals, society, and political systems?

3.2 Theoretical Models

Beyond the three paradigms, the study of voter behaviour – particularly political participation – can be further divided into six main individual-level theoretical models: *the resource model; the mobilization model; the socialization model; the rational choice model; the psychological model;* and *the political-institutional model* (Smets and van Ham, 2013). Since these models stem much from the three main theories, their explanatory power is similar. In addition, Smets and van Ham (2013) contend that even though there are multiple theories, there are also a variety of ways for grouping variables into these models. Geys (2006) contends further that none of the variables are ubiquitous in the literature. Consequently, many of the variables each model studies are not mutually exclusive as some, in fact, influence the behaviour of voters in multiple ways (Smets and van Ham, 2013: 347-348).

3.2.1 The Resource Model

The first theoretical model is the *resource model* (Franklin, 2004; Smets and van Ham, 2013). The central idea in this model is that *individual resources*, particularly money, time, and skills, drive turnout (Verba et al., 1995; Smets and van Ham, 2013). Accordingly, turnout is hypothesized to be greater for individuals with high incomes and

high socio-economic status as they are more likely to have access to a wider range of resources.

Furthermore, occupational status and educational attainment contribute to individual resources by enhancing an individual's knowledge, skills, and money. Smets and van Ham (2013) add further that education level and occupation type (white collar versus blue collar) are thought to act as a mechanism for social sorting. That is, they function "as a proxy for social class and skills" (348). In addition, Smets and van Ham (2013) contend that individuals with more resources have larger social networks and face greater risks and rewards in elections.

Individual motivations to participate should, thus, increase the higher one goes up the socio-economic "ladder". In essence, voter turnout is argued to be greater for individuals with higher socio-economic status, greater skills, and more knowledge, as they possess greater resources (Smets and van Ham, 2013: 344). Accordingly, the primary resource variables that influence an individual's voting behaviour are income, occupational status, and educational attainment.

3.2.2 The Mobilization Model

The second theoretical model is the *mobilization model*. This model hypothesizes that people vote because they are mobilized to do so by various social networks including political parties, candidates, interest groups, and social movements (Franklin, 2004; Smets and van Ham, 2013; Rosenstone and Hansen, 1993). As such, this model moves beyond the individual itself to emphasize social networks, suggesting that voting is guided by social norms (Smets and van Ham, 2013).

For this purpose, Blais (2000) contends the mobilization model is connected to the sociological paradigm as it emphasizes the influence of social networks (13). Consequently, Smets and van Ham (2013) argue these social networks reduce the costs of participating because they provide information on the electoral process, candidates, and parties (350). Moreover, associational life, such as membership in community groups, contributes to mobilizing individuals by emphasizing the values associated with participation, such as civic commitment. In other words, higher involvement in associational activities not only stimulates political participation, but also increases individual skills and promotes commitment to one's society (351). As a result, the primary variables in the mobilization model are the various social networks an individual is connected to.

3.2.3 The Socialization Model

The third model, *the socialization model*, is somewhat similar to the sociological paradigm, in that it focuses on similar variables, specifically the processes of social influences. Accordingly, this model argues that turnout and general political attitudes are based on early, or formative, socialization. Consequently, individuals' political attitudes and behaviours are formed during adolescence through the influence of various socializing agents such as the family, peers, the political context, and the mass media (Smets and van Ham, 2013: 352).

Blais (2009) contends this model is primarily focused on individual political interests and the factors responsible for developing them. In other words, turnout is conditional on *parental influences*, particularly socio-economic status and education levels, *political knowledge*, attained through political discussions, and early *habit*-

forming, which is, in itself, influenced by the previous two factors (Smets and van Ham, 2013). Therefore, an individual's early experiences through these foundational factors are consequential for political participation in adulthood.

3.2.4 Rational Choice Model

The fourth model, *rational choice*, is essentially the same as the rationalist paradigm. In particular, it argues that individuals make a cost-benefit calculus when deciding whether or not to vote. Again, the assumption is that *perceived benefits* must outweigh the *perceived costs*. Moreover, voting is viewed as a self-reinforcing mechanism, i.e. once an individual votes, they are more likely to vote in future elections, similar to the socialization model's variable, habit-forming (Smets and van Ham, 2013; Franklin, 2004). In essence, once an individual votes, their information barriers, and consequently costs, are lowered, as they understand the process and are thus able to continually use this knowledge and experience in the future. Simultaneously, individuals who have never voted are inexperienced, and the initial costs, such as becoming informed about the process, candidates, or issues, may be too high for them to participate (Smets and van Ham, 2013). Consequently, they are more likely to abstain.

Furthermore, Smets and Van Ham (2013) argue that if an individual believes they have a higher stake in an election or the potential for greater benefits, then they are much more likely to vote. Moreover, Niemi and Weisberg (2001) contend that even if an individual does not perceive many benefits, their sense of civic duty may be sufficient for them to vote (23). However, if the costs outweigh both perceived benefits and civic duty, an individual is not expected to vote. In short, the rational choice model hypothesizes that

individuals act in their own self-interest and, as long as their individual costs are lower than their expected benefits and sense of duty, they will vote.

3.2.5 The Psychological Model

The fifth model, the *psychological model*, is somewhat similar to the socialpsychological paradigm. Specifically, this model argues that turnout is affected by both attitudes and psychological predispositions. These psychological determinants include an individual's political interest, partisanship, and political efficacy (Smets and van Ham, 2013). As such, these explanatory factors range from *cognitive characteristics*, including political interest and knowledge, to *personal preferences* such as ideology and party identification, and to *personality characteristics*, such as altruistic behaviour or sense of civic duty.

Moreover, Smets and van Ham (2013) contend that cognitive factors act in similar fashion to resources in that they lower the costs of participation, whereas personal preferences are associated with increased benefits obtained through the act of voting (354). Personality characteristics, they continue, help explain the "degree to which people [participate and] perceive voting as a civic duty" (354). Accordingly, Smets and van Ham (2013) argue this model encompasses a wide range of explanatory variables.

3.2.6 The Political-Institutional Model

The final model, *political-institutional*, argues that an individual's decision to participate in the political process is a by-product of the political system (Smets and van Ham, 2013; Franklin, 2004). Namely, that voters are influenced by both political and institutional contexts. These contexts include the type of electoral system (proportional versus majority), voter facilitation rules, and compulsory voting (Smets and van Ham,

2013). Franklin (2004) adds, further, that because most theories on voting behaviour only account for individual factors, they may not, necessarily, capture other forces that influence electoral behaviour. Specifically, he suggests that the character of a particular election may also affect turnout (4). Consequently, electoral contexts, such as election competitiveness and the effective number of parties, must also be accounted for when studying voter turnout (Franklin, 2004; Johnston et al., 2007).

Furthermore, Franklin (2001) contends the context in which elections are held influences individual instrumental motivation (83). *Instrumental motivation* is the sense that an individual's action may affect the outcome of an election (86). Franklin (2001) argues that, within this view, voters are viewed as social beings that vote not as individuals, but as a part of a collective. Thus, the solidarity and connection an individual has with others will guide their participation. Therefore, understanding the political, institutional, and electoral contexts are crucial for understanding voting behaviour and subsequent turnout levels.

3.2.7 Conclusion

To summarize, it appears that there are multiple factors and variables influencing individual voting behaviour. Indeed, Smets and van Ham's (2013) meta-analysis of individual-level voter turnout reveals that there is empirical support, in varying degrees, for all of these theories. Accordingly, Smets and van Ham (2013) suggest that the very "fact that so many theoretical explanations exist and have found empirical support points to the possibility that multiple causal mechanisms explain voter turnout and that different causal mechanisms may be prominent for different voters or in different contexts" (345). Skocpol (2004) likewise suggests that a "combination of resources, motivations, and

mobilization explain variations in who participates, how, and at what levels" (10). In other words, it appears that voting is a product of multiple factors, primarily, *means, motives,* and *opportunities*.

So, why has voter turnout declined? Can one or more of these theories explain why voters participate at lower rates now than in previous decades? Or, is something more going on? Essentially, given the fact that these theories are based on micro processes, that is, individual-level variables, can they adequately capture the changing dynamic of electoral participation? Although these six theoretical models are best at explaining individual-level turnout, they are still necessary to understand when analyzing aggregate-level turnout, as they provide a foundation upon which aggregate analysis can be conducted.

3.3 Explaining Turnout Decline

Now that we have a basic understanding of the main paradigms and theoretical models used to study voting behaviour we can begin to discuss explanations for declining electoral participation. As mentioned above, voter turnout has declined in recent decades, with many Western democracies seeing significantly lower electoral participation rates in recent years than in the post-war era. To reiterate, beginning in the early 1990s voter turnout in Canadian federal elections declined sharply, going from an average of 75 percent in the post-war period to an average of 60 percent by the early 2000s (Elections Canada, 2013). Other countries that have similarly experienced declining turnout rates include Japan, New Zealand, and the United States (IDEA, 2011). Interestingly, Canada's experience has been one of the most dramatic in terms of rapid and sustained decline (IDEA, 2011). What has occurred over the last few decades that have caused electoral

participation to decline?

Naturally, several hypotheses have been proposed in an attempt to explain the phenomenon of declining voter turnout. These arguments include the importance of individual factors associated with high costs, as the *rational-choice model* and *rationalist paradigm* argue, and socio-demographic variables, specifically, education and age (Niemi and Weisberg, 2001; Blais, 2009). The problem with these particular variables, however, is that they do not seem to adequately capture the dynamics of declining electoral participation. Thus, according to Blais (2009), the three leading explanations are associated with *generational change*, *declining group mobilization*, and the *character of elections*.

3.3.1 Generational Change

According to Blais (2009) the first explanation, *generational change*, argues that those born since the mid-1960s, the post-baby-boomer generation, participate at much lower rates than those born prior to the 1960s. Blais (2009) argues the most recent generation is less likely to vote than the previous two generations, even after accounting for life-cycle effects⁹ (629). Many scholars point to weaker party attachments and community integration and lower political interest as the main differences between generations. In addition, Blais (2009) contends that the newer generation not only is less interested in politics, but also pays less attention to politics and has a weaker sense of civic duty.

Accordingly, Blais (2009) suggests that this generational shift points to "a larger cultural change" (629). Niemi and Weisberg (2001) add that because the majority of

⁹ Life-cycle effects refer to differences associated with the varying stages of life (Putnam, 2001: 54).

decline has been concentrated among people born since the mid-1960s, explanations need to account for changes "that are [both] 'societal' in the sense that their effect is widespread and yet targeted in the sense that their effect is greatest in specific cohorts" (27). Essentially, within this view, the *character of voters* and *society*, in general, has changed, which has resulted in declining electoral participation.

Despite some empirical evidence indicating a generational effect, Blais (2009) contends there are no persuasive explanations for what precipitated the generational differences (629). Moreover, the fact that voter participation has declined in so many countries over the same period indicates "the roots of this phenomenon lie [not only] in changes that are occurring throughout [a particularly] society, [but also] throughout the world" (Niemi and Weisberg, 2001: 29). Interestingly, those born since the 1960s were reaching the age of majority at the same time that economic inequality was more or less beginning to grow. Consequently, *political contexts* were changing. Perhaps, then, there is a link between generational change and increasing economic inequality?

3.3.2 Group Mobilization

The second explanation, according to Blais (2009), focuses on declining *group mobilization* (630). According to the mobilization model, unions and labour parties are thought to increase turnout. They do so by mobilizing people to participate, all the while reducing individual costs, and to some extent class biases, thus enabling those with fewer resources, skill, and knowledge to participate (Smets and van Ham, 2013). Thus, because labour parties and union membership have declined in recent years, group mobilization has, likewise, declined, resulting in declining voter participation. Even though some evidence supporting this hypothesis exists (Gray and Caul, 2000), Blais (2009) contends

that the argument is not entirely convincing, as "these two factors combined [appear to] 'explain' only about one point of the 10-point decline" (630), meaning there remains a substantial aspect to be explained.

3.3.3. Character of Elections

The third explanation, according to Blais (2009), was first proposed by Franklin (2004) and contends that what matters more is the *character of elections*. Essentially, Franklin (2004) argues that electoral participation rates vary not because voters or society have changed, but because the character of elections changes from one election to the next. Primarily, Franklin (2004) contends, turnout changes over time because the degree of electoral competitiveness changes. Consequently, Franklin (2004), along with Johnston et al. (2007), argue that competitive elections increase electoral participation. In other words, when an election is competitive, individuals are motivated to vote, as there is a greater probability of affecting the outcome of the election, meaning instrumental motivation is increased. Moreover, highly competitive elections increase parties' incentives to mobilize voters, thereby increasing voter turnout. However, according to Smets and van Ham's (2013) meta-analysis of individual-level influences on turnout, electoral competitiveness did not appear to be statistically significant for most national elections. Consequently, they conclude that electoral competitiveness is not responsible for turnout decline (355).

Franklin (2004) argues further that there are two main sources contributing to declining turnout. They are "young initiation" and the decline of majority status elections. The first source, "young initiation", is associated with changes to voting age legislation. According to Franklin (2004), due to changes in voting age legislation, people now reach

the age of the majority at a "bad" time in their lives. As a result, it becomes difficult for young people to initially engage. Consequently, if people do not vote in their first election, they are less likely to vote in future elections, since voting is a "habit" (Blais, 2009: 629). Blais (2009), however, argues that most countries lowered their voting age in the 1970s, yet turnout did not begin declining until the 1990s. Moreover, Japan has never changed their legislation and yet has still experienced the same phenomenon. Thus, Blais (2009) concludes that voting age legislation is not the primary cause (629).

Despite the lack of empirical support for this particular argument, Franklin (2004) argues that by reducing the voting age, the addition of young voters increased the overall size of electorates. Franklin (2004) contends that "[a]n electorate with more new voters will be an electorate that is more responsive to any factors that alter voter motivations" (27). As such, any changes in the character of elections may be greater simply due to an increased proportion of an electorate responsive to such changes (27). Perhaps then, the fact that economic inequality did not start increasing until the 1980s and early 1990s, around the same time as the post-baby boomer generation reached the age of the majority, an age highly receptive to changes in the system, can help explain why turnout did not decline until the 1990s?

The second source, according to Franklin (2004), is due to the decline of majority status elections. Essentially, because party systems have become fractionalized – i.e., there are more parties that are smaller in size – the chances of any one party obtaining a majority is reduced. As a result, the formation of minority or coalition governments increases, meaning the enactment of party-specific policies is reduced. As a consequence, Franklin (2004) contends, voters find it increasingly difficult to connect their vote with

government policy and, as such, find it increasingly difficult to consider voting worth their efforts, and thus stop voting (176). However, both Blais (2009) and Smets and van Ham (2013) find little empirical support for this hypothesis, meaning the increased propensity for minority or coalition governments is not causing voter turnout to decline. Overall, the character of elections, changes to voting age legislation, and the decrease in majority status elections do not appear to adequately capture the phenomenon of declining voter turnout.

3.3.4 Conclusion

On the whole, it appears that these three main hypotheses only partially explain the recent phenomenon of declining voter turnout. As such, one wonders what other factors are contributing to declining electoral participation. Moreover, one questions why generational differences in voter turnout exist: what has caused the newer generations to participate at lower rates than previous generations? Is it a symptom of a larger cohort effect from Franklin's (2004) "young initiation"? Or perhaps the younger cohorts are more susceptible to changes in the political system, which has manifested itself in a generational change? If this is so, what has changed political systems in such drastic ways as to warrant changes in voting behaviour of younger cohorts and newer generations?

Interestingly, economic inequality has increased at the same time as the post-baby boomer generation reached the age of majority. Furthermore, as they were younger in their initial elections, they were more responsive to changes in the political system. Consequently, if the system has become unequal (economically, socially, and politically), perhaps voters have increasingly found it ineffective and, thus, irrational to vote.

3.4 Conclusion

The study of voting behaviour first began by studying American elections in the mid-20th century and resulted in three main theories: the sociological paradigm, the social-psychological paradigm, and the rationalist paradigm. These three traditions have since guided research, theories, and hypotheses that have sought to explain the differences between voters and non-voters. As a consequence, six individual-level theoretical models explaining voter turnout have emerged: the resource model; the mobilization model; the socialization model; the rational choice model; the psychological model; and the political-institutional model.

However, each individual-level theory only partially explains voter turnout. Moreover, the variables associated with each theory are not mutually exclusive, as they influence behaviour in numerous ways, neither are they ubiquitous in the literature. Consequently, distinguishing which factors influence turnout, and how and why they do so, is complicated. Nonetheless, there is general agreement amongst scholars that voter turnout is a product of multiple factors, primarily, *means, motives,* and *opportunities*. Therefore, people do not participate when they do not have the resources, have no interest or motivation, are not mobilized, or feel it does not matter (Verba et al., 1995: 271; Blais, 2009).

Despite the general agreement on the importance of these individual factors, there becomes a problem when analyzing turnout rates across time and space. The fact that the electoral behaviour literature is heavily influenced and dominated by American-centered research raises concerns regarding its applicability to contexts outside the United States (Heath, 2009). As such, caution must be heeded when applying any of the above theories

or hypotheses to contexts outside the U.S.

In addition, Franklin (2004) argues that "[although] voting is a matter of individual decisions, turnout is an aggregate-level phenomenon" (16). As a result, Franklin (2004) suggests the exact manner in which individual-level effects are aggregated should be accounted for when analyzing overall electoral participation (17). Moreover, Heath (2009) argues that since the political behaviour literature primarily focuses on *micro*, or individual-level, issues and processes, it becomes difficult to generalize behaviour across different social and institutional contexts. Heath (2009), thus, contends there has been a recent shift in electoral studies away from individual-level factors and towards institutional, social, and political factors, which include the impact of institutional frameworks and the changing social foundation and its influence on political interests and action (611). That is, there has been a move towards analyzing macro processes, such as institutional frameworks. As a result, Blais (2009) argues the shift to *macro level* questions enables aggregate-level analysis, meaning turnout can be compared across both time and space (621).

Moreover, the changing focus from micro to macro processes enables us to analyze entire political systems. This in turn allows us to assess whether or not there have been changes in the system, itself, that have contributed to changes in political participation and general engagement, ultimately enabling us to answer what declining voter turnout signifies. Remarkably, Campbell et al. (1960) argued that when analyzing voting behaviour, it should be "placed within the context of a larger political system" (3). Fundamentally, in order to understand the phenomenon of declining turnout, we need to understand what factor, or factors, have changed that not only have affected individual

voters, but also have contributed to changes in the political system as a whole.

The fact that so many Western liberal democratic states have experienced the same phenomenon of declining electoral participation over the same time frame suggests that something has changed that not only has occurred in particular societies, but also has similarly transpired throughout the world (Niemi and Weisberg, 2001). Interestingly, economic inequality has risen in a majority of these countries over the same period that electoral participation has declined. Consequently, one begins to question whether there is a connection between the two phenomena. In essence, *is economic inequality contributing to declining electoral participation*?

3.5 Research Question

From the above, the major question about how economic inequality influences political engagement in Canada arises. In particular, the fact that economic inequality has increased over the same time frame that voter turnout has decreased, and given that the explanations for the phenomenon of declining voter turnout are insufficient, one begins to question what effect increasing economic inequality has had on voting behaviour. Specifically, is economic inequality another factor contributing to declining voter turnout rates? Thus, my research question is *what effect has growing national economic inequality had on voter turnout in Canadian federal elections?*

Chapter 4: Defining the Causal Mechanism

Although the general voting behaviour literature argues that declining voter turnout is due to either changes in the character of elections or society attributed to generational replacement, these arguments become unsatisfactory when placed in contexts of escalating economic inequality. The fact that numerous Western democracies have experienced declining electoral participation all the while economic inequality has increased raises questions as to what exactly has transpired in these countries. Indeed, the fact that economic inequality is a relatively new phenomenon raises questions as to its effect on democratic political systems.

Interestingly, while explaining the American political system, American political scientist, E.E. Schattschneider (1960), hypothesized that the operation of and the processes within the political system depressed political participation. Specifically, he contended that voter abstention resulted from the bias and limitations of the system, which were caused by differences in the relative power of different groups to influence the political system. Schattschneider contended that differences in relative power were caused by levels of economic affluence and, as such, were magnified by economic inequality. Consequently, the more unequal the distribution of economic resources becomes, the more unequal is the distribution of power in society and political influence, resulting in an asymmetrical political system that favours the economically affluent.

Political systems are, fundamentally, a function of power relations. Therefore, applying the assumption that economic affluence equals political influence, then the recent growth in economic inequality and declining voter participation may, in fact, say something about the political system. In particular, falling voter turnout may indicate that

a political system's bias and limitations have intensified. If this is so, what has exacerbated the system's bias and limitations? Moreover, what are these biases and limitations, and how are they connected with the operation of the political system?

In essence, understanding the distribution of power and the nature of power relations within the political system are crucial for explaining the causal mechanism that has enabled economic inequality to influence the behaviour of voters. Furthermore, understanding the relationship amongst increasing economic inequality, declining voter turnout, and asymmetrical power relations within the political system is vital for explaining why inequality has increased and turnout has declined, as well as how economic inequality has affected voter turnout.

This chapter focuses on explaining the causal mechanism that has enabled economic inequality to influence the political system and voting behaviour, and is divided into two sections. It begins by explaining Schattschneider's (1960) seminal work on the American political system and how the system, itself, is responsible for nonvoting. In particular, Schattschneider (1960) argues that large segments of the American population are disenfranchised due to the bias and limitations of the political system (111). The bias and limitations result from the relative power of the affluent to control the political system. Essentially, the relative power of the affluent enables them to control the scope of conflict and the level of response of the system to the needs of the non-affluent. As a consequence, large segments of the population are not adequately represented by the political system and, as a result abstain from participating in the political process. In addition, the bias and limitations of the political system are exacerbated in conditions of
economic inequality, consequently, abstention increases when inequality increases and is high in regions where economic inequality is great.

The second section presents three theories that hypothesize a relationship between economic inequality and electoral participation. The first, the *Theory of Relative Power*, states that economic inequality increases the relative power of the affluent, which magnifies the bias and limitations of the political system, ultimately contributing to the unresponsiveness of the system to the needs of the general population. Consequently, electoral participation declines in conditions of increasing economic inequality. The second theory, the *Conflict Theory*, predicts the complete opposite of the *Theory of Relative Power*. That is, in contexts of increasing economic inequality, conflict between the affluent and non-affluent intensifies; thus, participation rises when economic inequality increases as each side tries to change the system in their favour.

The final theory, *the Resource Theory*, is somewhat similar to the first, i.e., it assumes that economic resources and affluence are important for participation. However, the relationship between economic inequality and turnout is dependent on the level of economic resources voters have, meaning those who have the resources to participate, do so. Consequently, turnout is based upon the absolute level of economic resources at a voter's disposal, not relative differences (power and economic). Thus, the effect of economic inequality on participation disappears once turnout is adjusted for absolute income.

4.1 Schattschneider's Hypothesis

While explaining the American political system, E.E. Schattschneider (1960) posed an intriguing question as to the phenomenon of nonvoting. Specifically, concerned

with what nonvoting signified, Schattschneider questioned if *nonvoting* reflected the biases and limitations of a political system (99). He argued that "anything that [looked] like a rejection of the political system by so large a fraction of the population [was] a matter of great importance" (99) and, consequently, deserved attention. Further, he suggested the extent of nonvoting invited an "explanation beyond the various psychological and educational factors usually cited" (98).

As a result, Schattschneider argued, "[voting] had something to do with the way in which large areas of need and interest are excluded from the political system" (106). Consequently, he suggested that "the key to the problem [of nonvoting was] to be found in the nature of public policy and the organization of public support for policy" (104). As such, Schattschneider contended, "[*abstention* reflected] the suppression of the options and alternatives that [reflected] the needs of the nonparticipants" (105), meaning the choices presented were not representative of the needs of the majority, but instead reflected a minority. Furthermore, those with the greatest needs do not, necessarily, participate most actively (105).

Fundamentally, the abstention of citizens in political and civic arenas reflects the suppression of alternatives and choices that relate to the nonparticipants and, to a larger degree, to "the social condition of the people" (106). Schattschneider, thus, contended that "the [dimensions] of the political community [corresponded] to the social facts of life" (107). In essence, the political community is divided in the same manner that the socio-economic community is (106). Consequently, because "the social system makes a substantial distinction between those who have *relatively more* and those who have

relatively less" (emphasis added, 107), the political system does as well. This, Schattschneider argued, "is the *bias* of the system" (emphasis added, 107).

Accordingly, Schattschneider hypothesized that differences in rates of participation and engagement between affluent and non-affluent citizens were primarily caused by differences in these groups' relative power to influence the system. Specifically, he argued that due to the relative power of the affluent to control the political system, non-affluent citizens do not participate. Moreover, the relative power of the affluent is strengthened in conditions of economic inequality. As such, where inequality is great, levels of participation are low, especially among the least affluent.

Put another way, political engagement and participation is directly affected by the *relative power* of the rich to control the political system. This, Schattschneider argued, is because the affluent are able to suppress options and alternatives by controlling the degree of conflict, i.e., political debate. Fundamentally, Schattschneider argued that, "at the root of all politics is... conflict" (2). Consequently, politics is about the struggle for the control of, and effort to use, conflict (67). Moreover, Schattschneider argued, "the definition of alternatives is the choice of conflicts, [and as such] the choice of conflicts allocates power" (68). Accordingly, the ultimate mechanism of power is the extent conflict can be controlled through the definition of alternatives (68). Therefore, whoever determines the scope of the conflict effectively runs the country (68).

Furthermore, Schattschneider argued, "the nature of conflict determines the nature of the public involvement" (129). Consequently, the degree to which conflict becomes "socialized" or widened dictates the level of public involvement. Schattschneider suggests that the only way to maintain power relations "is to keep conflicts out of the

public arena" (38). In essence, those who have the relative power to control the scale of conflict do so by defining the alternatives and, as a result, control the political system. Schattschneider, moreover, contends that citizens are not really engaged with policy and decision-making, as "the relation of the electorate to the government is not as simple as [is often argued]" (102). As a result, it becomes easy for citizens to be turned off by the system. Essentially, the relative power of the affluent enables them to control the political system by keeping conflicts "private" through limiting the choice of alternatives.

In addition, Schattschneider argued, "whoever decides what the game is about decides also who can get into the game" (105). In essence, it matters greatly who decides the rules because they define the "requirements for success" and if these "requirements" limit options and choices, individuals will find it increasingly fruitless to engage and participate. Schattschneider argued further that "the way in which issues get referred to the public, the scale of competition and organization, and above all by *what* issues are developed" (110) directly influences the electorate. Therefore, "the existence of a large nonvoting population provides an insight into the nature of the [political] system" (110).

Fundamentally, because power is allocated through the choice of alternatives, the ability for the scale of conflict to be widened is limited to those who have power. This, Schattschneider argued, is the *limitation* of the political system. In other words, due to the suppression of alternatives, citizen, particularly the non-affluent disengage from the system as they realize that not only do they have few alternatives to choose from, but the ability to influence the conflict (system) is limited and biased in favour of the affluent. Thus, Schattschneider argued, "the unequal intensity of conflict determines the shape of

the political system" (68), consequently, "[it becomes] impossible to involve the nonvoters] unless there is a large-scale change in the agenda of politics" (104).

In short, controlling the scope of political conflict is absolutely crucial in any political system, because, as Schattschneider (1960) argued, "at the root of all politics is the universal language of conflict" (2). Thus, *political systems are a function of power relations*. Consequently, if economic affluence equals political influence, then growing economic disparities become quite disconcerting, especially for democratic political systems. Indeed, if economic affluence results in political influence, then economic inequality serves as a mechanism that exacerbates the unequal distribution of power within the system. Thus, if political systems are a function of power, and the affluent have more power than the non-affluent, then political systems are primarily controlled by the affluent.

If the affluent control the system, they are able to control the scope of conflict and limit the choices available. Therefore, as economic inequality increases, political systems are increasingly biased in favour of the rich, resulting in a decreased responsiveness of the system to the needs of the non-affluent. Consequently, as the system becomes increasingly biased and limited in its response, the non-affluent disengages. In essence, economic inequality increases the relative power of the affluent to control the political system, thereby discouraging the non-affluent from participating in the political process. *Therefore, declining voter turnout is due to economic inequality strengthening the relative power of the affluent to control the political system*.

4.2 Theorizing The Relationship

There are three major theories that hypothesize a relationship between economic inequality and political participation. They are: the *theory of relative power*, the *conflict theory*, and the *resource theory*. The *theory of relative power* is derived from Schattschneider's argument and, accordingly, hypothesizes the relationship to be negative. That is, in contexts of growing economic inequality, voter turnout will decline. The *conflict theory* hypothesizes the relationship to be positive, meaning as economic inequality increases, conflict between the affluent and non-affluent increases, which results in higher voter turnout. The *resource theory* hypothesizes that the relationship is dependent upon the level of economic resources voter have. That is, turnout is based upon the absolute level of economic resources at one's disposal, meaning those who have the resources to participate, do so. Consequently, economic inequality only matters in so much as it contributes to the absolute level of resources. Thus, it is not about relative power, but about absolute economic means.

The first theory, the *theory of relative power*, is derived from Schattschneider's argument and states that due to the relative power of the affluent, the political system is biased in favour of the affluent and, as such, the system is limited in its representation and responsiveness. As a result, economic inequality increases the relative power of the affluent, which exacerbates the existing bias and limitations, further intensifying the unresponsiveness of the system to the needs of the general population. Consequently, as the electorate realizes they are no longer adequately represented they stop participating. Thus, electoral participation declines when economic inequality increases and is low in contexts of high economic inequality.

In essence, economic inequality increases asymmetrical power relations by contributing to the unequal distribution of power, which becomes concentrated further in the hands of the affluent minority. Consequently, the non-affluent abstain from participating as they conclude that it is not *rational* to do so. In other words, because the system no longer responds to, nor adequately represents the needs of the non-affluent, and the choice of alternatives is limited and biased in favour of the rich, the non-affluent stop participating. Moreover, because the affluent have control and power over the system, the non-affluent stop voting as they conclude that both their voice does not matter and that the probability of making a difference in the outcome is limited.

Furthermore, because the non-affluent abstain from participating, conflict in the system is reduced to the concerns of the affluent. As such, because the affluent no longer have to worry about having their needs and wants being represented by the system, participation likewise, declines. Therefore, due to the relative power of the affluent, economic inequality has a general negative effect on voter turnout regardless of absolute level of economic resources. However, it is accentuated among poorer segments of the population (Solt, 2008).

In addition, Schattschneider's hypothesis assumes that because people have meaningful preferences over public policy, they will notice when these preferences are not entertained by the political system. Out of the three major voting theories, only the *rationalist paradigm* is compatible with this hypothesis. That is, according to Niemi and Weisberg (2001), the *rationalist theory* "provides a more explicit and precise theoretical basis for voting decisions... than do the other approaches" (15). Indeed, in the basic

rational voter model, voter participation is primarily based on issues. Consequently, if the issues do not reflect the preferences of the electorate, participation decreases.

The second theory, the *conflict theory*, predicts the complete opposite of the theory of relative power. Essentially, inequality should *increase* people's engagement in politics because inequality causes differences in political preferences, fueling debates on appropriate political action, which leads to increased mobilization on all sides. As disparities increase, redistributive policies become more attractive to the less affluent as they attempt to rectify their economic conditions. However, redistributive policies become more costly to the affluent, thus wealthy individuals will increasingly become forceful in their opposition to these policies. As such, participation is expected to increase as conflict between the affluent and non-affluent intensifies. Therefore, increasing economic inequality has a general positive effect on voter turnout regardless of economic status (Solt, 2008).

The third theory, the *resource theory*, is in the middle of the theory of relative power and conflict theory. That is, according to the *resource theory*, the effect economic inequality has, whether the relationship is negative or positive, is dependent upon the absolute level of resources a voter has, particularly, income. That is, resources, particularly income, lower the costs of political participation. Accordingly, voters are expected to conduct a cost-benefit analysis, as they do when purchasing any consumer good, prior to engaging in politics. However, because economic inequality heightens the resources needed to participate in the game, only those willing and able to pay the costs of participating, do so. Thus, it is not about relative power, but about absolute economic resources at a voter's disposal.

Furthermore, Verba et al. (1995) argue that "the voices of certain people – [those] with certain politically relevant characteristics – are more resonant in participatory input" (211), suggesting that certain characteristics are essential for participation. Specifically, they argue that individual resources, in particular time and money, are central for political participation. However, Verba et al. (1995) argue that money is far more important as it enables political influence to a greater degree than simply donating time. Simply put, money is a major "attribute relevant for political conflict" (Verba et al., 1995: 515).

In short, because economic resources are necessary to participate, participation is limited to those with the resources to participate. Thus, economic inequality only matters in so much as it contributes to a voter's absolute level of economic resources. In essence, the relationship between economic inequality and turnout is dependent upon absolute economic resources, not relative differences. Consequently, the effect of economic inequality on participation disappears once turnout is adjusted for absolute income.

4.3 Conclusion

In short, political systems are a function of power relations; thus, in order to fully understand the relationship between economic inequality and voter turnout, the context of the political system must be accounted for. Therefore, explaining how and why economic inequality affects the behaviour of voters requires an understanding of the existing power relations within the political system. Specifically, the relative power of the affluent to control the scope of conflict enables them to influence politics and the political system as a whole. This, in turn, exacerbates the bias and limitations of the system, which contributes to the system's unresponsiveness to the needs of the non-affluent. Thus, the further unequal power becomes, the more unequal the political system becomes. As a

result, because political systems are a function of power relations, increasing economic inequality entrenches asymmetrical power relations, further increasing the relative power of the affluent, which, in turn, affects the entire political system.

Essentially, by applying the assumption that economic affluence equals political influence, the relative power of the affluent increases as economic inequality increases. Therefore, the recent growth in economic inequality and declining voter participation is due to changes in the political system, in particular, the processes within and the operation of the system. Specifically, the phenomenon of decreasing voter turnout indicates that a political system's bias and limitations are escalating, meaning the system is no longer adequately or accurately representing the entire population. Fundamentally, *declining voter turnout is due to economic inequality intensifying the relative power of the affluent to control the political system*.

Chapter 5: Democratic Implications of Economic Inequality

The implications of growing economic disparities give rise to concerns not only about the distribution of power and citizen participation, but also about the health and viability of democracies and democratic institutions. Hence numerous scholars, including Dahl (1961; 1998; 2006), Bartels (2008), Thompson (2007), and Janmatt (2008), connect political participation to democratic ideals. As such, measures of participation, particularly electoral participation, are the primary means for assessing the health of a democracy. Thus, declining voting rates in so many countries may be an indication of increasing inequalities and a growing "democratic deficit" or "democratic malaise" (Uppal and LaRochelle-Cote, 2012; McBride and Whiteside, 2011; Pammet and LeDuc, 2003).

Accordingly, by taking the simple definition of democracy as the widespread and inclusive participation of citizens in all levels of government, then the dual phenomena of rising economic inequality and declining political participation become quite alarming. Therefore, understanding the dynamics of economic inequality is crucial for several reasons, particularly for political equality and democracy. Indeed, Bartels (2008) argues that "[e]scalting economic inequality poses a crucial challenge to America's democratic ideals" (28). This challenge can, without a doubt, be applied to any democratic country that has experienced rising economic inequality. This chapter, thus, discusses the implications of economic inequality for political equality, democratic institutions, and democracy as a whole.

Beginning in the early 1960s, political scientist, Robert Dahl (1961), began questioning the effect that economic inequality had on a political system. In particular,

Dahl (1961) argued that economic inequality resulted in political inequality. That is, according to Dahl (1961), because economic resources contribute to the political resources of individuals. A *political resource* "is any means that a person can use to influence the behavior of other persons, [including] money, information, time, [knowledge] social standing, effective rights, [and] votes" (Dahl, 2006: 51). Therefore, someone who is affluent not only has the money, but the time, education, understanding, and social status to influence political behaviours and decisions of individuals, communities, and governments.

Consequently, if economic resources are distributed unevenly, so too are political resources, meaning political influence and power have, likewise, become unequal. Accordingly, Kenworthy (2013) argues that one of the main concerns with economic inequality is the potential for unequal "influence on government policy" (112). Bartels (2008) argues further that as economic inequality increases, not only are resources distributed unequally, but the responsiveness of elected officials to poorer economic strata becomes unequal. In essence, those with economic resources (the affluent) have greater ability to influence elected officials and the political process, which entrenches inequalities further into the system (Bartels, 2008: 253).

Fundamentally, those with economic resources have the power to influence the political system and are, therefore, able to shape the system to suite their needs and/or desires (Schattschneider, 1960). Thus, according to Bartels (2008), economic inequality affects the views and politics of the electorate. Specifically, he suggests that the electorate believe that political influence is wholly controlled and limited to the affluent (252). Moreover, the opinions of ordinary citizens in the bottom economic strata appear to have

no effect on the behaviour of elected officials (275). As such, Atkinson criticizes the "assumption that government policy responds directly to the economic interests of the socalled median-voter" (Bartels, 2008: 26), arguing instead that policies of redistribution are shaped by the preferences of political interest groups. Consequently, if one lacks the economic resources to have political influence, then one's interests are not accommodated by the political system. Dahl (1998) thus, questions who speaks and defends the interests of those whose voices are not heard?

In addition, Bartels (2008) argues that because income polarization has occurred, there now exists a rising oligarchy. This, he continues, is alarming because it highlights that the growth of inequalities are much more a result of asymmetrical power relations than purely market forces (17). Thompson (2007) adds that any discussion of inequality must emphasize the way it shapes the political community as a whole through the creation of asymmetrical power relations. Consequently, because economic inequality has grown, power relations have increasingly becoming unequal, which has directly led to further disparities in the sphere of politics, meaning the political system, itself, is increasingly controlled by the most affluent. The implication of this, Bartels (2008) argues, is that "political elites retain considerable latitude to pursue their own policy ends" (4), creating and reinforcing a negative feedback loop of economic inequality, political inequality, and disengagement. Essentially, economic inequality is interconnected with political influence, power, and ultimately political inequality, which all contribute to declining participation and democratic malaise (Osberg, 1991; Champernowne and Cowell, 1998; Dahl, 1961; Bartels, 2008; Green and Kesselman, 2006; Schattschneider, 1960).

Fundamentally, growing economic inequality has negatively impacted political equality, political participation, and public engagement in most Western democracies (Solt, 2008; Bartels, 2008; Dahl, 2006). Indeed, Gornick and Jantti (2013) find empirical support that high levels of economic inequality "[cause] voter disillusionment, widespread distrust, perceptions of unfairness, and ultimately disenfranchisement" (4). Continuing they argue that political participation declines where inequality is high, which directly impacts the nature of political decision-making. This, they contend, is because politics and economic inequality are interrelated – i.e. politics affects economic inequality, and inequality in turn influences politics.

Alongside the above arguments, Neckerman and Torche (2007) argue that one of the major implications of economic inequality is the adverse effect on social capital and general trust. Although, it is argued that social capital has been steadily decreasing since the 1960s, well before the growth of economic inequality, it has been suggested that these inequalities have perpetuated the diminishing social cohesion of Western democratic societies. Declining social capital, they continue, is directly linked to growing economic disparities. As a result, participation is much lower in areas where economic inequality is high.

Furthermore, Janmaat (2008) argues that it is the skewing of resource allocation that exacerbates economic inequality. Continuing, he argues that it is this that contributes to declining social capital, leading to further disillusionment, alienation, and disengagement from the political system. Consequently, Janmaat (2008) argues that "the poor have lost faith in liberal democracy as a political system responsive to their needs" (180). Fundamentally, if the non-affluent believe the political system is no longer

responding to or representing their needs, they will disengage, which may have severe and harmful effects for democratic political systems. Indeed, Thompson (2007) argues that historically economic inequality "was viewed as a concrete social ill that would... erode social cohesion, create political fragmentation, and even, in its worst instances, lead to the dissolution of the political community itself" (25).

In short, as economic disparities increase, political power becomes increasingly unequal, which enforces a negative feedback loop of rising inequality. This in turn undermines democratic values and the entire democratic political system, which contribute to democratic malaise. Indeed, Dahl (2006) contends that there are six necessary features of an ideal democracy: effective participation; equality in voting; gaining enlightened understanding; final control of the agenda; inclusion; and fundamental rights (8). Accordingly, if we use this as a basis by which to measure the viability of a democracy, then we begin to see that these criteria are not, entirely, being met. Specifically, the features of effective participation, equality in voting, inclusion, and control of the agenda (i.e. government policy) are not achievable if economic affluence contributes to political influence.

The fact that economic resources are so unevenly distributed in democratic political systems, such as the U.S. and Canada, means that the political scales are tipped in favour of the affluent. Ultimately, economic inequality contributes to disparities in both political influence and power within the political system, meaning those that are economically affluent, fundamentally, control the political system. Consequently, if economic affluence results in political influence, then citizens, particularly the nonaffluent, are going disengage from the political system. If the majority of citizens is no

longer participating or engaged in the political system, how viable and realistic is democracy, and who actually governs?

Chapter 6: Situating Canada

Schattschneider contended that voter abstention resulted from the bias and limitations of the American political system, which were caused by differences in the relative power to influence the system. He argued that differences in relative power were caused by economic affluence and, as such, were exacerbated by economic inequality. Consequently, rates of voter abstention rise when economic inequality increases. The fact that Canada has seen an increase in economic disparities and declining voter turnout invites us to question whether this mechanism functions similarly in Canada. In particular, do the processes within the Canadian political system operate in a similar manner as the American system? Moreover, does the Canadian political system exhibit the same bias and limitations as the American system? If so, what are the processes of the Canadian political system that enable the mechanism to operate in a comparable fashion to the American political system?

Although there is much dispute about the comparability of Canada and the United States, the Canadian and American political systems are fundamentally similar in several aspects, especially in regards to how economic power translates into political power. This, thus, suggests that the causal mechanisms Schattschneider proposed function similarly in both countries. Namely, the process through which public policy is created in the Canadian political system operates analogously to that of the American system. Accordingly, in order to understand why the Canadian electorate has increasingly abstained from the electoral process necessitates an examination of the political system — specifically, the processes within and operation of the system that are comparable to the American system.

Both the Canadian and American systems share several comparable features, including aspects of their political cultures, political economies, and their party and electoral systems. Indeed, both Canada and the U.S. are pluralist societies, where nongovernmental institutions, particularly pressure groups, play important roles in creating public policy. Moreover, both countries are liberal-welfare systems, where the interests of capital dominate those of labour. As such, the political left has remained relatively weak in both countries, especially when compared to corporatist and social democratic European countries, such as Germany and Sweden. Furthermore, both countries' electoral systems are based on the single-member-plurality system and the effective number of parties has historically been approximately two.

The mechanism that enables economic power to translate into political power primarily operates through these factors. Consequently, the unequal distribution of economic resources, exacerbated by economic inequality, not only results in unequal political influence, but also increases the relative power of the affluent and their control over the system. Therefore, Schattschneider's hypothesis and the theory of relative power applies in a comparable manner in Canada as it does in the U.S. Thus, declining voter turnout is due to increasing economic inequality.

This chapter is focused on explaining the processes within the Canadian political system that enable the causal mechanism to operate, and is divided into three sections. The first examines the features of Canada's political culture, political economy, and electoral and party systems that enable Schattschneider's causal mechanism to operate. The second section presents my hypothesis, and the final section provides a brief literature review of relevant empirical studies, highlighting the lack of Canadian focused

research. Indeed, despite the fact that economic inequality has risen simultaneously to declining voter turnout, few empirical studies have been conducted analyzing the potential relationship between the two phenomena.

6.1 Canada's Political System

The processes within the Canadian political system operate in such a way as to reward those with economic affluence. To begin, Canada's system operates in a pluralistic manner, meaning those with economic resources have greater power to influence the processes. Further, Canada is a liberal-welfare state, which is a system that consistently favours the market and rewards those with economic resources and power. In addition, Canada's electoral system is a single-member-plurality system meaning accurate representation does not, necessarily, occur. Moreover, two national parties have historically dominated Canada's party system, which has resulted in a politically weak left and few alternatives. Fundamentally, the operation of the Canadian political system has, historically, favoured the economically powerful.

Additionally, how these institutions developed not only played a central role in shaping Canada's political system, but also influenced and shaped Canadians' ability and willingness to pursue alternative policies (Beramendi and Anderson, 2008: 10-11). That is, according to Beramendi and Anderson (2008), political, economic, and electoral institutions contribute to the political environment in which conflicts among different political and economic interests are shaped and translated into public policies (7). Consequently, due to the complex relationship "between political parties, political institutions, and the representation of economic interests" (Beramendi and Anderson, 2008: 11), public policy not only reflects the system of political representation, but also

the relationship of economic interests, specifically capital and labour, to the system (Beramendi and Anderson, 2008).

Accordingly, understanding economic inequality requires analyzing the contexts in which actors and institutions interact. In particular, understanding Canada's political, economic, and electoral institutions is necessary to explain how interests are translated into policy. Moreover, understanding how institutions and citizens interact is central to understanding how the causal mechanism underlying Schattschneider's hypothesis functions. This section is divided into three parts: the first explores Canada's political culture, the second examines Canada's political economy, and the third looks at the electoral and party systems. Each part examines the specific qualities that enable Schattschneider's hypothesis to function in a similar manner in Canada as it does in the U.S.

6.1.1 Political Culture

The organization of interests, their level of integration within the system, and the level of competition allowed in the political arena dictate the type of political system that exists. Canada, like the U.S, is a *pluralist* system, in which, theoretically speaking, power is dispersed amongst *many* groups, including government agencies, as well as social and special interest groups (Coleman, 2013). Accordingly, the formation of public policy in Canada primarily occurs within policy communities, meaning policies are shaped through the interactions that occur between state actors and organized interest groups (Archer et al., 2002; Coleman, 2013; Beramendi and Anderson, 2008). Consequently, organized interests, particularly pressure groups, along with the news media, are crucial in the policy-making process (Archer et al., 2002: 278). As such, the pressure system results

from the organization of special-interest groups. Thus, according to Soroka (2002), "the different ways in which media, the public, and policymakers interact is central to our understanding of political systems" (30).

Although the general assumption regarding the formation of public policy is that it is formed on the basis of public opinion, Schattschneider (1960) contends this is not necessarily true, particularly if a bias exists in the system (133). Schattschneider (1960) argues, further, that any "discussion of interests... refers to the motives, desires, and intentions of people" (25). Consequently, it becomes possible to "draw inferences from the exclusive or the nonexclusive nature of benefits sought by organizations as well as [by] the composition of groups" (26). Accordingly, since these groups have membership, they emphasize the *scope* or *bias* of the pressure system (30). Indeed, because membership in interest groups is generally skewed in the direction of the affluent, the pressure system is biased in favour of those with economic resources and power. As a result, the interests expressed by the pressure system may not adequately or accurately reflect public opinion.

Moreover, because economic resources are distributed unequally in both Canada and the United States, access to the policy-making process is unequal, meaning the pressure system is skewed further in the direction of the affluent (Dahl, 2006). Consequently, understanding economic inequality becomes crucial for understanding the operation of the political system, particularly how it may become biased further towards those who have the resources to influence the political process and the development of public policies. Indeed, Schattschneider (1960) insisted that we must understand "the

hierarchies of unequal interests" (71) in order to understand the conflict of interests and explain the political system.

6.1.2 Political Economy

According to Jenson (2013), "three factors [shape] regimes: the nature of class mobilization (especially for the working class); class-political coalition structure; and the historical legacy of regime institutionalization" (44). In addition, Coleman (2013) argues, "the relative balance in political influence between business and labour is critical to explaining the differences... in welfare state [formation]" (93). However, because the "left", including left parties and organized labour, has historically been quite weak in Canadian politics, the welfare system did not develop to the same degree as in countries whose political left was more powerful (Jenson, 2013; Johnston, 2013a).

Coleman (2013) argues further that the "dispersal of power [associated with pluralism] prevents coordinated policy making between business and labour" (95). Consequently, policies focused on the short term are favoured, which often serves the interests of society's individual power centers. Moreover, according to Jenson (2013), when the Canadian state "pushed out its borders, it never displaced, or even threatened to displace, the market sector which was also providing substantial benefits via Canada's 'private welfare state''' (51). Consequently, the importance of the market in the Canadian political system never diminished. As a result, Canada developed a liberal-welfare state, whose capitalist (free) market policies often favour business and market interests over labour. In essence, because organized business interest has been much stronger than organized labour, the Canadian political system developed in a similar manner to the American system.

Another major factor in the development of the political system is the strength of the political left. This, Johnston (2013a) contends, is heavily influenced by "the degree of labour mobilization, [which is] usually captured by union density" (188). Accordingly, "the greater the parliamentary weight of the political left, the larger and more elaborate is the welfare state" (Johnston, 2013a: 188). However, Canada's union density remained relatively low, especially when compared to Continental Europe, peaking at 36 percent in the 1980s (OECD Labour Force Statistic, 2015). Moreover, labour interests have never become formally regulated or imbedded like that in corporatist states.

6.1.3 Electoral and Party Systems

Canada's electoral and party systems are designed in such a way as to limit choices available to the electorate. In particular, Canada, like the U.S, has a singlemember-plurality (SMP) electoral system. As such, since this system is based on a candidate winning by simply receiving more votes than the other candidates, true or accurate representation is not possible. Indeed, in an SMP system, a candidate may win without obtaining a majority of the votes cast. Consequently, this type of system tends to create a "winner-take-all" environment.

Furthermore, the unequal and inaccurate representation is further complicated by Canada's multi-party system. Indeed, in spite of more electoral choices with Canada's multi-party system, the SMP system reduces the actual alternatives available (Johnston, 2013b). That is, according to Courtney (2004), an SMP system "makes it easier for regionally strong parties to elect MPs but harder for nationally weak parties" (159). Consequently, an SMP system primarily benefits strong national and major regional parties, while smaller national parties are disadvantaged (Courtney, 2004; Johnston,

2013b). Accordingly, Johnston (2013b) argues that by creating an index, which counts the effective number of parties, not only is "the intuition that certain parties count more than others [systematized, but] that the mere number of official alternatives does not capture the real shape of contestation for power" (294).

Moreover, unlike Australia and the United Kingdom, Canada has never had a labour party govern at the federal level (Johnston, 2013a). The historically weak political left has meant that two major national parties have dominated Canadian politics. As a result labour interests have not been integrated into public discourse to the same degree as they have in other countries. Consequently, groups advocating for poor and working class Canadians have never gained the same prominence as they have in countries whose labour and political left have been strong.

Indeed, Schattschneider (1960) argued,

The nature and role of political parties and pressure groups, the relative merits of sectional and national party alignments, national party discipline, the locus of power in party organizations, the competitiveness of the party system, the way in which parties develop issues, and all attempts to democratize the internal processes of the parties are related to the scope of the political system (12).

Thus, understanding the Canadian party and electoral systems is crucial for understanding the scope (bias) that exists in the political system, as well as how relative power functions within this system.

6.1.4 Conclusion

Fundamentally, the creation of public policy in Canada is achieved through a complex process of different interests interacting. Moreover, Canada's political system developed in such a way as to primarily benefit economic interests. Consequently, those without substantial economic resources have greater difficulty in accessing the system

and having their voices heard and adequately represented. As a result, Canada's political system functions similarly to the American system, in that those with economic affluence have political influence. As such, any increases in economic disparities will strengthen the relative power of the affluent to influence the processes within, and operation of, the Canadian political system, ultimately intensifying the existing bias and limitations of the Canadian political system.

6.2 Hypothesis

Given the features of Canada's political system, I hypothesize that the findings will support the theory of relative power. I expect the data will indicate a negative relationship exists between economic inequality and turnout, meaning economic inequality has a negative effect on voter turnout. That is, due to the development of the Canadian political system, political influence has remained tied to economic power and affluence. Consequently, any increase in economic inequality will negatively affect the political system by increasing the relative power of the affluent. As a result, Canadians will increasingly disengage from the system by concluding participation is not worth their time nor effort as the system no longer responds to their needs, meaning voter turnout rates decline. Fundamentally, rising economic inequality has magnified differences in relative power and has led to lower rates of voter participation.

6.3 Economic Inequality – Turnout Empirical Literature Review

Despite the fact that over the past 30 years many Western democratic countries have witnessed escalating economic inequality and declining voter turnout rates, there are few studies analyzing the effect of economic inequality on voter turnout. Moreover, out of the existing studies, there are fewer that explicitly examine Schattschneider's

hypothesis and the importance of relative power for explaining the causal relationship between economic inequality and voter turnout. As such, the literature is somewhat conflicted and inconclusive as to the effect of economic inequality on political participation in general, and voter turnout, specifically.

Out of the existing studies only Solt (2010) directly tests Schattschneider's hypothesis. In this study, Solt (2010), analyzing turnout in American gubernatorial elections, found that not only does economic inequality have a strong, negative effect on individuals' decisions to vote, but in states where economic inequality is greatest, turnout is lowest. Accordingly, Solt (2010) argues that his findings demonstrate that electorates are biased in favour of those with greater incomes, suggesting that not only do economic resources matter, but "the context of inequality in which these resources are used" (297) also matter. Thus, in order to understand why turnout has declined, one must account for the degree of income inequality in which elections operate.

Although Solt (2010) found strong empirical support for Schattschneider's hypothesis, Stockemer and Scruggs (2012) argue that because this study is strictly focused on a micro-level analysis of turnout in American gubernatorial elections, the findings "may not be representative of the effects internationally" (765). Consequently, they argue that any study that strictly focuses on the U.S. is limited in its application to other contexts. As such, they, along with several other scholars, conduct a cross-national analysis of the effects of economic inequality on voter turnout.

Stockemer and Scruggs (2012) find no relationship between economic inequality and electoral participation in their macro-level, multilevel analysis. In contrast, Solt (2008), Lister (2007), Mahler (2002), Jaime-Castillo (2009), and Horn (2011) all find that

economic inequality negatively affects electoral participation, however, to differing degrees. The strongest support was found by Solt (2008), whose findings indicate that economic inequality not only reduced electoral participation, but it also reduced individuals' interest in, and discussion of, politics. Moreover, Solt (2008) argues that the "negative effects [increased] with declining relative income" (48), providing support for the theory of relative power.

Both Stockemer and Scruggs (2012) and Solt (2008) use the Gini index as their main inequality measure. Lister (2007), in contrast, uses the Theil T-statistic, a measure that is best at capturing changes in the bottom (poorer) segments of the income distribution, as his inequality measure. Further, Lister (2007) does not directly evaluate the theory of relative power. Rather, he uses inequality as a proxy to measure "the relationship between welfare state institutions, social norms, and political behaviour" (26-27). Nonetheless, Lister (2007) finds that inequality has a significant, negative effect on turnout.

Mahler (2002) uses a P₉₀/P₁₀ percentile ratio as his inequality variable, and finds that, although inequality has a negative effect on turnout, it is not statistically significant. However, because Mahler (2002) uses regional level inequality as his independent variable and turnout in national elections as his dependent, he is not accurately measuring the causal mechanism that Schattschneider hypothesized. In addition, Mahler's (2002) primary objective is to explain cross-national variations in income inequality and, as such, uses turnout as the explanatory variable, meaning he inverses the relationship. Accordingly, because Mahler's analysis differs substantially, his results are not necessarily comparable.

Both Jaime-Castillo (2009) and Horn (2011) use multiple measures of inequality and find that while inequality has a general, negative effect on turnout, the significance changes depending upon which inequality measure is employed. Moreover, both studies find that greater inequality in the top of the income distribution appears to depress turnout, whereas, greater inequality in the lower half of the distribution provides mixed results. For instance, Jaime-Castillo (2009) finds statistical significance for both the Gini index and the P_{90}/P_{50} ratio, a measure that captures inequality within the top half of the income distribution; however, he found no significance when analyzing the P_{50}/P_{10} ratio, a measure that captures inequality in the bottom half of the income distribution.

In contrast, although Horn (2011) finds that there is a general, negative effect for most of his inequality variables on turnout, he finds none of the effects are statistically significant. In addition, Horn (2011) finds that inequality in the lower half of the income distribution appeared to, in fact, have a minimal positive effect. Consequently, Horn (2011) argues that the effect of inequality on turnout depends greatly on where inequality has grown in the income distribution and who is the most affected by this growth.

Altogether it appears that the effect of income inequality on voter turnout depends on contexts within each country. Indeed, the lack of consistent results suggests that more rigorous examination needs to be conducted. Furthermore, no study has examined the relationship explicitly in Canada. The few studies that have included Canada have not employed the same methodological or theoretical tools (Solt, 2008; Lister, 2007; Mahler, 2008; Jaime-Castillo, 2009; Stockemer and Scruggs, 2012). Consequently, comparison between the different analyses is difficult, which has, no doubt, contributed to the inconsistencies found in the relationship. However, this is not to say that a relationship,

particularly a negative one, does not exist in Canada. In fact, because these studies are inconclusive offers further support that an individual country assessment is needed to test this relationship, and specifically Schattschneider's hypothesis, to see if it holds at the individual country level.

In addition to the lack of strict focus on Canada, much of the research that has been conducted in Canada has analyzed these two phenomena separately; for example, see the Canadian Centre for Policy Alternatives' project on the growing income gap and Elections Canada's study on explaining turnout decline (Pammett and LeDuc, 2003). Further, the existing hypotheses on declining electoral participation only partially explain why turnout has declined in recent years (Blais, 2009). Consequently, there is a need for a Canadian centered analysis in which economic inequality is assessed as a potential factor contributing to declining voter turnout.

Chapter 7: Methods and Data

In order to analyze the relationship between economic inequality and voter turnout in Canadian national elections, I conducted an aggregate level, time series analysis of national turnout and economic inequality for Canadian federal elections between 1979 and 2011. Specifically, I analyzed national-level data on turnout in federal elections, levels of economic inequality, electoral competitiveness, economic conditions, union density, and level of absolute national income. The analysis was limited to Canadian general elections between 1979 and 2011, excluding all by-elections and referendums during this period.

An aggregate level analysis was chosen for the purpose of understanding overall patterns of economic inequality. In addition to understanding aggregate patterns, a time-series analysis is necessary to understand where economic disparities have grown, as well as how they have, or have not, influenced participation in elections. A simple "snapshot" of one election is not sufficient to understand trends in voting behaviour, nor how inequality affects voter turnout. Each federal election is analyzed by level of voter turnout alongside measures of economic inequality, median national income, electoral competitiveness, and economic conditions in each election year.

Because the effect of growing economic inequality may be delayed, I incorporated measures of up to three lags in time from the election year. Each lag represents one year prior to the election year, such that, for variable x at election time t, the lag will either be one year, t-1, two years, t-2, or three years, t-3.

Similar to OLS regression, time series analysis must satisfy six assumptions in order for us to conclude the results are unbiased (Pickup, 2015). These six assumptions,

known as the *Gauss-Markov assumptions*, are: one, the relationship is linear; two, there is variance in all *X* and there is no perfect collinearity; three, "the data are a single realization of a random data-generating process" (Pickup, 2015: 55) and, as such, satisfy the assumption for zero conditional mean, of covariance stationarity; four, the errors are normally distributed, i.e., homoskedasticity; five, there is no serial correlation; and six, all errors are normal and independent (Pickup, 2015: 55-57).

Two potential problems with time series analysis must be addressed in order to satisfy the *Gauss-Markov* assumptions for classical linear regression, as well as to permit causal inference. They are *trending* and *serial correlation*. *Trending* occurs when the variables being analyzed naturally move, in the same or opposite direction, together over time and are seemingly related. However, they may simply be "trending" together and, as such, assuming a true relationship exists (inferring causation) would be incorrect. Furthermore, trending violates the assumptions of zero conditional mean and stationarity by the fact that "the mean is changing over time" (Pickup, 2015: 39). Thus, in order to make a valid causal inference about the relationship between variables (i.e., to ensure the relationship is not spurious), time series analysis must account for possible trends. Hence, a time trend variable, *T*, was added to the regression equation.

There are a number of ways that a trend may be accounted for; however, the two trends used in my analysis are a *deterministic linear trend* and a *deterministic quadratic trend*. The *deterministic linear trend* is the simplest process, and is modeled as follows:

$$y_t = \beta_0 + \beta_1 T$$

According to Pickup (2015), "the interpretation of such a process is that y_t increases or decreases, on average, by the magnitude of β_1 in each time period" (39-40).

The second function of time that is used is a *deterministic quadratic trend*, which is "a more complex function of time" (Pickup, 2015: 40) and is modeled as:

$$y_t = \beta_0 + \beta_1 T + \beta_2 T^2$$

The interpretation of this process is "that y_t increases or decreases on average by the decreasing or increasing magnitude of $\beta_1 + \beta_2(2T)$ each time period" (Pickup, 2015: 60). When deciding which trend is appropriate, the significance of the time variable is assessed, i.e., if the significance of the simple linear trend is greater than that for the quadratic, then the former will be used in the final model. Conversely, if the significance is greater for the quadratic trend, then the quadratic trend will be used in the final model (Pickup, 2015: 60).

The second potential problem that must be addressed is *serial correlation*, which occurs when errors in two or more periods are correlated. Thus, in order to satisfy the *Gauss-Markov* assumptions, the assumption that all errors are uncorrelated, i.e. the error term is a white noise process, is adopted. Naturally, there is a certain level of uncertainty with this assumption; thus, a white noise test is applied. Specifically, a *Portmanteau's Q* test is used to assess the residuals of each model to ensure the error term is, in fact, a white noise process. According to Pickup (2015), a "*Q*-test statistic is chi-squared distributed with *p* degrees of freedom, so the *P* value can be calculated for the purpose of hypothesis testing. [Accordingly,] the null hypothesis can be interpreted as 'the process is white noise''' (23).

Dependent Variable

The dependent variable is *voter turnout*. Elections Canada (2012) defines turnout as the number of ballots cast divided by the number of registered electors on the final lists

of electors (5). Unfortunately, "because registration rates change over time [and] across various segments of the population" (Elections Canada, 2012: 5), this number can be biased and somewhat misleading. Further, the registration rates capture between 92 and 93 percent of Canadian voters, meaning 7 to 8 percent of voters are missing and, as such, the estimated turnout rate may be higher than what the ballots-divided-by-registered-voters calculation suggests. The rate of voter turnout would be better captured if the number of ballots cast was, instead, divided by the total population eligible to vote. However, the turnout rate, as currently defined by Elections Canada, is sufficient for this analysis as it shows the phenomenon that is occurring, which is the subject of inquiry for this thesis.

Independent Variable

There are four independent variables that capture economic inequality. The first independent (inequality) variable is the Gini coefficient for adjusted after-tax household income. After-tax income is defined as total income minus taxes paid (Statistics Canada, 2013). It is commonly referred to as *disposable* income and is essentially what families and individuals have in their "pockets" after taxes and redistribution.

The primary purpose for using the Gini coefficient is that it provides a relatively simple measure for changes in economic inequality. The coefficient varies between zero, where income is evenly distributed to all households, and one, where a single household receives all income. The income data in which the Gini coefficient measures "are 'data equivalent adjusted' to account for economies of scale in larger families" (Frenette, Green, and Picot, 2006: 75), meaning income is adjusted to account for the differences in needs required for different family sizes.

Despite the fact that the Gini index provides a simple measure for changes in economic inequality, it is best at capturing changes in the middle of the income distribution, as it is "middle-sensitive". Consequently, the Gini may not adequately capture overall changes in economic inequality, particularly if these changes are at the extremes. As a result, three other inequality measures are analyzed alongside the Gini coefficient.

The second and third independent variables are income share ratios. The second is an 80/20 income share ratio, which measures the share of income received by the fifth (richest) quintile divided by the share of income of the first (poorest) quintile (OECD, 2015). The third independent variable is an S90/S10 share ratio, which measures the share of income received by the richest decile divided by the share of income received by the poorest decile (OECD, 2015). The last independent variable is the Palma Ratio, which is "the share of all income received by the [richest 10 percent] divided by the share of all income received by the [poorest 40 percent]" (OECD, 2015). All independent variables are based on disposable income, as it is theoretically relevant because it is what voters have at their disposal (after taxes and redistribution) to influence the system.

Control Variable

In order to ensure that economic inequality is correlated with turnout decline, we need to ensure other possible factors are accounted for. Primarily, turnout and inequality must be placed in contexts of both the election and economic conditions at the time of each election. *Electoral competitiveness* is thought to have played a major role in the sudden decline in turnout in the 1990s (Johnston et al., 2007). Accordingly, there are two

ways to capture aspects of electoral competitiveness. The first is referred to as the *competitiveness index*, C_k , which is captured using the formula:

$$C_k = k^k \prod_{i=1}^k p_i$$

where, C_k is party competitiveness among *k* parties, *k* is the effective number of parties rounded to the nearest integer, and p_i is the proportion of votes cast for the *i*th party¹⁰. The closer C_k is to '1', the more competitive the election.

The second is the *raw margin*, which is simply the difference in vote shares awarded to the top two parties in an election. For example, in 2011, the Conservative Party received 39.6 percent of the vote and the NDP received 30.6, meaning that the raw margin for this election is 9 percent, which is recorded as 0.09. The smaller the margin, the more competitive the election.

In addition to understanding electoral context, it is also crucial to understand economic inequality within the context of national *economic conditions* (Frenette, Green, Picot, 2006: 74). There are two primary control variables associated with national economic contexts. The first is the real gross domestic product (GDP) annual growth rate for all election years and is labeled as *GDP Growth*. The second economic context variable captures national annual unemployment rate as a percent, for all election years, and is labeled *labour*.

In addition to economic and electoral context variables, another important contextual variable that must be accounted for is *union density*. That is, according to Solt (2008; 2010), unions mobilize both members and non-members and, as such, the density of unions is hypothesized to have a positive effect on turnout. However, because the

¹⁰ This formula is similar to the one adopted by Johnston et al. (2007); however, they look at electoral competitiveness at the constituency level, whereas I am looking at the national level. Accordingly, I have dropped any reference to the constituency level.

density of unions has decreased in Canada over the period in question, it may, instead, act as another form of inequality, which may complicate the assessment of economic inequality's effect on turnout. As such, Pearson's *r* is analyzed to assess the level of correlation between the different inequality variables and union density.

On top of these five control variables, two additional controls are added to help ensure causal inference can be made. In particular, to test the competing resource and relative power theories, absolute income must be accounted for. As such, national *median income* level in each election year is included. In addition to median income, annual *GDP per capita* is also used as a control for the level of absolute resources.

The purpose of including both median income and GDP per capita is that over the period under investigation (1979-2011) national wealth increased. As a result, the level of absolute national income increased simultaneously to increases in economic inequality. Accordingly, by adding these two control variables to the model we can see which factor is more important for voter turnout: economic inequality or absolute level of economic resources. In essence, if when either the median income or GDP per capita variable is added to the regression equation, the coefficient for the inequality variable and significance weakens or is less than either control, then we know that resources matter more. However, if the significance or coefficient remains greater than either measure for absolute income, then we know the theory of relative power is more applicable.

Models

In essence there are 12 different models, four of which are variations in the type of time trend (linear versus quadratic) added. The first model is $y = \beta_0 + \beta_1 x_{1t}$, where β_0 is the y-intercept, and β_1 is the regression coefficient for the independent variable, x_{1t} ,
which is the contemporaneous (unlagged) value of an inequality variable. The second model is $y = \beta_0 + \beta_1 x_{1t-k}$, where x_{1t-k} is an inequality variable lagged by one period, and where *t-k* is election year, *t*, minus number of lagged periods, *k*. As said above, there are three lags in each independent variable. The third model, $y = \beta_0 + \beta_1 x_{1t} + \beta_2 x_2$, is essentially model 1 with a control variable, x_2 , added, meaning β_2 is the regression coefficient for the control variable. There is no lag incorporated in this model. Model four is model two and three combined, i.e., $y = \beta_0 + \beta_1 x_{1t-k} + \beta_2 x_2$, where the inequality variable is lagged by one or more periods.

The first four models are of no real use beyond providing an insight into whether or not the variables are trending. If an independent variable appears to have an effect on turnout before adding a time variable, but loses significance and/or the magnitude of its coefficient changes direction, such as going from negative to positive, then we can conclude that both variables are simply trending together and are, thus, not causally related. As a result, we can discard the particular independent variable by concluding there is no relationship.

Accordingly, the remaining models incorporate a time trend. Moreover, as there are two types of trends that are used, the remaining models each have two variations: one with a deterministic linear trend, T, and the other with a deterministic quadratic trend, T^2 . Model five is model one (no lags or controls) with a trend added:

Model 5a: $y = \beta_0 + \beta_1 x_{1t} + \beta_2 T$

Model 5b: $y = \beta_0 + \beta_1 x_{1t} + \beta_2 T + \beta_3 T^2$

where β_2 is the regression coefficient for the time trend, *T*, and β_3 is the coefficient for the quadratic time trend, T^2 .

Model six is model two (no controls, but lags of independent variables are added) with an added time trend, becoming:

Model 6a:
$$y = \beta_0 + \beta_1 x_{1t-k} + \beta_2 T$$

Model 6b:
$$y = \beta_0 + \beta_1 x_{1t-k} + \beta_2 T + \beta_3 T^2$$

Model seven is model three (no lags of the independent variable, but controls are added) with a time trend, becoming:

Model 7a:
$$y = \beta_0 + \beta_1 x_{1t} + \beta_2 x_2 + \beta_3 T$$

Model 7b: $y = \beta_0 + \beta_1 x_{1t} + \beta_2 x_2 + \beta_3 T + \beta_4 T^2$

The final model, model eight is model four (both lags and controls are added) with an added time trend becoming:

Model 8a:
$$y = \beta_0 + \beta_1 x_{1t-k} + \beta_2 x_2 + \beta_3 T$$

Model 8b: $y = \beta_0 + \beta_1 x_{1t-k} + \beta_2 x_2 + \beta_3 T + \beta_4 T^2$

where β_3 and β_4 are the regression coefficients for the linear and quadratic time trends, respectively.

Out of all of these models the most important are models 7 and 8, as they are the most complete and specific models and provide the most accurate analysis of the effect of economic inequality on voter turnout.

Data Limitations

Prior to conducting the analysis, I must note that because there are only 11 observations (11 federal elections between 1979 and 2011), my sample size is limited: n=11. Consequently, due to the limited sample size, it becomes quite difficult to conduct multiple linear regression and test multiple inequality (independent) variables, as well as multiple added control variables at once. For that reason, only one inequality variable, alongside one control variable is analysed at a time. Furthermore, due to the limitations on inequality – i.e., changes to survey types, how Statistics Canada measures inequality, and simply lack of data – I am only using inequality data from 1976 to 2011. As such, my analysis on voter turnout is limited to these years. Despite these limitations, the time period being analysed is highly interesting as voter turnout declined all the while economic inequality increased. Accordingly, we, as researchers, are invited to investigate the dynamics of this period, specifically, what effect economic inequality has had on voter turnout in Canadian federal elections.

Hypotheses

When conducting the data analysis I am testing four hypotheses. The null hypothesis, H_0 , is accepted when the regression coefficient on the independent (inequality) variable is not significantly different than zero. That is, when $\beta_1 = 0$ inequality will be determined to have had no effect on turnout. Conversely, when $\beta_1 \neq 0$ we can reject the null hypothesis. The larger the regression coefficient β_1 , the more confidence we have in rejecting the null hypothesis.

There is a further distinction to be made for the alternative hypotheses involving β_1 . If β_1 is positive, then economic inequality is said to have a positive effect on turnout, suggesting that turnout rises when inequality increases, which lends support to the *conflict theory*. However, if β_1 is negative, then the effect of economic inequality is negative. This means voter turnout is negatively correlated with turnout, indicating that turnout falls when inequality increases. This lends support to both the *theory of relative power* and *the resource theory*, hence the need to control for absolute income, as mentioned above. Further, if the regression coefficient for the independent (inequality)

variable, β_1 , changes in magnitude and/or direction and the statistical significance is greater for the absolute income control variable, then we can conclude that individual resources matter more than inequality for voter turnout, meaning the *resource theory* is more applicable than the *theory of relative power*. I am, thus, testing four different hypotheses:

 H_0 = null hypothesis, β_1 , is not significantly different than zero.

 H_1 = alternative hypothesis one, where the regression coefficient, β_1 , is positive, H_2 = alternative hypothesis two, where the regression coefficient, β_1 , is negative. H_3 = alternative hypothesis three, where the regression coefficient, β_1 , becomes insufficient when a control for absolute income is added.

Chapter 8: Analysis and Results

Voter turnout in Canadian federal elections has declined all the while income inequality has increased, as is shown below in Figures 1 and 2, respectively. Indeed, since 1979 voter turnout has declined approximately 15%. Further, besides the low turnout in 1980, voter turnout was relatively stable at approximately 75%, and did not begin declining until 1993, and continued to do so until 2008 when it reached a low of 58.8%. Moreover, it appears that in the 2000s turnout, more-or-less, stabilized around 60%.

During the same time period disposable income inequality, as measured by the Gini index¹¹, increased. Indeed, since 1979 the Gini index has seen an overall increase of 9%. Further, between 1988, when the Gini was at its lowest value, and 2004, when it was at its maximum, the Gini rose 14%. Since 2004, the Gini index appears to have decreased slightly, however, it still remains at a higher value than 30 years before. In addition, taking into account the fact that this is a measure that ranges from 0 (perfect equality) to 1 (perfect inequality), a change of any magnitude constitutes a large change in overall inequality. Consequently, a change as minimal as 9 percent represents a substantial movement in overall income inequality.

Alongside the changes in the Gini index, the 80/20 income share ratio similarly increased. The 80/20 share ratio is a ratio that measures the average disposable income of the richest quintile to that of the poorest quintile. Since 1979, the ratio increased by over 9%. Further, in a 15-year period between 1988, when the ratio was at its minimum value, and 2004, when it reached its maximum, the 80/20 ratio increased over 25%. Similar to

¹¹ To avoid confusion when discussing the results, *Gini index* will be used instead of *Gini coefficient*.

the Gini index, it appears that the 80/20 ratio has decreased slightly since peaking in 2004; however, the average in the 2000s remained well above that of the 1980s. The fact that both inequality variables and turnout have trended along similar paths suggests that perhaps there is a correlation beyond simply trending. As a result, the question of the effect of increasing economic inequality on voter turnout is analyzed.

According to the results of the aggregate-level, time series analysis, economic inequality has a strong negative effect on voter turnout in Canadian federal elections. These findings are consistent with only the theory of relative power, suggesting that, contrary to conflict theory, inequality does not encourage participation. Moreover, in spite of the growth in national income, absolute levels of economic resources are not found to be statistically significant. Consequently, contexts of income inequality are important for voter turnout. These findings are discussed in detail below.

Figure 1, below, depicts the decline in voter turnout in Canadian federal elections and Figure 2 displays disposable income inequality via the Gini index and the 80/20 income share ratio. Table 1 provides a summary of the mean, minimum, maximum, and standard deviation for turnout, the Gini index, and the 80/20 share ratio, as well as for the control variables – that is, the competitive index, real GDP growth rate, union density, and GDP per capita. Tables 2 and 3, below, and A1 to A4 in the appendix, display the results of the aggregate-level, time series analyses.



Figure 1 Voter Turnout in Canadian Federal Elections, 1979-2011

Figure 2 Disposable Income Inequality in Election Years, 1979-2011



Source: CANSIM Table 202-0707 and Table 202-0709

Source: Elections Canada (2013)

Variable	Mean	Max	Min	Std. Dev.
Turnout (%)	67.2	75.7	58.8	6.35
Gini Index	0.302	0.322	0.282	0.015
S80/S20	5.037	5.56	4.42	0.37
Comp Index	0.38	0.77	0.09	0.32
GDP Growth (%)	3.47	5.6	1.2	1.35
Union Density (%)	30.91	35.9	27.1	3.72
GDP/capita	453.6	566.9	348.3	83.19

 Table 1 Summary Statistics of Variables

8.1 Findings

8.1.1 Results for the Gini Index

The results of the analysis of the Gini index are reported in Table 2. The results for the added controls – *competitive index*, *GDP growth rate, union density*, and *GDP per capita* – are displayed in columns 2, 3, 4, and 5, respectively. According to the findings for the Gini index, the effect of income inequality on voter turnout is negative for all models and reaches statistical significance in the presence of all controls except competitive index and union density. However, in both cases, the estimated coefficient for the Gini index remained much larger – -255.107 and -209.263 versus 1.835 and 0.306 for competitive index and union density, respectively – and the corresponding *p*-values much lower than either control, suggesting that inequality had a larger effect than either of the controls.

Furthermore, the findings of the Gini index are consistent only with the theory of relative power. Indeed, if the level of absolute economic resources were more important than relative power for turnout, then the effect of the Gini should have disappeared when controlling for absolute income. However, this did not occur, rather, the Gini remained

negative and statistically significant at the 90% confidence level when GDP per capita¹² was controlled, as is evident in Table 2, column 5. In contrast, GDP per capita was not statistically significant and the estimated coefficient did not appear to be substantially different than zero. Consequently, it appears that relative income and economic inequality are more important than absolute level of economic resources.

The magnitude of the Gini index's negative effect on turnout can be assessed by calculating the first difference in the predicted probability for turnout generated by a change in the context of economic inequality while all other variables are held constant. Using the estimated coefficient from Model 7b, which controls for GDP growth rate, -287.948, holding all other variables constant, a change from the lowest to highest observed values of the Gini index is estimated to reduce turnout by 11.5 percentage points. Using the same estimated coefficient, but computing a predicted difference in turnout for one standard deviation of the Gini index results in a drop of 4.4 percentage points in voter turnout. Clearly, a small change in the Gini index results in a large negative effect on voter turnout.

In addition, the Gini index was not found to be trending, neither with a linear nor quadratic trend. The results for the linear trend are reported in Table 2 and are not found to be statistically significant for any model. In contrast, however, it appears that both the competitive index and real GDP growth are trending, as they both lost statistical significance and the time trend was found significant at the 95% confidence level when a simple regression was conducted. Moreover, when the test for serial correlation, *Portmanteau's Q-test*, was conducted, no serial correlation was found. The *Q-test* indicates that the chi-squared with 3 degrees of freedom is not statistically significant,

¹² The same result was found when median income replaced GDP per capita in the model.

meaning we cannot reject the null hypothesis that the process is white noise, suggesting that the errors are not serially correlated. Accordingly, we can be fairly confident in inferring that the Gini index has a negative effect on voter turnout that is causal.

In short, these results suggest that national income inequality, as measured by the Gini index, has a substantially negative effect on voter turnout in Canadian national elections. Further the effect of the Gini is larger than any other variable, including the control, i.e., electoral competitiveness, economic context, the rate of national unionization, and the level of absolute economic resources. These findings provide support only for the theory of relative power.

Table 2 Gini Index

	Model 7a	Model 7b	Model 7c	Model 7d
Variable	Comp. Index	GDP Growth	Union Density	GDP/capita
v anabic			Delisity	
Gini Index	-255.107	-287.948**	-209.263	-301.821*
	(128.873)	(96.481)	(148.835)	(135.025)
Controls	× , , ,	× /		
Competitive Index	1.835			
-	(3.887)			
GDP growth rate		1.141		
-		(0.606)		
Union Density			0.306	
			(0.664)	
GDP/capita				0.043
				(0.065)
Time Trend	-0.672	-0.337	-0.532	-1.523
	(0.531)	(0.471)	(0.600)	(1.412)
Constant	138.656***	152.298***	124.174*	148.085***
	(37.270)	(26.516)	(60.122)	(31.465)
Adjs. R ²	0.80	0.87	0.80	0.81
Seriel Convolution Text				
Serial Correlation Test	2 7220	1 (005	5 7460	4 5750
Portmanteau (Q) Stat	5./559	1.6995	5./469	4.5/50
$Prob > chi^2(3)$	0.291/	0.6370	0.1246	0.2057

Effects of Economic Inequality (Gini index) on Electoral Participation

Standard errors in parentheses, *p < .10, **p < .05, ***p < 0.01

8.1.2 Results for the 80/20 Income Share Ratio

The results of the analysis of the 80/20 income share ratio are reported in Table 3 and the results for the added controls – *competitive index*, *GDP growth rate*, *union density*, and *GDP per capita* – are displayed in columns 2, 3, 4, and 5, respectively. According to the findings for the 80/20 ratio, the effect of income inequality on voter turnout is negative for all models and is statistically significant for all controls except union density. However, the estimated coefficient for the 80/20 ratio remained negative

and larger than that of union density, -6.790 and 0.265, respectively. Moreover, the corresponding p-value for the 80/20 ratio approached statistical significance at the 90% confidence level, while union density did not appear to be significantly different from zero, suggesting that inequality had a greater effect than the national rate of unionization.

Furthermore, the results from Model 7b, controlling for GDP Growth, suggest that both the 80/20 ratio and GDP growth, as measured in each election year, had an effect on voter turnout. Nonetheless, the estimated effect for the 80/20 ratio was much greater than that of GDP growth at -9.084 and 1.197, respectively. Additionally, the *p*-value for the 80/20 ratio was statistically significant at the 95% confidence level and it, in fact, was near the 99% confidence level. In contrast, GDP growth was statistically significant at only the 90% confidence level. Comparing the estimated effect of the 80/20 ratio and GDP growth rate indicates that holding all other variables constant, with a change from the lowest to highest observed values, turnout is estimated to decline 10.4 percentage points¹³ and rise 5.3 percentage points for inequality and GDP, respectively. However, as mentioned above, GDP growth rate was found to be trending and not statistically significant when a simple regression was conducted. Thus, it is reasonable to conclude that the effect of inequality, as measured by the 80/20 income share ratio, is greater than real GDP growth rate on voter turnout.

Moreover, the findings of the 80/20 income share ratio are consistent only with the theory of relative power. Indeed, similar to the findings of the Gini index, the 80/20 ratio was negative and statistically significant at the 95% confidence level when absolute

¹³ The estimated effect of the 80/20 ratio was slightly lower (declined 8.2 percentage points) when using the estimated coefficient from Model 7f, Labour, in place of the coefficient from Model 7b, GDP Growth. However, this does not cause concern, as the rate of unemployment was not found to be statistically significant.

income was controlled, while GDP per capita was not found to be substantially different than zero, as reported in column 5 of Table 3. Further, using the estimated coefficient derived in Model 7d, -8.929, the estimated effect of the 80/20 share ratio's negative effect on turnout while holding all other variables constant is a decline of 10.2 percentage points over the range of the 80/20 ratio. As a result, it appears that, despite the growth in absolute incomes, increasing rates of income inequality, as measured by the 80/20 share ratio, are more important for explaining declining voter turnout.

In contrast to the Gini index, a linear trend was found to be statistically significant for all models except union density and GDP per capita for the 80/20 share ratio. However, statistical significance remained after controlling for the trend for all controls except union density, as mentioned above. In addition, when testing for serial correlation, the *Q-test* was not statistically significant. Consequently, we cannot reject the null hypothesis that the process is white noise, meaning the errors are not serially correlated. Accordingly, we can be fairly confident in making the causal inference that the 80/20 ratio has a significant and negative effect on voter turnout. Indeed, the 80/20 share ratio was found to have the greatest effect out of all inequality variables assessed.

Table 3 80/20 Share Ratio

	Model 7a	Model 7b	Model 7c	Model 7d
	Comp Index	GDP Growth	Union	GDP/capita
Variable			Density	
S80/S20	-7.062*	-9.084**	-6.790	-8.929**
	(3.534)	(2.658)	(4.230)	(3.752)
Controls				
Competitive Index	2.168			
	(3.583)			
GDP growth rate		1.197*		
		(0.561)		
Union Density			0.265	
			(0.635)	
GDP/capita				0.034
				(0.061)
Time Trend	-0.996**	-0.762**	-0.873	-1.809
	(0.373)	(0.320)	(0.559)	(1.405)
Constant	107.888***	113.346***	98.437**	107.482***
	(17.363)	(11.939)	(38.581)	(18.175)
N	11	11	11	11
Adjs. R ²	0.82	0.89	0.82	0.82
Serial Correlation Test				
Portmanteau (Q) Stat	4.6648	0.8119	6.4884	5.6347
$Prob > chi^2$ (3)	0.1981	0.8466	0.0901	0.1308

Effects of Economic Inequality (80/20 Share Ratio) on Electoral Participation

Standard errors in parentheses, *p < .10, **p < .05, ***p < 0.01

8.1.3 Reasoning

The reason for only reporting these specific models is empirical. The purpose for reporting the Gini index is that it is the most commonly assessed income inequality measure and provides a general picture of changes in inequality, as it is "middle sensitive". The remaining inequality variables, the 80/20 income share ratio, the Palma ratio, and the 90/10 income share ratio, all measure movement in average income shares of the richest quantile relative to the average income shares of the poorest in the income

distribution. As such, they all provide a picture of the social distance between the richest and poorest segments of the population. The 80/20 income share ratio was selected because it measures the richest quintile, whereas the Palma and 90/10 ratios both measure the richest decile. However, it makes no difference to the findings as to which measure is analyzed.

The excluded models do not give us any additional information and the inclusion of any of these variables does not affect the substance of the results reported. Rather, they provide additional support to the findings reported. Thus, in the interest of simplicity, they were omitted from the analysis. The remaining models of the Gini index and 80/20 income share ratio are reported in the appendix, Tables A1 and A2, respectively. In addition, full regression tables for the Palma ratio and 90/10 income share ratio are also reported in the appendix - Tables A3 and A4, respectively. All models indicate that economic inequality has a strong, negative effect on voter turnout in Canadian federal elections.

8.2 General Summary for all models

All inequality variables were best modeled without lags, suggesting that inequality's effect is not delayed. In addition, no trend was found in the Palma analysis; however, similar to the 80/20 ratio, a linear trend was found in all models except union density and GDP per capita for the 90/10 share ratio analysis. Nonetheless, statistical significance remained after controlling for the trend, except for the control for annual unemployment rate.

No model controlling for union density was found to be statistically significant. Indeed, because the national rate of unionization is highly correlated with measures of

after-tax-and-transfers (disposable) income inequality, understanding the effect that economic inequality has on voter turnout is complicated when controlling for union density. Specifically, when measuring Pearson's r for the correlation between union density and the various inequality measures, all measures were found to be very strongly, negatively correlated, ranging from -0.75 for the 90/10 share ratio to -0.91 for both the Gini index and Palma ratio. As such, drawing accurate causal inference on the effect of economic inequality on voter turnout when controlling for union density becomes problematic.

Further, because Pearson's *r* is statistically significant, we may have a violation of the Gauss-Markov assumption of no collinearity. As such, the standard errors may be incorrectly estimated. Specifically, the standard errors increase when union density is added to the model. However, this does not cause bias in the model, meaning the model is still valid. Moreover, despite the high degree of correlation, when analyzing the effect of inequality and union density on voter turnout separately, all inequality variables become statistically significant at the 95% confidence level, whereas union density did not reach statistical significance. Thus, it is reasonable to conclude that inequality has a greater effect than union density.

In addition, in order to ensure no Gauss-Markov assumptions were violated and the results valid, several tests were performed on the models. In particular, three tests, the *Portmanteau's Q-test* for serial correlation, the *Breusch-Pagan test* for heteroskedasticity, and the *skewness* and *kurtosis* tests for normally and independently distributed errors, were conducted. No violations of the Gauss-Markov assumptions were found in any model.

Moreover, after plotting the residuals, it was found that the major outlier in the analysis was the 1980 election. This is not surprising given that turnout was low, even though economic inequality had not increased. The primary explanation for the low voter turnout is voter fatigue since the 1980 election was less than a year after the 1979 election. Accordingly, due to the minimal time between elections, it is not unexpected that turnout was low, despite relatively favourable contexts of economic equality.

Finally, all models indicate that economic inequality has a strong negative effect on voter turnout. Furthermore, all inequality regression coefficients were negative and substantially different from zero. Consequently, both the null hypothesis of no effect and the first alternative hypothesis of positive effect, as per the conflict theory, can be safely rejected.

Moreover, no measure for absolute income was found to be statistically significant, nor significantly different from zero. What is more, all inequality variables, except the 90/10 share ratio when controlling for GDP per capita, were statistically significant. The 90/10 ratio was, however, near significance at the 90% confidence level. As a result, the third hypothesis, which states the relationship between inequality and turnout becomes insignificant when controlling for absolute income, as per the resource theory, can be rejected. In essence, all models support the theory of relative power, meaning economic inequality has a substantially negative effect on voter turnout.

Chapter 9: Conclusion

Conducting an aggregate level, time series analysis on national data for Canadian federal elections between 1979 and 2011, I analyzed the effect that increasing economic inequality has had on voter turnout. Although the general consensus amongst voting behaviour scholars is that voting is a product of multiple factors, primarily, means, motives, and opportunities, analyzing only one election is not sufficient to understand trends in voting behaviour. Furthermore, despite "voting being a matter of individual decisions, turnout is an aggregate-level phenomenon" (Franklin, 2004: 16). Thus, an aggregate level, time-series analysis was chosen for the purpose of understanding overall patterns of economic inequality, where disparities have grown, and how economic inequality has affected electoral participation.

According to the results, economic inequality has a strong negative effect on voter turnout. Indeed, the findings suggest that any growth in income inequality has a serious adverse effect on participation. Accordingly, the findings are consistent only with the theory of relative power, suggesting that, contrary to conflict theory, inequality does not encourage participation. In addition, the level of absolute economic resources was not found to be significant, meaning participation in federal elections is not dependent upon individual resources, as per the resource theory and model. Fundamentally, national contexts of economic inequality are crucial for voter turnout in Canadian national elections.

These findings are consistent with both Solt's comparative and American gubernatorial analyses (2008; 2010) and lend support to Schattschneider's hypothesis. Indeed, despite overall growth in national income, electoral participation appears to be

primarily based upon relative resources and associated levels of relative power. In essence, economic affluence contributes to political influence. Thus, as economic inequality increases, the relative power of the affluent to control the political system is biased further in their favour, which, in turn, increases the limitations of the system. Consequently, as the costs of participating increase, the expected benefits decline, and the probability of influencing the outcome of government policies is low, non-affluent citizens disengage as they conclude that it is not rational to participate. In addition, because the conflict that exists within the system is limited to the concerns of the affluent, they similarly disengage from the political system, as they no longer have to worry about their needs being represented. Thus, economic inequality has a general negative effect on electoral participation; however, it is greatest among the least affluent.

Limitations and Future Research

Due to data limitations, including lack of data and inconsistent surveys, only Canadian federal elections between 1979 and 2011 were analysed. Further, all byelections and referendums during this period were excluded, meaning the number of observations was limited to 11. Consequently, due to the limited sample size, multiple linear regression becomes difficult to conduct. As such, only one inequality variable, alongside one control variable, was analyzed at a time.

Accordingly, there is much room to expand this analysis. For instance, an analysis that examines economic inequality's effect on other forms of political participation alongside voter turnout or a provincial-level analysis would be quite useful for testing the findings of this thesis.

Final Thoughts

Fundamentally, economic inequality is not only detrimental to political equality, but it also has significant implications for democratic political institutions and ideals. Therefore, increasing voter participation requires a substantial change in the operation of, and processes within, the Canadian political system. Specifically, how economic power translates into political power must be rectified in order for equal voice to exist. Furthermore, implementing policies such as compulsory voting laws may increase turnout rates, however, they may not increase the value of one's vote. Rather, they may, in fact, exacerbate feelings of disillusionment and alienation, which may, in turn, contribute to citizens turning to unconventional means to have their voices heard. In essence, economic power is intrinsically interconnected with political power, and is crucial for political participation.

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Appendix A: Additional Tables and Figures

Table A1 Gini Index

Effects	of Econd	omic Ineo	mality (Gini i	ndex) or	n Electoral	Participation
LIICUIS	of LCOIR	mile mee	uanty	Onn n	nuch j U		1 articipation

	Model 7e	Model 7f	Model 7g
Control Variable	Raw Margin	Labour	Median Income
Gini Index	-260.813*	-228.255*	-255.119*
	(119.002)	(118.844)	(115.653)
Controls			
Raw Margin	-3.574		
	(12.986)		
Labour		0.374	
		(0.565)	
Median Income			-0.000
			(0.0003)
Time Trend	-0.644	-0.670	-0.625
	(0.539)	(0.523)	(0.545)
Constant	150.371***	137.198***	152.255***
	(33.716)	(35.187)	(35.437)
Ν	11	11	11
Adjs. R^2	0.80	0.81	0.80
Serial Correlation Test			
Portmanteau (Q) Stat	3.8917	4.1551	3.5391
$Prob > chi^2(3)$	0.2734	0.2452	0.3157

Table A2 80/20 Share Ratio

Effects of Economic Inequal	ity (80/20 Share Rati	o) on Electoral Par	ticipation
	Model 7e	Model 7f	Model 7g
Control Variable	Raw Margin	Labour	Median Income
S80/S20	-8.086**	-7.201*	-7.923**
	(3.403)	(3.363)	(3.324)
Controls			
Raw Margin	-3.255		
	(12.485)		
Labour		0.386	
		(0.537)	
Median Income			-0.000
			(0.0003)
Time Trend	-1.047**	-1.010**	-1.024**
	(0.371)	(0.363)	(0.382)
Constant	114.614***	106.402***	116.722***
	(16.162)	(17.585)	(20.065)
Ν	11	11	11
Adjs. R ²	0.81	0.82	0.81
Serial Correlation Test			
Portmanteau (O) Stat	4 8966	4 7730	4 3517
$Prob > chi^2(3)$	0 1795	0 1892	0 2259
- (-)			

Effects of Economic Inequality (80/20 Share Ratio) on Electoral Participation

Table A3 Palma Ratio

	Model 7a	Model 7b	Model 7c	Model 7d	Model 7e	Model 7f	Model 7g
	Comp Index	GDP Growth	Union	GDP/capita	Raw Margin	Labour	Median Income
Dalma Patio	22 057	12 170**	20 227	57 826*	42 405*	24 482	20 207*
railla Katio	(19.578)*	$(17.509)^{*}$	(24.952)*	*(25.080)	(21.249)	(22.054)	(20.307)
Controls	· · · ·	()		()	· · · · ·	()	
Competitive Index	3.332 (3.584)*						
GDP growth rate		1.021 *(0.667)					
Union Density			0.408 *(0.676)				
GDP/capita				0.064 *(0.074)			
Raw Margin				()	-8.007 (14.073)		
Labour					(11.075)	0.275	
Median Income						(0.050)	0.0001
Time Trend	-0.617	-0.416	-0.513	-1.882	-0.59	-0.720	-0.677
	*(0.559)	*(0.537)	*(0.635)	*(1.501)	(0.596)	(0.589)	(0.588)
Constant	107.206***	113.158***	90.134*	108.072***	119.84***	107.466***	112.374***
	(19.568)*	(16.620)*	(43.902)*	(19.530)*	(21.293)	(24.380)	(21.809)
Ν	11	11	11	11	11	11	11
Adjs. R ²	0.80	0.83	0.79	0.80	0.79	0.79	0.78
Serial Correlation Test							
Portmanteau (Q) Stat	3.0954	2.3290	4.3574	2.4595	2.6129	2.4366	2.8775
Prob > chi2(3)	0.3771	0.5070	0.2254	0.4827	0.4552	0.4869	0.4109

Effects of Economic Inequality (Palma Ratio) on Electoral Participation

Table A4 90/10 Share Ratio

	Model 7a	Model 7b	Model 7c	Model 7d	Model 7e	Model 7f	Model 7g
	Comp Index	GDP Growth	Union	GDP/capita	Raw Margin	Labour	Median
							Income
S90/S10	-3.336*	-3.399*	-2.393	-3.801	-4.01*	-2.928	3861*
2	(1.636)	(1.724)	(2.217)	(2.190)	(2.051)	(2.08)	(2.003)
Controls	()	× ,		× ,		()	× ,
Competitive Index	4.906						
	(0.178)						
GDP growth rate		0.827					
		(0.719)					
Union Density			0.492				
CDD/2000ita			(0.657)	0.027			
ODP/capita				(0.027)			
Raw Margin				(0.070)	-10 271		
ituw iviaigin					(14.859)		
Labour					(1.00))	0.297	
						(0.656)	
Median Income							0.0002
							(0.0003)
Time Trend	-1.004**	-1.132**	-0.897	-1.885	-1.235**	-1.250**	-1.271**
	(0.367)	(0.359)	(0.612)	(1.635)	(0.361)	(0.366)	(0.359)
Constant	98 340***	98 628***	76 724*	96 949***	108 413***	96 001***	96 418***
Constant	(12.435)	(13.176)	(36.282)	(19.010)	(16.457)	(19,105)	(16.3)
	()	()	(2 0 - 0 -)	()	()	()	()
Ν	11	11	11	11	11	11	11
Adjs. R ²	0.82	0.80	0.78	0.77	0.78	0.77	0.78
~							
Serial Correlation Test	4 1 407	0.7557	4 0 2 2 4	0.0000	1 (022	0.0042	2 (120
Portmanteau (Q) Stat	4.1487	0.7557	4.0324	0.9909	1.6923	0.9843	3.6129
$r_{100} > cn_2(3)$	0.2438	0.8600	0.2380	0.8035	0.0386	0.8051	0.3064

Effects of Economic Inequality (90/10 Share Ratio) on Electoral Participation



Figure 1A Share of Total Income Growth, 1975-2007 - Select OECD Countries

Source: OECD. 2014b. "Focus on Top Incomes and Taxation in OECD Countries: Was the crisis a game changer?"

Note: OECD calculations based on the World Top Income Database. Total income refers to pre-tax incomes, excluding capital gains