

POLITICAL CONSEQUENCES OF ECONOMIC INEQUALITY

By

Sung Min Han

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Political Science – Doctor of Philosophy

2016

ABSTRACT

POLITICAL CONSEQUENCES OF ECONOMIC INEQUALITY

By

Sung Min Han

Economic inequality has emerged a persistent topic in the popular press, academic circles, and election cycles. Indeed, mounds of evidence suggest the gap between the rich and the poor is not only growing in the United States, but also around the globe. While much research exists on the economic fallout of inequality, we have less understanding of the political repercussions of this expanding wealth gap. My dissertation, comprised of three main chapters, aims to address this lacuna and revise conventional wisdom by highlighting the consequences of economic inequality on our political systems and politics. In particular, I examine how economic inequality yields more extreme policy positions by political parties, how it fosters public discontent with democracy, and how it moves voters to prioritize redistributive issues. Each chapter features a clear micro-level model of how the rising economic inequality affects electoral incentives and redistributive preferences among party elites and voters. Together, they contribute to our understanding of how changes in economic inequality affect party-voter's distributional linkage, redistributive attitudes, democratic processes, and democratic accountability.

Recent theories suggest that rising income inequality is the main determinant of party system polarization. The second chapter of the dissertation, "Income Inequality, Electoral Systems, and Party Polarization", challenges this conventional perspective and demonstrates that party polarization in many countries does not track with a widening wealth gap. Combining these insights with studies on electoral systems, I argue that the symbiosis between political

polarization and income inequality critically depends on the electoral system. My empirical finding suggests that parties only have diverging ideological platforms when electoral systems encourage moves to the extreme.

The third chapter of the dissertation, “Economic Inequality, Winner-Loser Gap, and Satisfaction with Democracy”, addresses how economic inequality affects voters’ discontent with democracy. Although existing theories of democratic attitudes charge that the design of electoral institutions can mitigate electoral losers’ dissatisfaction with democracy, these claims have received mixed empirical support. Building on theoretical insights from relative deprivation theory and median voter theory, I argue that electoral losers react to electoral defeat more strongly and express deeper discontent with democracy as income inequality rises. In particular, this chapter demonstrates that the mediating effects of economic inequality are more critical than those effects of electoral institutions.

The forth chapter, “Policy Distinctiveness, Income, and Redistributive Attitudes”, addresses the question of how and under what conditions do the poor prioritize redistributive policies. Existing theories suggest that rising economic inequality leads to increasing demand for redistribution from the lower socioeconomic classes. Yet, this claim has also received mixed empirical support. Drawing on theoretical insights from studies on political information, this chapter argues that policy distinctiveness critically mediates the relationship between income and redistributive preferences. This chapter contributes to the on-going debates on redistribution politics and inequality by identifying when and why poor citizens may not demand greater redistribution of wealth.

Copyright by
SUNG MIN HAN
2016

To my wife, Heeseon

ACKNOWLEDGEMENTS

This dissertation would not have been possible without the guidance and the help of a number of individuals. First and foremost, I would like to thank my dissertation committee chair, Eric C. C. Chang. Eric has always been supportive and encouraging since I arrived in East Lansing. His guidance, support, and feedbacks were crucial for the long journey of dissertation project. My other dissertation committee members, Cristina Bodea, Christian Houle and Corwin Smidt, provided numerous helpful comments on each stage of my dissertation. I thank them for their considerable time and effort.

I was extremely lucky to have many wonderful graduate student colleagues during my stay at Michigan State. I am very grateful for their friendships, encouragement, support, and helpful comments. My gratitude goes to Fang-Yu Chen, Hyunjin Choi, Kangwook Han, Masaaki Higashijima, Shih-Hao Huang, Changkuk Jung, Hyunwoo Kim, Brian Kennedy, Alon Kraitzman, Helen Lee, Chunho Park, Johann Park, Peter Penar, Wen-Chin Wu, Fangjin Ye and many others.

I am also so grateful for the endless support of my family. First, I would like to thank my parents, Ilhwan Han and Mija Kim have been always supportive since I decided to pursue academic life in the United States. They always have been great friends and mentors in my life. I am also thankful to my parents-in-law, Hyeog Lee and Okhyang Kim, for their support, patience, and encouragement. My deepest debt of gratitude goes to my wife, Heeseon Lee, who proofread several drafts of this dissertation and has always been a great source of encouragement to me while I was working on this project. Last but not least, I thank God, who loves me and always encourages me when I most needed.

TABLE OF CONTENTS

LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER 1 INTRODUCTION	1
1.1 Three Puzzles in Economic Inequality	2
1.1.1 Inequality and Party Polarization.....	2
1.1.2 Inequality and the Winner-Loser Gap in Satisfaction with Democracy	2
1.1.3 Inequality and Support for Redistribution	4
1.2 Theory and Arguments	5
1.3 Contributions	8
1.4 Outline of the Dissertation	9
CHAPTER 2 INCOME INEQUAITY, ELECTORAL SYSTEMS, AND PARTY POLARIZATION	11
2.1 Introduction.....	11
2.2 Party Polarization.....	13
2.3 Income Inequality and the Permissiveness of Electoral Systems	14
2.3.1 Why Income Inequality?.....	15
2.3.2 Electoral Systems as Institutional Constraints.....	17
2.4 Data and Analysis	21
2.4.1 Dependent Variable: Party Polarization.....	21
2.4.2 Income Inequality	22
2.4.3 Electoral Systems and Party Systems	22
2.4.4 Control Variables	23
2.4.5 Results.....	25
2.4.6 Robustness Check	35
2.5 Conclusion	37
CHAPTER 3 ECONOMIC INEQUALITY, THE WINNER-LOSER GAP, AND SATISFACTION WITH DEMOCRACY	39
3.1 Introduction.....	39
3.2 Literature Review.....	42
3.3 Theory	44
3.4 Data and Analysis	49
3.4.1 Data.....	49
3.4.2 Dependent Variable	50
3.4.3 Independent Variables	52
3.4.4 Control Variables.....	52
3.4.5 Empirical Estimation	54
3.4.6 Empirical Results.....	56
3.4.7 Robustness Check I: Alternative Measurements and Model Specifications	63

3.4.8 Robustness Check II: Testing Further Implications.....	66
3.4.9 Robustness Check III: Intertemporal Analysis	67
3.5 Conclusion	69
CHAPTER 4 POLICY DISTINCTIVENESS, INCOME, AND REDISTRIBUTIVE	
PREFERENCES	72
4.1 Introduction.....	72
4.2 Literature Review.....	75
4.3 Theory	77
4.4 Research Design and Empirical Finding.....	81
4.4.1 Data	81
4.4.2 Dependent Variable	81
4.4.3 Independent Variables	82
4.4.4 Control Variables	84
4.4.5 Model Specification	85
4.4.6 Findings	86
4.4.7 Robustness Check	89
4.5 Conclusion	92
CHPATER 5 CONCLUSION	94
APPENDIX.....	96
BIBLOGRAPHY	119

LIST OF TABLES

Table 2-1 The Effects of District Magnitude and Income Inequality on Party Polarization	27
Table 3-1 Income Inequality, the Winner-Loser Status and Satisfaction with Democracy.....	57
Table 3-2 Robustness Check: Using Alternative Political Institutions.....	65
Table 4-1 Redistributive Preferences and Parties' Policy Platforms	88
Table 4-2 Robustness Check: Using Different Estimation	90
Table 4-3 Robustness Check: Using Different Time Dimension	91
Table C2-1 Social and Economic Left-Right Positions from the CMP.....	101
Table C2-2 National Election Surveys to Measure Parties' Ideological Positions.....	104
Table C2-3 Descriptive Statistics.....	105
Table C2-4 Relationship between Economic/Social Polarization and Economic Inequality	106
Table C2-5 The Effects of District Magnitude and Income Inequality on Party Polarization	107
Table C2-6 Relationship between Economic Inequality and Voter Polarization	108
Table C2-7 Robustness Check: Inequality Measures and Using Prais-Winsten Estimator.....	109
Table C2-8 Robustness Check: Endogeneity Problem and Fixed Effect	110
Table C3-1 Inequality and Issue Salience on Redistribution.....	116
Table C3-2 Robustness Check: Income Inequality, the Winner-Loser Status, and Satisfaction with Democracy	117
Table C3-3 Income Inequality, Policy Winner, and Satisfaction with Democracy.....	118

LIST OF FIGURES

Figure 1-1 Economic Inequality and Party Polarization	3
Figure 2-1 Economic Inequality and Party Polarization	12
Figure 2-2 Marginal Effect of Economic Inequality and Electoral System.....	30
Figure 2-3 Marginal Effect of Economic Inequality in Different Party Competitions.....	32
Figure 2-4 Party Polarization in New Zealand	34
Figure 3-1 Hypothesized Satisfaction with Democracy under Different Levels of Inequality	45
Figure 3-2 Satisfaction with Democracy across Countries.....	51
Figure 3-3 Marginal Effect of the Winner-Loser Status on Satisfaction with Democracy as Economic Inequality Changes	59
Figure 3-4 Winner-Loser Gap by Inequality and Electoral Systems.....	60
Figure 3-5 Marginal Effect of Winners under SMD and PR Systems.....	63
Figure 3-6 The Dynamics of Inequality and the Winner-Loser Gap in South Korea.....	68
Figure 4-1 Cross-National Patterns of Income-Redistributive Attitudes.....	73
Figure 4-2 Changes in Income-Redistributive Preferences within Countries	74
Figure 4-3 Marginal Effects of Income	89
Figure C2-1 Marginal Effect of Economic Inequality Using Lagged IVs.....	111
Figure C2-2 Marginal Effects of Economic Inequality Using Voter Polarization	112
Figure C2-3 Marginal Effect of Economic Inequality at Different Party Competitions I.....	113
Figure C2-4 Marginal Effect of Economic Inequality at Different Party Competitions II.....	114
Figure C2-5 Marginal Effect of Economic Inequality at Different Party Competitions III	115

CHAPTER 1

INTRODUCTION

This dissertation investigates the political and economic consequences of economic inequality. In particular, this dissertation attempts to answer three critical and related research questions: First, how does economic inequality produce extreme policy appeals through democratic linkages between parties and voters? Second, how does economic inequality instigate voters' discontent with democracy? More specifically, how does economic inequality moderate the gap in satisfaction with democracy between electoral winners and losers? Third, under what conditions voters concern more about redistributive issues? Building on political-economic model of redistribution and relative deprivation theory, I argue that rising economic inequality increases the salience of redistribution issues by instigating both the poor and the rich individuals: the poor expect more redistribution to reduce the gap between the have and have-not, whereas the rich have more concerns about tax hikes targeting the affluent individuals. Yet, this salience of redistribution issue translates into different types of political responses by voters and political elites in various political structures. In my subsequent chapters, I will provide detailed explanation how inequality leads to the salience of redistribution issues and why voters and political parties respond to this salience of redistribution more strongly in a certain political structures.

1.1 Three Puzzles in Economic Inequality

1.1.1 Inequality and Party Polarization

The first puzzle this dissertation addresses is under what conditions inequality leads to party polarization. Here, I define party polarization as the ideological distance across political parties. A number of studies in the United States argue that party polarization moves in tandem with changes in income inequality (McCarty et al. 2006; Theriault 2008; Hetherington 2009). As rising income inequality increases the importance of redistributive issue (Tavits and Potter 2015), the conflict between the poor and the rich becomes intensified with the rise in inequality. Because the poor and the rich are core supporters of the left and right parties, parties attempt to propose more extreme redistributive policies to satisfy their core supporters.

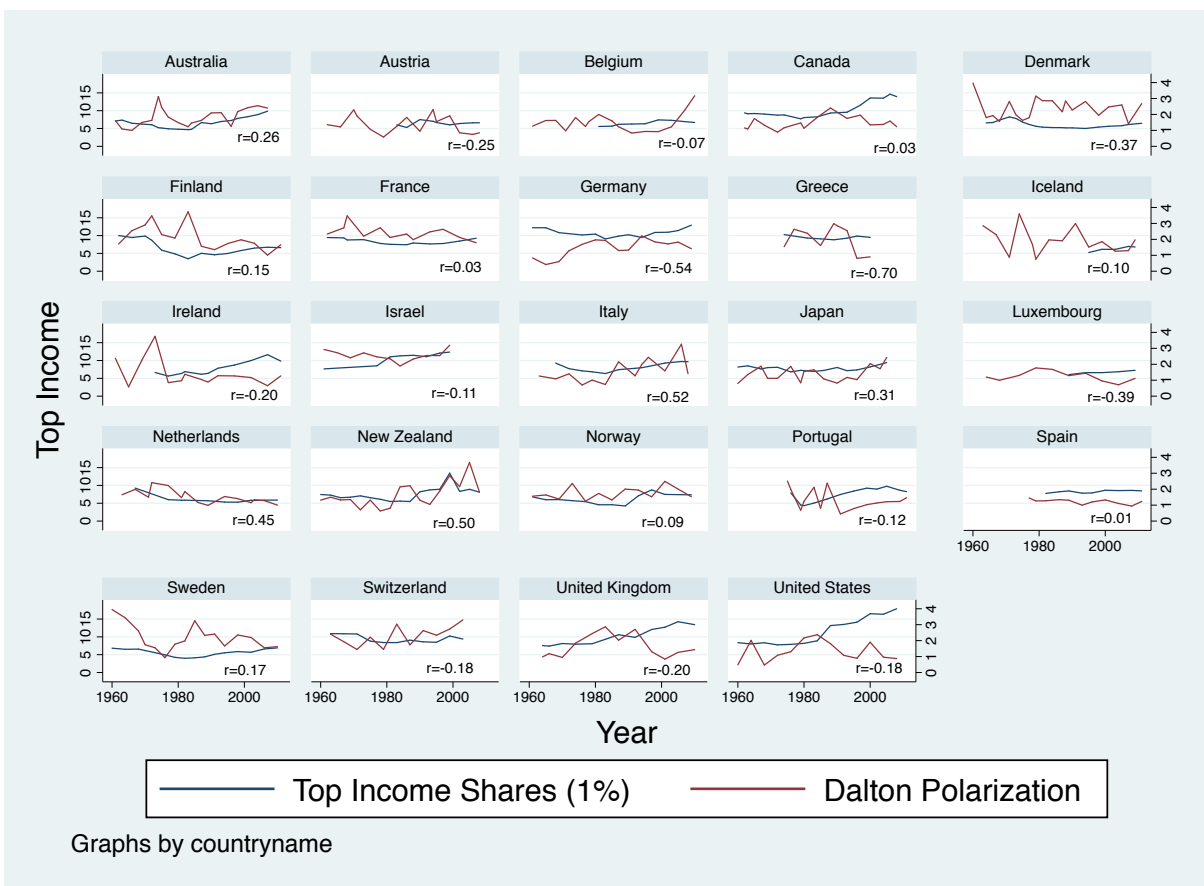
However, it is unclear whether income inequality leads to increasing party polarization in other countries. For example, the ideological distance between two major parties decreased while the level of inequality rises during 1980s in the United Kingdom (Adams et al. 2012). As Figure 1-1 indicates, not all countries have experienced increasing party polarization with rising inequality. It raises an important question: *Why do income inequality and party polarization proceed together in some countries but not in others?*

1.1.2 Inequality and the Winner-Loser Gap in Satisfaction with Democracy

Given the importance of people's democratic attitudes on democratic stability, various studies have proposed factors explaining individual support for democracy. Among those factors, electoral winner-loser status has been suggested as the most important in explaining democratic attitudes (Anderson and Guillory 1997; Anderson et al. 2005). In particular, given that a wide democratic satisfaction gap between electoral winners and losers is quite detrimental to

democratic stability, studies have attempted to find factors that could alleviate electoral losers' discontent toward democracy (Anderson et al. 2005).

Figure 1-1 Economic Inequality and Party Polarization



Note: The left side of vertical axis indicates the range of top income shares from Solt (2009) while the right side of horizontal axis indicates the range of Dalton's polarization index (Dalton 2008) calculated by the author. r refers to the correlation coefficients.

Conventional wisdom in winner-loser gap thesis proposes that the adoption of consensual political systems is critical to diminish democratic satisfaction gap between electoral winners and losers (Anderson and Guillory 1997). The notion is that in countries with consensual systems, such as proportional representation (PR) systems, electoral losers still find a way to influence

policy outcomes. In contrast, electoral losers are entirely disconnected to the future policy under majoritarian systems.

Even though Anderson and his co-author's studies empirically find the effect of political institution on winner-loser gap, most of the recent studies have not found these mediating effects of political institutions (Blais and Gélneau 2007; Curini et al. 2012; Howell and Justwan 2013; Singh 2014). In fact, Anderson and Guillory (1997)'s study only focuses on a limited sample of Western European countries, and it is reasonable to suspect that the impact of political institutions may be different in other world regions. In addition, in light of the recent findings on the redistributive consequences of electoral systems (Iversen and Soskice 2006), one can further question whether the moderating effect of electoral systems identified by Anderson is in fact the surrogate effects of other economic forces. Then, *What factors critically mediate the winner-loser gap of being satisfied with democracy?*

1.1.3 Inequality and Support for Redistribution

Conventional model of political economic theory have long argued that inequality increases the level of redistribution and that the individual income would be the best predictor in explaining citizens' redistributive attitudes. However, many recent studies (Shayo 2009; Dion and Birchfield 2010) have failed to find the negative relationship between income and redistributive preference. Instead, the rich are not necessarily less likely to support government redistribution whereas the poor are not necessarily more likely to support more redistribution by government. Given this puzzling gap between the theoretical intuition and the lack of empirical evidence, one needs to ask: *Why don't income level predict the redistributive preference among citizens?*

Existing studies have suggested a few possible explanations, such as ethnic fractionalization, religious belief, and national identity (Alesina and Glaser 2004; De La O and Rodden 200; Scheve and Stasavage 2006; Shayo 2009; Stegmueller et al. 2012). However, only limited number of the studies considers informational role of welfare state in shaping citizens' redistributive preference. It is reasonable to believe that voters who are in need might not necessarily have a strong redistributive preference if they have limited information on redistributive politics. For example, Gingrich (2014) argues that voters are more likely to choose candidates based on their redistributive preferences when they have clearer information on welfare states. Therefore, there is a need to understand *how information on redistributive policies affects citizens' support for redistribution by government*

1.2 Theory and Arguments

In this dissertation, I develop my theory based on two inter-related theoretical models, median voter redistributive model and relative deprivation theory. Median voter redistribution model (Meltzer and Richard 1981) suggests that the poor and the rich have very different redistributive preference based on their level of income. Because the poor can benefit from redistribution financed by the rich, there is a fundamental conflict of economic interest between the have and the have-not. Importantly, rising inequality further instigate these underlying conflicts between the poor and the rich. Increasing inequality also increases the relative deprivation of the poor against the rich. In other words, as inequality increases, the poor demand more redistribution and the rich are more likely to concern about the future redistribution. Therefore, greater inequality increases both the fear/concern from the rich and the expectation from the poor regarding the level of redistribution.

Building on these insights, each chapter provides a theoretical micro-foundation to answer the above puzzles regarding party polarization, satisfaction with democracy, and redistributive preference.

In the first chapter, I argue that inequality generates polarizing redistributive preferences between the rich and the poor. In other words, inequality increases left and right parties' incentives to propose extreme policy positions in response to their core supporters. However, office-maximizing parties also need to calculate whether their extreme moves could generate net vote gains. When parties believe that their moves would lead to decreasing total vote shares, parties would not move to the extreme to respond to the demand from their core supporters.

I argue that the outcome of this strategic calculation is largely determined by the electoral system. In proportional representation (PR) systems, parties can still gain seats even though they may lose some votes from the center. This induces parties to be more responsive to their core supporters. Thus, when income inequality rises, parties move to extreme to meet the demand from their core supporters. Yet, in majoritarian systems, losing vote shares from the center might lead to catastrophic outcomes. Hence, it is hard for many parties to take this risk and propose extreme policy positions. In short, I argue that inequality only leads to increasing polarization in PR systems.

In the second chapter, I connect issue salience of redistribution to winner-loser gap thesis regarding satisfaction with democracy. Again, my argument builds on the theory that inequality leads to the salience of redistribution (Tavits and Potter 2015). I argue that this salience of redistribution increases the stakes of election winning.

Both the poor and the rich recognize that who becomes winners critically affects the future policy outcomes on redistribution. Because greater inequality increases anticipated

redistribution gains and losses to both the poor and the rich, voters become more attentive to the electoral winning of their supporting parties and more sensitive to their regime evaluation. If left (right) parties win the election, the poor would (not) expect their anticipated level of redistribution would be met by the governments. Because inequality increases the importance of election winning through redistributive gains/losses inequality signifies the importance of electoral winner-loser status on individual democratic support. Thus, with greater inequality, electoral losers are less likely to be satisfied with democracy than electoral losers under relatively equal societies. By the same token, electoral winners under high inequality are more likely to demonstrate higher level of democratic satisfaction than electoral winners under low inequality. Taken together, I argue that income inequality moderates the democratic gap between electoral winners and losers.

In the third chapter, I explain under what conditions income level would be a better predictor for individual redistributive attitudes. Conventional wisdom of redistribution model suggests that income level should predict citizens redistributive preference based on their material interest. However, various empirical studies find cases where income level does not predict redistributive preference and the effect of income is conditioned by other structural factors (De La O and Roddern 2008; Dion and Birchfield 2010).

I argue that this discrepancy between conventional wisdom and empirical findings can be understood by looking at the supply side of politics. In particular, I argue that policy distinctiveness on redistribution significantly mediate the relationship between voter's income and redistributive preference. Voters are more likely to utilize their income dimension when they could clearly identify the distinction of redistributive policy dimensions. It is because policy distinctiveness generates critical information to voters about redistributive policies.

1.3 Contributions

This dissertation provides a unifying theory of how rising economic inequality affects electoral incentives and redistributive preferences among party elites and voters. Together, they provide a more clear view of political consequences of economic inequality.

First, this dissertation clarifies under what conditions the effect of inequality becomes more salient on party competition and policy outcomes. Scholars have long debated whether inequality increases party polarization (McCarty et al. 2006; Adams et al. 2012), and how electoral institutions affect parties' policy platforms (Dow 2001, 2011; Ezrow 2008; Curini and Hino 2012). Extending the insights from these studies, this study provides a more coherent framework on the relationship between inequality, electoral systems, and party polarization.

Second, this dissertation argues that voters' redistributive concerns critically affect how voters evaluate the elections and current regime performance. Hence this study provides important insights on democratization literature. Democratization literatures have long suggested that the level of inequality determines the onset of democratization (Boix 2003; Acemoglu and Robinson 2005). Yet, recently, Houle (2009) argues that the level of inequality is only related to the democratic consolidation but the onset of democratization. Engaging the debate, this study provides attitudinal explanation on how inequality weakens democratic consolidation.

Additionally, this study provides clear policy implication to new democracies by comparing mediating effect of political institution and inequality. This study challenges the focus on political institutions in the conventional wisdom (Anderson and Guillory 1997) and suggests that voters' evaluation of democracy is more dependent on the level of inequality. This implies that in new democracies, improving income inequality and other distributional conditions are more critical to enhancing democratic stability than reforming political institutions.

Lastly, this study contributes to the growing literature on the political economy of information. Extant studies on political information have long argued that voters have very limited political information (Campbell et al. 1960; Bartels 2008) and informed voters have very different preferences on social policy (Boeri and Tabellini 2012). Resonating recent studies on political economy of redistribution that posit the importance of political information (Boeri and Tabellini 2012; Gingrich 2014; Iversen and Soskice 2015), this study suggests that political information greatly enhance voters' understanding of their material status and signifies the relationship between their incomes and redistributive preferences. In particular, this dissertation points out the past policy distinctiveness on redistribution provides clearer information to voters regarding future policy outcomes.

1.4 Outline of the Dissertation

This dissertation is organized as follows. Chapter 2 investigates the relationship between income inequality, electoral systems, and party polarization. Building a theory of how electoral systems mediate the diverging pressure by inequality on party polarization, this chapter provides empirical evidence that PR systems contribute to party polarization as inequality rises across 24 advanced democracies during 1960 to 2011. Furthermore, I provide a more detailed case supporting the argument that inequality effect is mediated by the electoral system. Using the case of New Zealand that experienced a significant change in the electoral system from restrictive single member district (SMD) systems to more permissive mixed electoral systems, this chapter provide additional evidence that inequality only leads to increasing polarization under permissive electoral systems.

Chapter 3 explores the relationship between inequality, winner-loser status, and satisfaction with democracy. Engaging debates on current winner-loser thesis, this chapter provides an argument that the level of inequality signifies the gap of being satisfied with democracy between electoral winners and losers. To test the argument, I use 76 cross-national election surveys from the Comparative Study of Electoral Systems (CSES) data. I find the strong evidence of my argument. Additionally, I find that mediating effect of inequality is much stronger than the effect of electoral systems in the sample with developing and developed countries. This challenges the conventional wisdom which emphasizes the role of political institutions on winner-loser effects.

Chapter 4 investigates how party distinctiveness signifies the relationship between income level and redistributive preferences. Building on insights from the political information literature, I argue that voters can make better connection between their income status and social policy preferences when they have better accesses to information regarding redistributive policies. This chapter provides an argument that policy distinctiveness regarding redistribution diminishes the informational asymmetry between the have and the have-not. Employing the data from the International Social Survey Programme (ISSP) and the changes in budget composition, I find the strong support for my argument. Finally, I provide implications and future research agendas on political economy of inequality from main findings of this dissertation in the Chapter 5.

CHAPTER 2

INCOME INEQUALITY, ELECTORAL SYSTEMS, AND PARTY POLARIZATION

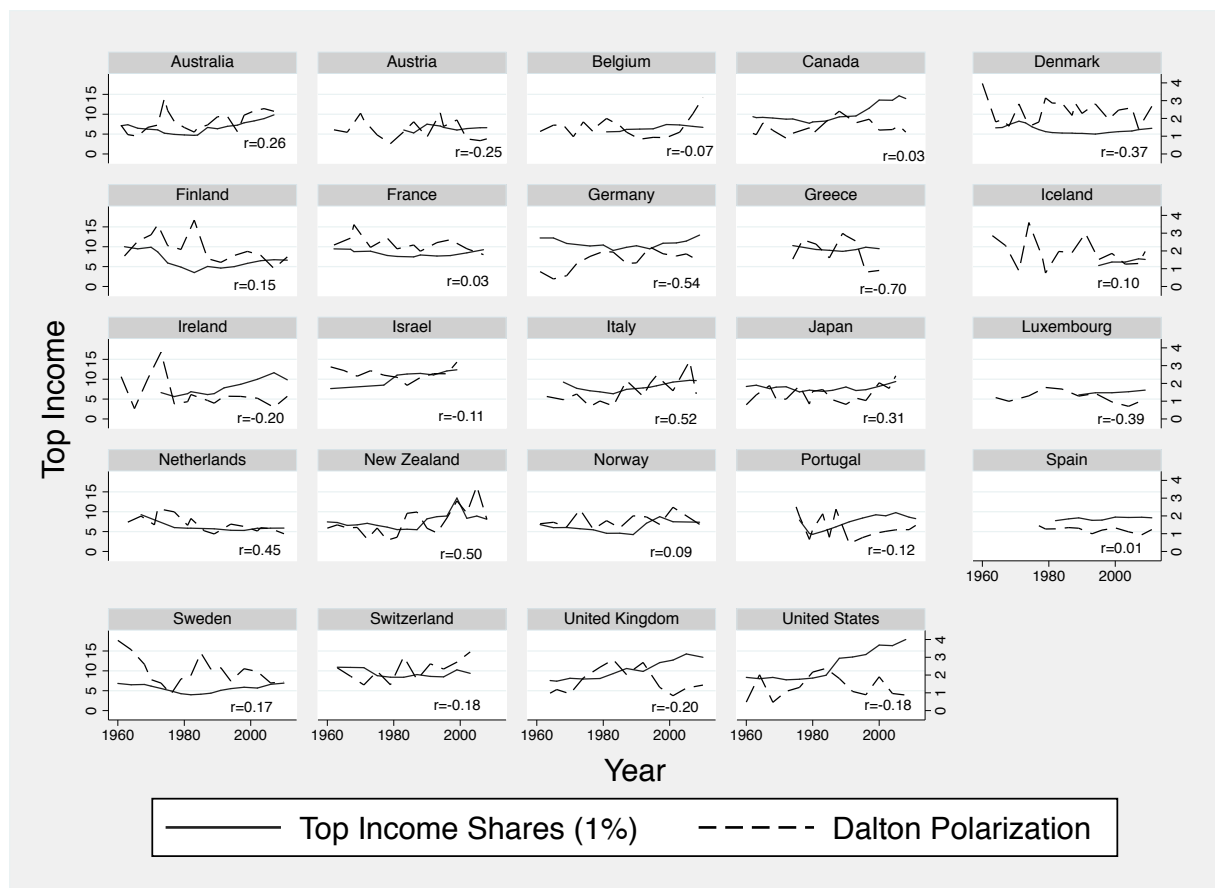
2.1 Introduction

Political polarization is commonly referred to as the ideological divergence of politicians, political parties and mass publics (McCarty et al. 2006). Party polarization is particularly important as it reveals how political parties handle underlying domestic conflicts by proposing future policy outcomes. Therefore, the rise in party polarization could predict changing political and macro-economic outcomes because it implies a rise in political conflict (Alt & Lassen 2006; Lindqvist & Östling 2010).

While party polarization has received considerable scholarly attention in the United States (McCarty et al. 2006; Theriault 2008; Hetherington 2009), it remains unclear if explanations for party polarization in the United States can be applied to other countries. More specifically, the key question is whether income inequality – one of the dominant explanations for the increase of political polarization in the United States – is the main cause of party polarization in other countries. In a recent contribution, McCarty et al. (2006) show that polarization in Congress tends to move in tandem with rising income inequality. Their rationale is that the increase in income inequality induces high-income earners to vote homogeneously for the Republican Party and low-income earners to vote homogeneously for the Democratic Party, thereby parties have more incentives to pursue extreme party positions. However, the presence of this linkage in other countries remains unexplored. To illustrate this point, Figure 2-1 plots the polarization index by Dalton (2008) along the vertical axis against the index of income inequality by Solt (2009) on the horizontal axis. As one can see, while in some countries income inequality

and party polarization move together (Italy, Japan, the Netherlands, and New Zealand), this trend does not exist in other countries (Austria, Canada, and the United Kingdom).¹

Figure 2-1 Economic Inequality and Party Polarization



Note: The left side of the vertical axis indicates the range of top income shares while the right side of the vertical axis indicates the range of Dalton's index. r refers to the correlation coefficients.

Why do income inequality and party polarization proceed together in some countries but not in others? I argue that country-level institutional differences might explain why political

¹ Some might question the pattern of party polarization in the United States. Contrary to the other countries, the CMP measures party positions in the Presidential election. Because positions of presidential candidates are relatively more moderate than that of each party, party polarization in the United States is not as distinctive as the one in McCarthy et al (2006).

parties change their policy position in response to the rise in income inequality. I pay special attention to electoral systems that can either facilitate or hinder parties' diverging incentives (Cox 1990; Calvo & Hellwig 2011).

Combining the insights of the studies on income inequality with those of the studies on electoral systems, I argue that the extent to which party polarization responds to the rise in income inequality critically depends on the electoral system. When income inequality increases, the conflict among the left and right wing parties' core supporters becomes more salient. As a result, political parties have more incentives to respond to their core supporters, the rich and the poor, by taking more extreme positions. Yet their ability to respond to economic shocks varies depending on the permissiveness of their electoral systems. Specifically, I hypothesize that the effect of income inequality on party polarization should be stronger under more permissive electoral systems.

To assess these arguments, I conduct an empirical analysis of the relationship between party polarization, income inequality, and electoral systems across 24 advanced democracies from 1960 to 2011. In line with theoretical expectations, this study finds that greater income inequality increases party polarization in more permissive electoral systems. As district magnitude increases, the effect of income inequality becomes positive and stronger. However, the relationship disappears in less permissive electoral systems: political parties do not diverge their policy positions as economic inequality increases.

2.2 Party Polarization

Party polarization indicates the ideological distance between political parties (McCarthy et al. 2006; Dalton 2008). The conceptualization of party polarization can be different across party

systems. It is easy to conceptualize party polarization in two-party systems because only the ideological distance between two parties (e.g., United States) is being considered. However, the conceptualization of party polarization is not as straightforward in multi-party systems. While some argue that party polarization may be conceptualized as the ideological distance between two major parties (Pontusson & Rueda 2008), others assert that the position of each party in relation to other parties should be considered (Esteban & Ray 1994; Dalton 2008). For example, in the United Kingdom, party polarization may be conceptualized by considering only the Conservative and Labour parties, which are the two major parties, and dismissing the Liberal Democrats, which has its position at the center. However, three possible dynamics could be taken into account in the United Kingdom: the Conservative-Labour, the Conservative-Liberal Democrats, and the Labour-Liberal Democrats pairs. In the empirical analysis, I will use both types of conceptualization.²

Party polarization is an aggregate measure of the party system and it captures the ideological distance across political parties. Political parties strategically consider multiple factors to determine their positions. Among them, changing economic inequality is a critical condition for parties to change their positions toward the extreme (McCarty et al. 2006; Anderson & Beramendi 2012).

2.3 Income Inequality and the Permissiveness of Electoral Systems

I argue that the effect of rises in income inequality on party polarization is conditioned by electoral systems. Income inequality is the main stimulus that generates diverging incentives for political parties. The rise in income inequality promotes a clear division between the poor and

² About the different measures for party polarization see C2.1

the rich. As Adams et al. (2005) persuasively proposed, parties gain more votes by appealing to their core constituents. As a result, left and right parties gain a strong incentive to pursue more divergent positions by responding to their core supporters, the rich and the poor.

Yet, this polarizing pressure from rises in income inequality is conditioned by electoral systems: when electoral systems are more permissive, polarizing effects of income inequality become stronger; conversely, when electoral systems are more restrictive, the effects of income inequality are smaller. Under restrictive systems, even political parties with diverging platform incentives have difficulty changing their positions to more extreme locations. Taking extreme positions do not help political parties to gain more seats in many occasions. Rather, it increases the likelihood of losing seats if other parties maintain their positions.

2.3.1 Why Income Inequality?

The Median voter redistribution model identifies income inequality as the main source of redistributive conflict between the poor and the rich. Parties' ideological positions move to the left if a median voter becomes poorer with rises in income inequality (Meltzer & Richard 1981). However, not every party engages in left movements if income inequality increases. Parties of the right also have strong incentives to respond to their core supporters, the rich (Pontusson & Rueda 2010). In an environment where the rich prefer lower tax rates and the poor favor higher ones, the increase in income inequality prompts an even larger divide due to the fact that the poor support policies that redistribute wealth from the rich, who try to preserve their wealth.³ As income inequality triggers more intense conflict between the poor and the rich, both left and right

³ Some may argue that the assumed relationship between income inequality and redistribution by Meltzer and Richard (1981) does not hold empirically (Bradley et al. 2003; Iversen & Soskice 2009). However, a number of studies have found robust relationships between redistributive preference and the level of earning income (Finserass 2009).

parties have stronger centrifugal incentives to respond to divergent economic interests. Consequently, increasing inequality would result in party polarization, owing to changing parties' platform incentives (Pontusson & Rueda 2008).⁴

Parties are motivated to propose more extreme positions when policy issues become more salient (Adams et al. 2005). Rises in inequality promotes the voters to care more about policy issues, which implies that both the poor and the rich, core supporters of left and right parties, are likely to cast their votes based on platforms on redistribution (Tavits & Potter 2015). Core supporters' redistributive preferences become stronger because the scope of redistribution would be larger under greater inequality. This means that economic interests dominate core supporters' political decisions, which makes it easier for political parties to target them by proposing extreme positions.

The relationship between inequality and party polarization is empirically tested by several studies in the United States (McCarty et al. 2006; Garand 2010). However, the idea that rises in income inequality increase party polarization is difficult to validate cross-nationally. Although studies have attempted to explain party polarization in cross-national contexts (Dow 2001; Ezrow 2008; Dow 2011; Curini & Hino 2012), only a few have tried to link party polarization with income inequality in cross-national contexts (Pontusson & Rueda 2008; McCarty & Pontusson 2009). Limited efforts to draw a link between income inequality and party polarization are partly due to the misconception that economic and social inequality naturally leads to party polarization (Keefer & Knack 2002).

⁴ Rises in inequality could induce even center parties to deviate from the center. Distributional preferences of middle-income voters and the poor become very similar with rises in inequality. They both want more redistribution. To keep their supporters, center parties have incentives to deviate from the center because rises in inequality induce supporters of center parties to have more extreme positions.

More importantly, existing studies on party polarization in cross-national contexts have a number of limitations. First, they have not considered the role of third parties that gain considerable representation. Most advanced democracies have more than two main political parties, so excluding third parties might arrive at inaccurate conclusions regarding party polarization. Second, the empirical relationship between party polarization and income inequality is unsettled in cross-national contexts. For instance, it has been reported that income inequality contributes to rises in party polarization in France (Pontusson & Rueda 2008), whereas party convergence is observed in the United Kingdom with rises in inequality (Adams et al. 2012). This is further confirmed by the author's own analysis. As shown in Figure 2-1, the relationship between inequality and political polarization is unclear in advanced democracies. Political parties might not change ideological positions simply because core supporters have stronger redistributive preferences. Changing preferences of core supporters may increase parties' incentives to move their positions closer to their supporters. However, parties do not move toward core supporters if other structural factors facilitate diverging incentives.

2.3.2 Electoral Systems as Institutional Constraints

Despite the theoretical reasoning that the rise in income inequality induces party polarization, some studies have suggested that it may not increase party polarization (Adams et al. 2012). For instance, the Labour Party's effort to secure votes from the center generates policy moderation even in the period of increasing inequality in the United Kingdom. The reason why increasing inequality does not lead to party polarization could be related to institutional factors that constrain party competition (Curini & Hino 2012).

Scholars have demonstrated that the electoral system is the main factor for the explanation of parties' platform choices (Cox 1990; Calvo & Hellwig 2011). Cox (1990) suggests that as the district magnitude decreases, party competition becomes more centripetal. However, empirical findings regarding the effect of the electoral system have been mixed (Dow 2001; Ezrow 2008; Dow 2011). While Dow (2011) argues that PR systems create more polarized party systems, Ezrow (2008) does not find a relationship between PR systems and party polarization. These contradictory findings might be the result of limited efforts in considering political institutions as intervening variables rather than direct explanatory ones. If political institutions are the main determinants of party polarization, countries where institutions do not change over time should demonstrate consistent patterns of party competition. However, it is not hard to find countries with volatile party polarization and with identical institutional structures (Heath et al. 2001; McCarty et al. 2006).

I argue that parties' position-taking strategies are mainly determined by economic and institutional factors. Exogenous economic shocks produce external pressures for parties to deviate from the center. Rises in income inequality, in particular, generate a sharp division between left and right parties and create a strong stimulus of party polarization.

However, parties do not always take extreme positions even when economic pressures create incentives to do so. Under permissive electoral systems, parties gain more seats as long as they secure votes from core supporters by responding to exogenous shocks. Therefore, parties do not care much about whether platform changes will lead to loss of support from voters at the center. Under restrictive systems (i.e., SMD), on the other hand, parties give more weight to how position changes impact on support from center voters. In restrictive systems, parties compete for one or two seats at each electoral district. This naturally prevents extreme moves because parties

need to consider both how position changes generate more votes and how they destroy support from center voters. Vote gains from position changes also depend on the other parties' positions. If parties are uncertain how other parties change positions with rises in inequality, it is difficult for parties to change their positions towards the extreme because this might lead to the loss of support from center voters. Therefore, parties' position changes are more constrained under restrictive electoral systems. In this regard, the effect of increasing inequality will be smaller under restrictive systems than under electoral systems with large district magnitude. Therefore:

Hypothesis 1: As income inequality increases, party polarization becomes more pronounced under electoral systems with large district magnitudes.

Mediating effects of electoral systems are partly generated by party system effects. As Adams et al. (2005) proposed, party polarization is mostly observed in multi-party competition. Two-party competition makes it hard for parties to move to the extreme even with diverging pressures because securing votes from the center becomes more essential to winning the election. However, the electoral system itself creates other institutional constraints. Under permissive systems, it is easier that new radical parties secure their seats. Mainstream parties are then more likely to propose divergent platforms because radical parties' chances to secure dissatisfied voters increases. Voters who demand more extreme positions would support radical parties if extant parties cannot satisfy their demands. However, under restrictive systems, this possibility is almost blocked by systemic conditions, which demand more vote shares to secure seats. Therefore, parties under permissive systems will still have centrifugal incentives with rises in inequality even if the number of parties is quite limited.

Secondly, permissive systems create different mechanisms that facilitate parties' extreme moves by relieving the burden of calculation problems. Parties would adopt divergent platforms because parties are less concerned with adverse effects caused by their extreme positions in permissive systems. Even though parties are uncertain about other parties' positions, it is less risky for parties to move to extreme positions in permissive systems. In permissive systems, parties could secure their seats with extreme positions. Extreme moves in restrictive systems, on the other hand, might generate catastrophic outcomes because they demobilize much of the support from the center.

Additionally, electoral systems produce another diverging incentive. In permissive PR systems, the nature of electoral competition produces coalition governments, except on very rare occasions. The possibility of coalition government increases diverging incentives for parties. As Kedar (2005) shows, voters in permissive electoral systems recognize that voting for parties ideologically closer to them does not necessarily generate the policy outcomes that voters prefer. Then, voters have more incentives to vote for parties with extreme positions because this generates preferred policy outcomes via coalition governments. If parties recognize that proposing divergent positions does not decrease vote shares, then it becomes easier for parties to propose divergent platforms with the rise in economic inequality. Because of these reasons parties under permissive systems find it easier than parties under restrictive systems to change their positions to extreme ones when there is pressure to do so. Therefore,

Hypothesis 2: Economic inequality leads to party polarization under permissive systems even after controlling for party system effects.

2.4 Data and Analysis

2.4.1 Dependent Variable: Party Polarization

My hypothesis is tested using cross-national party polarization data. To measure party polarization I utilize the party position data from the Comparative Manifesto Project (CMP).⁵ Since party competition mostly arises along the traditional ideological cleavage in advanced democracies, I create party polarization measures based on left-right dimensions in the CMP. When compared to a party position measure from other sources, a manifesto-based measure of party position poses various limitations (Laver & Benoit 2007). However, the CMP is the only source with sufficient longitudinal coverage of parties' ideological positions since the 1940s (Budge et al. 2001).

Party polarization is measured in two ways: (1) a weighted average of the ideological distance among political parties (Dalton 2008; Curini & Hino 2012) and (2) the polarization index suggested by Esteban and Ray (1994). Appendix C2.1 provides a detailed explanation for each party polarization measure.

Additionally, party polarization measures are created based on different left-right positions in the CMP. Original left-right positions from the CMP include social dimensions as well as economic ones, so two additional party polarization measures are created based on economic and social left-right positions.⁶ I also measure party polarization using different sources, post-election surveys in advanced democracies. To calculate the parties' ideological positions, the average ideological positions of parties assessed by voters are used.⁷ Appendix C2.3 gives details of the ideological positions of political parties using post-election surveys.

⁵ The CMP provides left-right positions of parties based on various issue dimensions.

⁶ I explain the details about economic and social polarization measures in C2.2.

⁷ Curini and Hino (2012) also measure party polarization using post-election surveys.

2.4.2 Income Inequality

To estimate the effect of income inequality, two comparable measures of pre-tax income inequality are used: 1 percent top income shares from Solt (2009)⁸ and the 90-10 earning income ratio from the Luxembourg Income Study (LIS). I use pre-tax income inequality because the Median voter theory is based on pre-tax inequality (Meltzer & Richard 1981). In addition, the measures of pre-tax inequality are more exogenous compared to after-tax inequality. Thus, they allow the identification of a more robust relationship between income inequality and party polarization.

Top income share is a good proxy to reflect pre-tax income inequality and it is highly correlated with other measures of income inequality such as the Gini coefficient (Leigh 2007). Top income shares have some benefits over a survey-based Gini coefficient given that they are based on more objective tax collection data and cover longer periods of time.⁹

2.4.3 Electoral Systems and Party Systems

To estimate the effect of electoral systems, I calculate the natural logarithm of the average district magnitude from Bormann and Golder (2013)¹⁰. Studies on party competition have suggested that both electoral system and party system variables should be incorporated in the estimation because these two variables are highly correlated yet are different components of

⁸ Solt (2009) extends the scope of top income shares based on original top income shares data (Alvarado et al., 2013). The estimation results, by using original top income shares and the one by using extended top income shares (Solt 2009), do not differ substantively.

⁹ Literature in comparative political economy has used this index to measure pre-tax income inequality (Scheve & Stasavage 2009; Pontusson & Rueda 2010)

¹⁰ To measure the average district magnitude in mixed systems, I follow the suggestion by Carey and Hix (2011).

political institutions (Ezrow 2008; Curini & Hino 2012).¹¹ Following this suggestion, I include both electoral system and party system variables in my equation.

2.4.4 Control Variables

As suggested by the literature, a number of factors could explain party polarization. It remains unclear which factor mainly explains party polarization because some of these factors are highly correlated with each other. As a result, it is important to examine if the positive relationship between income inequality and party polarization occurs under different institutional and structural contexts.

Control variables found in the literature on party position and party polarization are used. These are measures of economic growth, unemployment rates, and inflation rates in the current year if the election was held in the latter six months of the year, and measures in the previous year if the election was held in the first six months of the current year. Economic growth from the World Development Indicators (WDI) and unemployment rates and inflation rates from the OECD data are also included.¹²

The measure for voter turnout from the CMP is used. Voter turnout captures the level of mobilization of low-income voters (Pontusson & Rueda 2008; Anderson & Beramendi 2012). Inflows of immigrants may also affect party polarization given that voters can blame immigrants as causes of increasing inequality and this induces the emergence of extreme right parties (Golder 2003).¹³ Some suggest that the salience of non-traditional issues and other cleavage dimensions diminish the importance of left-right dimensions (Alseina & Glaser 2004; Finseraas

¹¹ I reanalyze the estimation without the effective numbers of parties. Doing so does not change the result of my estimates substantively.

¹² For Israel, I use data from the IMF.

¹³ I measure net migration rates per population by using the WDI.

2009). If other cleavages and new issue dimensions replace the importance of left-right dimensions, increasing inequality might not affect party polarization. I control for ethnic and linguistic cleavages using ethnic fractionalization data (Alesina et al. 2003) and the salience of non-traditional issues by averaging the salience of these issues across political parties from the CMP.¹⁴ Extant studies suggest that presidential systems and coalition habits may affect party polarization (Curini & Hino 2012). For measuring presidential systems, I generate a dummy variable based on Huber et al. (2004). For measuring coalition habits, I follow Curini and Hino's (2012) instruction and generate a dummy variable for coalition habits where countries have had more than twice of either minority government or coalition cabinet after WWII. I use the Comparative Parliamentary Democracy data to measure coalition habits (Strøm et al. 2008). Additionally, I include an interaction term between coalition habits and effective number of parties following the suggestion by Curini and Hino (2012) that the effect of number of parties is conditioned by coalition habits. I also include a 10-year time interval variable to control for time specific factors.

The empirical estimation will have the following form.

$$\begin{aligned}
Y_{it}(\textit{Party polarization}) \\
&= Y_{it-1} + \alpha \textit{Inequality}_{it} + \beta \log(\textit{District Magnitude})_{it} + \gamma \textit{Inequality}_{it} \\
&\quad * \log(\textit{District Magnitude})_{it} + \textit{Control}_{it} + \epsilon_{it}
\end{aligned}$$

Due to the likely problem of time dependency, country level heterogeneity, and

¹⁴ I use the following issue dimensions to measure each new issue dimension: Environmentalism (per501, per416), Culture (per502), Attitudes toward European Union (per108, per110), and Multiculturalism (per607, per608). For measuring new issue dimensions, I refer to Budge et al. (2001), and Hino (2012).

contemporaneous correlation in the Time Series Cross Sectional data, I use a lagged dependent variable and the panel corrected standard error (Beck & Katz 1995). Country-fixed effect is not used in my estimation because one of my main independent variables, average district magnitude, and some control variables, are time invariant or rarely change over time.¹⁵ For the robustness check, I also test a random effect estimation and robust standard errors clustered for each country. Because my estimation does not include the country level fixed effect, problems should not arise when fixed effects with lagged dependent variables have been used by numerous prior studies in comparative politics (Plümper et al. 2005).

2.4.5 Results

Table 2-1 summarizes the effects of income inequality and institutional factors on party polarization. As a first cut, I examine the unconditional relationship between income inequality and party polarization. Model 1 shows the coefficient estimates without using an interaction.¹⁶ Interestingly, the relationship between income inequality and party polarization is weak at best. The weak relationship between income inequality and party polarization is observed across different indices of party polarization. This implies that naively assuming the rise in income inequality generates party polarization is misleading. In addition, electoral systems do not seem to affect party polarization. This indicates that permissive electoral systems, themselves, do not generate more party polarization. This result is also consistent with existing studies that find

¹⁵ I also estimate fixed effect models after excluding time invariant variables (Model 24 and 25 in Table C2-8). This estimation result is biased but I estimate it just for the robustness check. The coefficient estimates for income inequality and interaction term do not change substantively.

¹⁶ Polarization measures using simple left-right distances or Esteban and Ray's also show similar results (Table C2-3)

weak associations between electoral systems and party polarization (Ezrow 2008; Calvo & Hellwig 2011).

The coefficient estimate for effective number of parties is statistically significant and positive. As the number of parties increases, parties will seek more divergent positions to differentiate themselves from other parties. Given that extant studies utilize either Dalton's index, or polarization measures similar to Dalton's, it is not surprising that I find a similar result. Notably, the effect of the number of parties seems to be constrained by coalition habits. As suggested by Curini and Hino (2012), the effect of the number of parties becomes weaker when countries have experienced coalition governments. However, the effect of the number of parties becomes negative when using Esteban and Ray's polarization index (Table C2-5), because this index additionally incorporates intra-group homogeneity, measured as the squared term of parties' vote shares. As the number of competing parties increases, party homogeneity is likely to shrink because an increasing number of parties confine the vote shares of each party. In the summary, the effect of the number of parties is sensitive to different types of polarization measures, whether or not the polarization index incorporates intra-group homogeneity.

Table 2-1 The Effects of District Magnitude and Income Inequality on Party Polarization

	Model 1	Model 2	Model 3
Lagged DV	0.318*** (0.058)	0.318*** (0.057)	0.326*** (0.057)
Inequality	0.023 (0.021)	-0.021 (0.029)	-0.106 (0.075)
Ln(District)	0.014 (0.030)	-0.177** (0.081)	0.026 (0.261)
Inequality*Ln(District)		0.023** (0.009)	0.018 (0.026)
ENP	0.257*** (0.079)	0.236*** (0.078)	-0.042 (0.173)
Coalition	0.672** (0.308)	0.621** (0.303)	-0.110 (0.118)
ENP*Coalition	-0.206** (0.084)	-0.185** (0.083)	
Inequality*ENP			0.026 (0.021)
ENP*Ln(District)			-0.025 (0.058)
Inequality*ENP*Ln(District)			-0.001 (0.006)
Turnout	0.008* (0.005)	0.007 (0.005)	0.003 (0.004)
Economic Growth	-0.005 (0.016)	-0.004 (0.016)	-0.008 (0.016)
Inflation	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Unemployment	-0.001 (0.010)	-0.004 (0.010)	-0.006 (0.010)
President	0.433*** (0.160)	0.441*** (0.158)	0.316** (0.146)
ELF	-0.525** (0.233)	-0.467** (0.233)	-0.352 (0.239)
Environmentalism	-0.010 (0.013)	-0.005 (0.013)	-0.005 (0.013)
Culture	-0.093*** (0.022)	-0.098*** (0.023)	-0.099*** (0.023)
Euro	-0.033 (0.022)	-0.029 (0.022)	-0.027 (0.023)
Multiculturalism	0.016 (0.020)	0.009 (0.021)	0.014 (0.022)
Immigration	2.857 (2.959)	2.009 (2.955)	2.354 (3.002)
Constant	-0.316 (0.598)	0.290 (0.657)	1.479** (0.712)
Observations	265	265	265
Number of countries	24	24	24
R-squared	0.347	0.359	0.357

Note: Panel Corrected Standard errors in parentheses. Coefficient estimates for time variables are not reported.

*** p<0.01, ** p<0.05, * p<0.1

After incorporating the interaction term between district magnitude and income inequality, the coefficient estimates of both, income inequality and the interaction between inequality and the district magnitude, become significant. This indicates that the effect of income inequality is conditional on the district magnitude. As the permissiveness of electoral systems increases, the coefficient estimate for income inequality becomes positive and significant. Under permissive electoral systems, rises in income inequality increase party polarization as hypothesis 1 predicts. The coefficient estimates for income inequality in Model 2 refer to the coefficient estimate for income inequality in SMD systems. It is negative and insignificant, suggesting that income inequality in SMD systems does not produce more party polarization.

This empirical result shows that the relationship between income inequality and party polarization is much stronger in PR systems than in SMD systems. To illustrate this, I plot the marginal effect of top income shares conditioned by the log of average district magnitude (Figure 2-2). When electoral systems are not permissive (where average district magnitude is smaller than 10)¹⁷, party polarization does not increase as the level of income inequality rises.¹⁸ On the other hand, the coefficient estimate for income inequality becomes significant and positive in more permissive electoral systems where the district magnitude is larger than 10. This empirical finding suggests that the effect of income inequality on party polarization critically depends on the average district magnitude. Only in electoral systems that are permissive enough, does party polarization and income inequality increase simultaneously.

This can be explained by stronger incentives for party convergence in SMD systems (Downs 1957; Cox 1990). In countries where majoritarian incentives are dominant and the

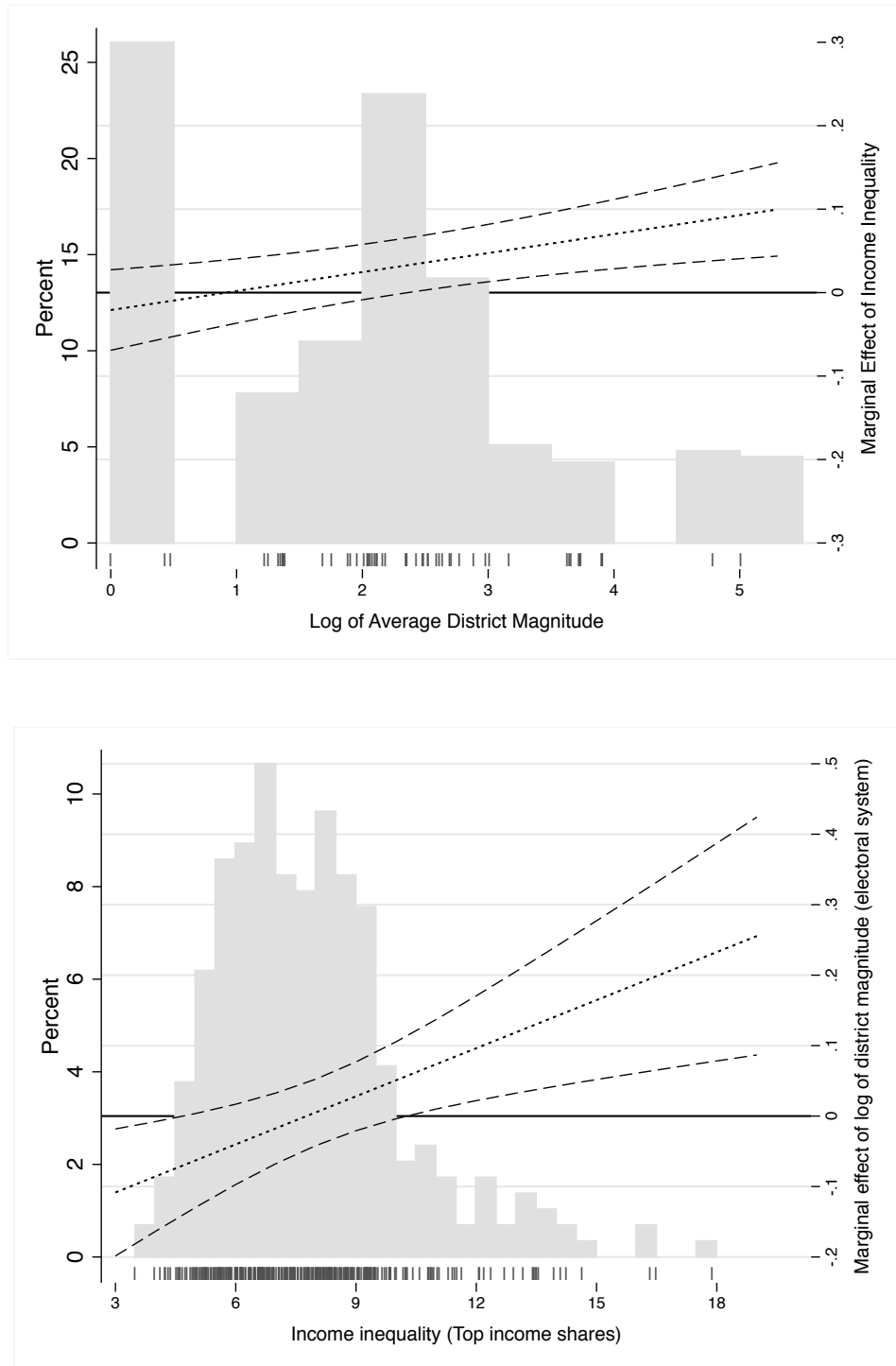
¹⁷ When the log of average district magnitude equals 2.3, which means district magnitude is about 10, the coefficient estimate for income inequality becomes positive.

¹⁸ The case in which the district magnitude is less than 10 is about 57 percent.

number of parties is limited, particularly those using SMD systems, gaining median voters' support is more important than in those using PR systems. This is because parties are uncertain about how changing to more extreme positions could generate net vote gains. An increase in income inequality still does produce diverging pressures for political parties in SMD systems, however, under these systems, polarizing effects of income inequality disappear because parties are not sure whether extreme positions generate more votes.

Significant coefficient estimates for the interaction term also imply that the effect of electoral systems on party polarization can also be dependent on the level of economic inequality (Berry et al. 2012). Figure 2-2 clarifies how economic inequality and electoral systems generate diverging pressures for political parties. Under fairly equal economic distributions, permissive electoral systems do not lead to increases in party polarization. Only when economic inequality reaches certain levels, do permissive electoral systems generate pressures for party polarization. This clarifies why extant studies produce inconclusive claims regarding the relationship between party polarization and electoral systems (Dow 2001; Ezrow 2008; Dow 2011). It is because previous studies have not considered that the effect of electoral systems is mediated by other conditional factors, notably inequality. Permissive electoral systems lead to party polarization only when economic inequality generates polarizing incentives.

Figure 2-2 Marginal Effect of Economic Inequality and Electoral System



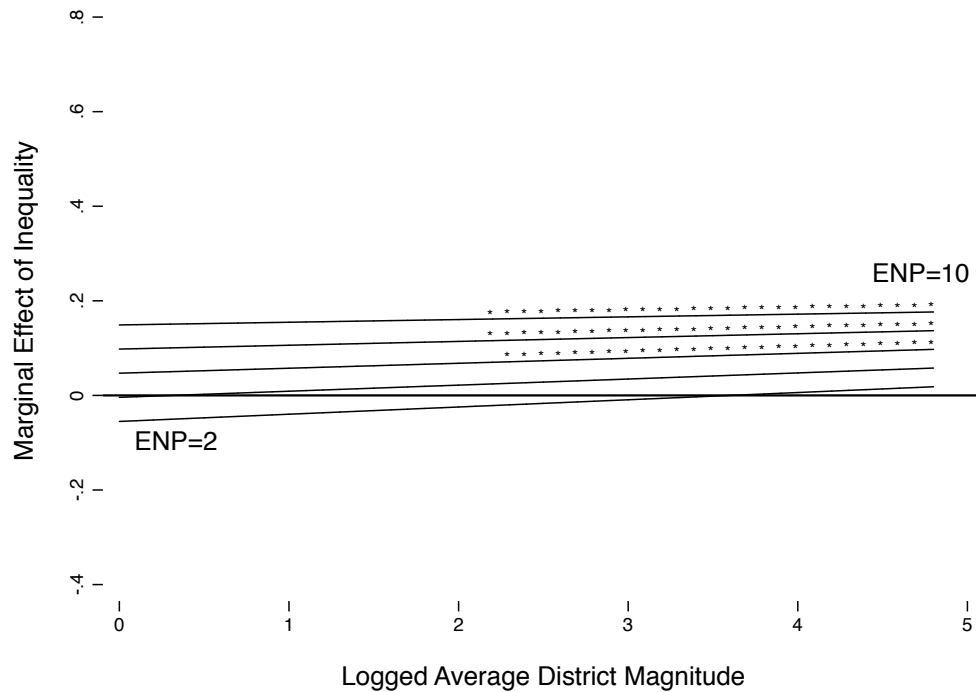
Note: The dotted lines are the estimated coefficients of economic inequality and electoral system; the dashed lines are 90% confidence intervals.

To differentiate the effect of electoral systems via party systems and the effect of electoral systems themselves, I also include the interaction between the number of parties and inequality, the number of parties and log of district magnitude, and interaction among the number of parties, inequality and log of district magnitude in Model 3.¹⁹ It causes difficulty interpreting the results of Model 3 in Table 2-1 because the mediating effects of electoral systems are also constrained by the effects of the number of parties. To interpret the results more easily, I generate marginal effect plots of inequality conditioned by the district magnitude at different levels of the party system. Figure 2-3 suggests that increasing the number of parties does not lead to party polarization in restrictive systems. The effect of inequality becomes positive only when the log of average district magnitude equals or surpasses to 2, regardless of the number of parties. This indicates that the mediating effects of electoral systems are still distinctive even after the effects of electoral systems via party systems are controlled, especially in permissive systems.²⁰ This clearly suggests that there are still substantial independent mediating effects of the electoral systems themselves (Hypothesis 2). For example, the limited possibility of coalition governments in SMD systems induces parties to pursue a median voter's support over core voter's support. On the other hand, a possibility of coalition government and the likelihood of emerging new extreme parties make it easier for parties to move in more extreme directions.

¹⁹ I include an additional interaction term between party systems and electoral systems to capture the correlation between these two variables.

²⁰ I generate additional figures showing marginal effects of inequality at different levels of party systems using different polarization measures (Figure C2-3, C2-4, and C2-5). Most figures support the idea that electoral systems produce independent mediating effects on the relationship between inequality and party polarization. The only exception is the figure with the measure by Esteban and Ray. Esteban and Ray's measure incorporates intra-group homogeneity, which is likely to shrink with number of parties. Because measure assumes negative effects of electoral systems in nature, the effect of electoral systems controlled by party systems is not as distinctive as the effect in other figures.

Figure 2-3 Marginal Effect of Economic Inequality in Different Party Competitions



Note: Each line indicates the marginal effect of inequality if the effective number of parties equals 2, 4, 6, 8, and 10. Asterisk (*) above the marginal effect lines indicates statistically significant regions at 95 %.

Economic variables, other than income inequality, do not seem to affect party polarization. The coefficient estimates for economic growth, inflation, and unemployment are insignificant. More importantly, these economic variables do not seem to have any conditional effects in relation to electoral systems. Regardless of the permissiveness of electoral systems, these economic variables do not affect party polarization.²¹ This suggests that it is only rises in inequality that generate polarizing pressures for political parties. The coefficient estimate for presidential systems is positive and significant. This is inconsistent with recent empirical

²¹ For sake of brevity, I do not report coefficient estimates for interaction terms between each economic variable and electoral system.

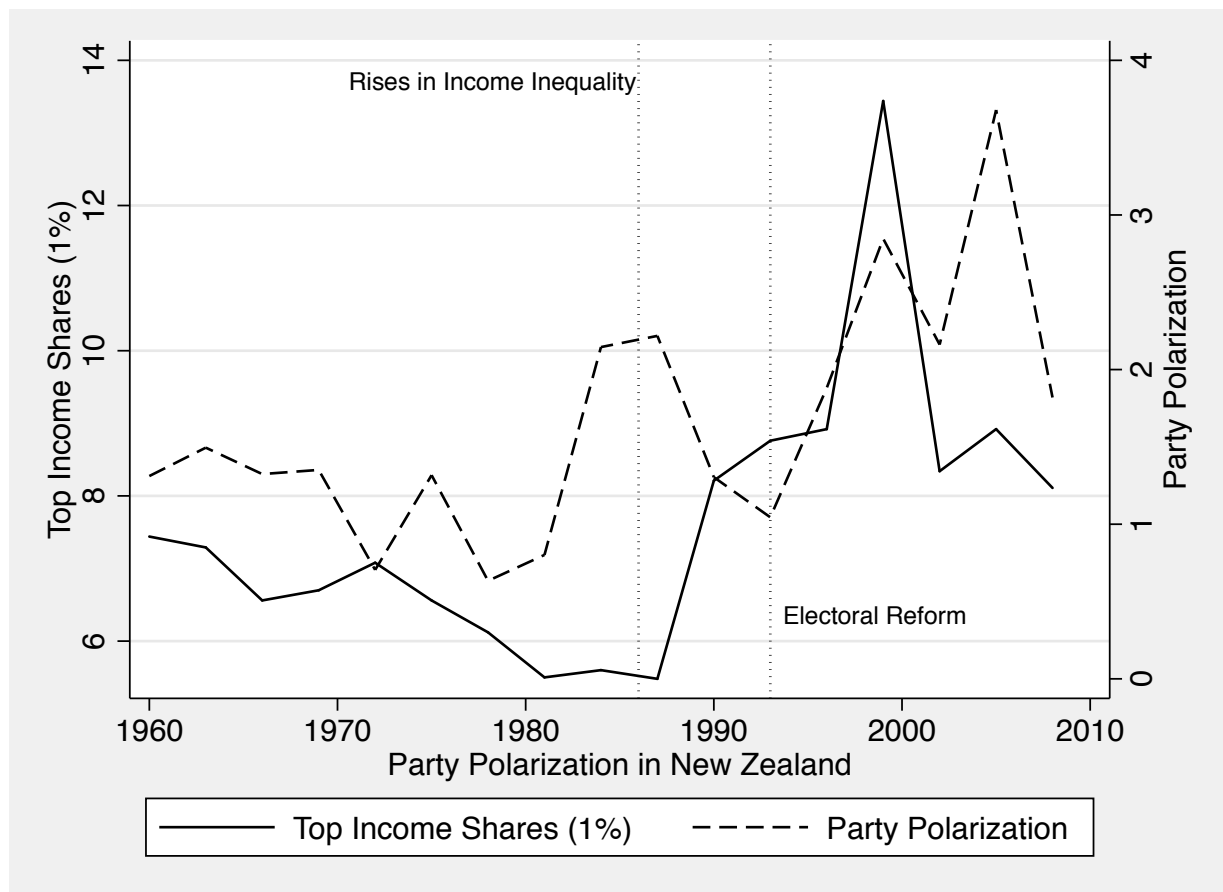
findings (Curini & Hino 2012). However, it is coincident with the well-known warning regarding the weakness of presidential systems (Linz 1990). Additionally, it should be noted that this finding is based on a sample with only two presidential countries (France and United States), whereas Curini and Hino's (2012) finding is based on a sample with a number of presidential countries.

As expected, the emergence of new issue dimensions diminishes the traditional ideological difference between political parties. As political parties increase their attention to non-economic issues such as cultural issues and European unification, the level of party polarization diminishes. This can be explained by the surge of non-traditional issues inducing political parties to be less dependent on traditional left-right ideological dimensions (Kitschelt 1994; Finseraas 2009). However, this does not indicate that new issue dimensions replace traditional ideological dimensions. A positive coefficient estimate for income inequality in permissive systems demonstrates that political parties still utilize traditional ideological dimensions under certain conditions.

The pattern of party polarization in New Zealand reveals how countries with different electoral systems utilize polarizing external pressures, such as rises in income inequality. New Zealand adopted a major electoral reform moving from a purely majoritarian SMD system to a more permissive mixed member proportional (MMP) system in 1993. Under the SMD system before the reform, New Zealand had experienced frequent changes in governments and electoral volatility was significantly high (Vowles 1995). As more voters changed their choices from election to election, it was hard for the two major parties, the National and Labour parties, to have distinctive policy platforms in response to exogenous pressures. After the reform, however, political parties in New Zealand gained more freedom to take extreme positions because

moderate positions do not necessarily help parties gain more seats under permissive systems. Notably, both major parties in New Zealand have shown more distinctive positions after the reform.²² Income inequality began to rise in 1980s. However, the positive relationship between party polarization and income inequality became much stronger after the reform (Figure 2-4). This anecdotal evidence also suggests that responses by parties to rises in income inequality critically depend on the permissiveness of electoral systems.

Figure 2-4 Party Polarization in New Zealand



²² The policy platform of the Labour Party becomes more progressive whereas the platform of the National Party becomes more conservative after the reform.

2.4.6 Robustness Check

I re-estimate the original estimation using party polarization measures in economic scales, the polarization measure based on simple ideological distance between the left and right parties, and a polarization measure based on post-election surveys (C2.4). The direction and magnitude of coefficient estimates for the relationship between party polarization and economic inequality using different indices do not differ much from the estimates in Table 2-1. The only difference is that the relationship between party polarization based on economic left-right positions and inequality becomes negative and significant under restrictive systems with a limited number of parties. Therefore, the effects of income inequality are not generated by using a specific polarization index.

Some may argue that different ways of measuring income inequality affect coefficient estimates. I reanalyze the data by changing the measures of income inequality. I use top income shares from the World Top Income Databases (Alvaredo et al. 2013) and the ratio between 90 and 10 income percentiles from the Luxembourg Income Study (LIS) as alternative measures for pre-tax income inequality. Table C2-5 shows the empirical results using these two different measures of income inequality. The coefficient estimate for the interaction term between inequality and district magnitude remains significant.

Using a lagged dependent variable for controlling time dependency is conventional in political economy literature. However, some criticize using a lagged dependent variable without theoretical considerations (Plümper et al. 2005; Keele & Kelly 2006). Based on the suggestions of these studies, I reanalyze the data by using the Prais-Winsten AR (1) autoregressive control to account for time dependency (Model 18 and 19 in Table C2-7). After using the Prais-Winsten AR (1), magnitudes of coefficient estimates slightly change. However, the positive and

significant relationship between income inequality and party polarization is still observed. This result suggests that using a lagged dependent variable does not produce a biased result.

Furthermore, I use a lagged dependent variable not only for controlling time dependency but also for controlling previous levels of party polarization because political parties consider the positions of rival parties at the last election to decide their ideological positions (Somer-Topcu 2009). Because party polarization is entirely based on parties' ideological positions, the current level of party polarization is also dependent upon the previous level of party polarization. Therefore, excluding a lagged dependent variable in the estimation may create an omitted variable bias.

Some may also argue that the direction of causality in the relationship between party polarization and income inequality is reversed. Although party polarization can show a strong correlation with income inequality, it is highly plausible that the increase in party polarization generates rises in income inequality (McCarty et al. 2006; Stiglitz 2012). For example, as elites become more polarized it becomes easier for elites to barricade the adoption of new policies that handle the problems of inequality. Even though party polarization might not be the direct cause of rises in inequality, it could exacerbate the rise in inequality. I do not deny this possibility that higher party polarization might actually generate higher income inequality. However, reverse causality is unlikely, based on the current findings. If the hypothesized reasoning is actually reversed and conservative elites promote policies that benefit the rich so that income inequality increases (Stiglitz 2012), I should observe much stronger associations between party polarization and income inequality in SMD systems than in PR systems. This is because it is much easier for conservative elites to change policies in their favor under SMD systems than under PR systems because of the limited possibility of coalition government and the limited number of veto players

(Tsebelis 2002). However, my empirical results suggest that the relationship between party polarization and income inequality is not strong in SMD systems.

Additionally, I test the endogeneity problem in various statistical ways. First, I reanalyze the data by using one-year lagged independent variables. The coefficient estimates for my main interest, interaction between income inequality and average district magnitude, remains significant and positive (Table C2-8). Based on the coefficient estimates from Model 18, I also generate a marginal effect plot of income inequality conditioned by a log of average district magnitude (Figure C2-1). The shape of Figure 2-2 is almost similar to that of Figure C2-1. Second, I use system GMM estimators by instrumentalizing dependent and endogenous variables with their lagged ones (Model 22 and 23).²³ The coefficient estimates for economic inequality, log of district magnitude, and interaction terms between these two are still similar to those of Model 2 and 9, suggesting that system GMM estimators still support my theoretical reasoning. This confirms that income inequality increases party polarization only under permissive electoral systems.

2.5 Conclusion

This study investigates party polarization in cross-national contexts. I argue that party polarization is mainly explained by two factors: rises in income inequality and institutional constraints. Increasing income inequality provides strategic incentives for political parties to move towards the extreme along the ideological dimension. However, changes in party positions are constrained by the permissiveness of electoral systems and the number of parties. More permissive electoral systems, and multi-party competition, allow political parties to change,

²³ I instrumentalize every possible endogenous variable except for time dummies, ethnic fractionalizations, coalition experience and presidential systems.

without restriction, their ideological positions in response to exogenous shocks such as rises in inequality, than is the case in SMD systems, which generally grant less incentive to do so because SMD systems, and two party systems, also generate depolarizing pressures. Only under permissive electoral systems with multi-party competition, does increasing income inequality leads to a higher level of political polarization.

This study provides some insights to studies on party competition and politics in European countries. As this study points out, rises in inequality increase the demand for more divergent political spaces in permissive systems. Therefore, rises in inequality provide good opportunities for extreme parties under permissive systems. Especially, extreme parties might become more viable if mainstream parties have failed to serve divergent positions under permissive systems. Current political ground in European countries shows that it is not an unlikely prediction. Strong performance of the Left in Germany, increasing popularity of right populist parties in the Netherlands can be partially attributed to combinations of bad economic conditions and limitations in existing mainstream left and right parties. Future work is needed to explain how the changing economic conditions shift the scope of party competition beyond the effect of institutional factors.

CHAPTER 3

ECONOMIC INEQUALITY, THE WINNER-LOSER GAP, AND SATISFACTION WITH DEMOCRACY

3.1 Introduction

Few would disagree on the importance of positive attitudes toward democracy for its endurance. As Easton (1965) emphatically put it, “democracy thrives on popular support and withers in its absence.” Corroborated by subsequent studies, positive evaluations of the democratic principles and practices are now known to be essential to democratic success and stability (Bernhard et al. 2001; Mainwaring 2006). Without citizens’ strong endorsement, representative democracy is likely to face crises of legitimacy and may even experience democratic breakdown.

Gaining insight into the conditions under which citizens are more likely to develop favorable orientations toward democracy is therefore of paramount importance. The pioneering work by Anderson and his coauthors highlights the electoral winner-loser status as the most critical factor in explaining popular satisfaction with democracy (Anderson and Guillory 1997; Anderson et al. 2005). According to this perspective, citizens who support the winning parties tend to be more satisfied with democracy than those who vote for the losing parties. Importantly, a wide gap between winners and losers in their support for democracy can be gravely detrimental to democratic stability. Therefore, alleviating electoral losers’ pain becomes critically important for democratic survival and consolidation (Anderson et al. 2005).

According to Anderson and his coauthors, the key to securing electoral losers’ consent of democracy lies in the proper design of electoral institutions. They demonstrate that the gap in satisfaction between electoral winners and losers under consensual systems is smaller than the

gap under majoritarian systems (Anderson and Guillory 1997; Anderson et al. 2005). In particular, proportional representation (PR) systems alleviate the winner-loser gap because they allow losing parties to still affect policy outcomes via the consensual nature of the systems and the possibility of joining future government coalitions. Losing parties in majoritarian systems, however, are completely marginalized from the political process.

This contribution by Anderson and his colleagues greatly advances our understanding of how political institutions affect citizens' support for democracy. However, the validity of the winner-loser gap thesis has been under heavy scrutiny lately, as several recent studies have either failed to find corroborating evidence for the mediating effect of electoral systems, or have proposed alternative, seemingly more plausible, explanations to account for the winner-loser gap (Blais and Gélneau 2007; Curini et al. 2012; Howell and Justwan 2013; Singh 2014). Extending this line of research, I argue that much of the debate over the mediating effects of electoral systems stems from overlooking the role of income inequality. Specifically, while Anderson and Guillory's seminal work (1997) implicitly considers redistributive outcome as a mechanism that could shape citizens' attitudes toward democracy, they do not explicitly test the role of inequality and redistribution on the gap between electoral winners and losers. To complement the literature, we posit that the degree of economic inequality is the real driver behind the gap between electoral winners and losers' satisfaction with democracy.

More specifically, I suggest that the level of economic disparity affects the value of winning elections and causes electoral winners and losers to respond differently to the electoral outcome. As Tavits and Potter (2015) suggest, rising income inequality makes the issue of redistribution more salient during elections. Importantly, as the gap between the rich and the poor grows, the redistribution pressure intensifies as the lower classes demand greater

redistribution from the upper classes (Meltzer and Richard 1981). Meanwhile, the rich become more anxious about the scope of redistribution since the call for larger income transfers would be more pronounced with greater income inequality. Therefore, an increase in economic inequality raises the stake of the electoral game and induces both the rich and the poor to pay more attention to the election results. Under such circumstances, if the poor, who expect greater redistribution, lose the election, their relative deprivation about democratic practices will be even more pronounced. Similarly, the wealthy will be more relieved if their parties win under high inequality. In other words, elections matter much more for both the rich and the poor when income inequality is greater. To assess the arguments, I conduct an empirical analysis of the relationship between income inequality, winner-loser status, and satisfaction with democracy across 76 cross-national election surveys using the Comparative Study of Electoral Systems (CSES) data. I find strong empirical evidence to support the theory. More importantly, this study shows that once income inequality is accounted for, electoral systems no longer matter for the difference between winners and losers' satisfaction with democracy.

At a broader level, this study connects the literature on citizens' democratic attitudes and the political economic theory of comparative democratization. In this literature, the level of income inequality is assumed to be a critical condition in triggering democratization (Boix 2003; Acemoglu and Robinson 2005). Recent scholarship further suggests that the rise in economic inequality in new democracies hinders democratic consolidation (Houle 2009). This chapter proposes a theoretical micro-foundation for the relationship between economic inequality and democratic consolidation. I suggest that if more equal economic distribution prevents democratic breakdown, it might be because the low level of economic inequality helps reduce the gap in democratic satisfaction between electoral winners and losers. By providing a mechanism of how

income inequality critically shapes losers' belief in democratic legitimacy, this study not only provides important implications to both literatures but also broadens our understanding of the political consequences of economic inequality.

3.2 Literature Review

The democratization literature has regarded popular support for democracy as the attitudinal foundation of democratic consolidation (Linz and Stephan 1996; Diamond 1999). When citizens in new democracies continually question the fairness of electoral results and the integrity of democratic practices, they may become nostalgic for the former authoritarian regimes and value authoritarian over democratic rule. Indeed, democratic legitimacy is unlikely to be sustained if a sizeable proportion of citizens consistently express their discontent toward democracy.

In their seminal work, Anderson and Guillory (1997) highlight the importance of political institutions in shaping citizens' democratic attitudes. They suggest that consensual systems lessen electoral losers' discontent because they increase fairness in political representation and promote governmental inclusiveness through several parties. In contrast, they argue that majoritarian systems augment the gap since winning parties have monopolized decision-making power in determining governmental composition. Nonetheless, a number of recent studies have failed to find evidence of these mediating effects advocated by Anderson and his colleagues. Rather, these studies have suggested other mediating factors, such as the intertemporal dimension of winning (Curini et al. 2012; Chang *et al.* 2014), ideological proximity (Anderson 2012; Curini et al. 2012), strategic voting (Singh 2014), types of elections (Blais and Gélneau 2007; Singh et al. 2012), and electoral margins (Howell and Justwan 2013) as key influences on

the winner-loser satisfaction gap. Altogether, empirical evidence of a mediating effect of electoral institutions has been mixed and inconclusive.

As a result, there is a paradox between the conventional wisdom that the type of political system matters for democratic satisfaction between winners and losers, on the one hand, and mixed empirical support for such a claim, on the other. This study charges that this puzzle is a result of extant studies failing to consider economic inequality. As I shall elaborate below, I argue that income inequality might be the real stimulus behind the democratic satisfaction gap between electoral winners and losers. Following the theoretical insight from the political economy literature that PR systems are commonly associated with lower levels of economic inequality (Bawn and Rosenbluth 2006; Iversen and Soskice 2006), I suspect that the effect of electoral systems on the winner-loser gap highlighted in the literature is likely to be a surrogate for the effect of income inequality.

In fact, Anderson and Guillory's seminal work implicitly considers redistributive outcome as a mechanism that shapes citizens' attitudes toward democracy. In particular, Anderson and Guillory emphasize the effect of citizens' economic evaluations on their support for democracy, and one could reasonably argue that the issue of inequality or redistribution constitutes a crucial dimension for citizens' economic evaluations. However, given that Anderson and Guillory only focus on 11 Western European countries, together with the fact that the levels and the variation of income inequality in those 11 advanced democracies are quite low, it would be very difficult to theoretically trace the causal mechanisms of inequality and electoral institutions, and empirically determine which effect is more dominant. I believe that the key to fully compare the explanatory power between inequality and institutional perspectives is to expand the sample size and incorporate more countries where I can observe greater variation in

income inequality and political institution. Specifically, this study examines the scope of samples covered by recent empirical studies challenging Anderson and Guillory's study, and this study finds most of the recent studies include Western European countries as well as other developing democracies. Hence, I suspect that the effects of electoral system identified by Anderson and Guillory can only be found in low-inequality countries such as Western European democracies, and they may not be generalizable to other parts of the world. Indeed, as I demonstrate in my empirical analysis below, once I include additional countries into the analysis, the mediating effects of economic inequality become more important than the institutional effects.

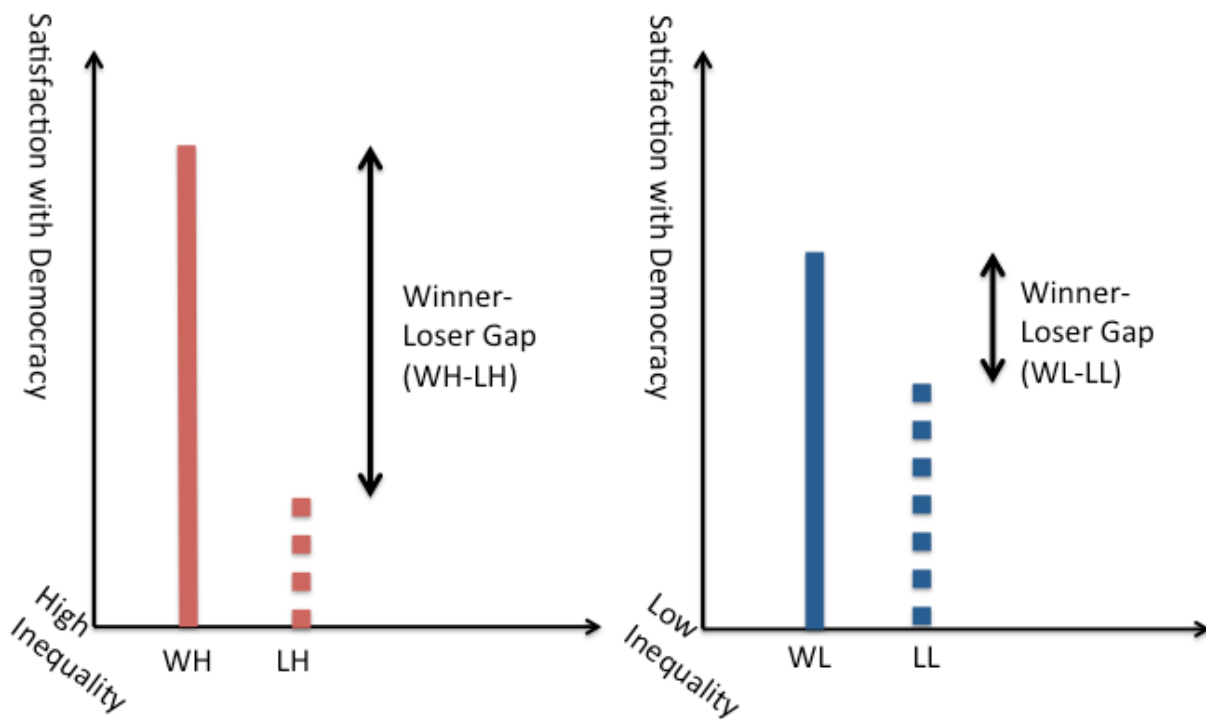
3.3 Theory

The idea that economic inequality matters for popular support for democracy is not really new. Several studies have documented the pernicious effect of rising economic inequality on popular attitudes toward democracy. For instance, Kang (forthcoming) usefully shows that rising income inequality decreases democratic satisfaction in South Korea, and Soci et al. (2014) report similar findings in the case of the United Kingdom. In a cross-national setting, Krieckhaus et al. (2014) also find that larger gaps between the rich and the poor produce negative sentiments among voters toward democratic practices. At a broader level, studies on inequality demonstrate that greater inequality increases public mistrust, decreases public perception of justice, and undermines political representation of the poor in advanced democracies (Brady 2004; Gilens 2005; Rothstein and Uslaner 2005).

While these studies usefully illustrate the effect of inequality on popular support for democracy, they fail to take into account the heterogeneity among citizens. In line with the growing literature on the winner-loser gap in democratic satisfaction (Anderson 1997; Anderson

2012; Blais and G lineau 2007; Curini et al. 2012; Howell and Justwan 2013; Singh 2014), I consider voters' electoral allegiance with the incumbent – electoral winners versus losers – as the primary source of heterogeneity between voters. Importantly, I argue that the difference in the democratic attitudes between electoral winners and losers will be magnified when inequality rises. For the ease of presentation, I classify voters into four categories based on the level of economic inequality: electoral losers under higher inequality (L_H), electoral winners under higher inequality (W_H), electoral losers under lower inequality (L_L), and electoral winners under lower inequality (W_L). Figure 3-1 depicts the theoretical expectation of the level of democratic satisfaction for each type of voter. Just to reiterate, the central argument is that the gap in satisfaction between electoral winners and losers are more pronounced under higher inequality.

Figure 3-1 Hypothesized Satisfaction with Democracy under Different Levels of Inequality



Fundamentally, parallel to the conventional wisdom, I suggest that electoral winners will express greater democratic satisfaction than electoral losers because of two types of benefits. First, just like sports fans express greater pride when their team defeats their rival, winning elections creates psychological satisfaction for electoral winners. Second, and more importantly, winning elections generates material benefits to electoral winners due to policy outcomes provided by winning parties. The importance of the supply side of politics—policy proposals by parties—on democratic satisfaction is well documented in the literature (Ezrow and Xezonakis 2011). As I elaborate below, this policy-induced material benefit is particularly pertinent in the context of redistributive politics. In short, due to both psychological satisfaction and policy benefits, it is intuitive to see:

$$W_H > L_H; \quad W_L > L_L \quad (1)$$

Next, I argue that electoral losers under high levels of inequality (L_H) will show greater discontent toward democracy than electoral losers under lower inequality (L_L). For this purpose, I weave together the analytical insight from the median voter redistributive model and the relative deprivation theory.

To further illustrate, take the following scenario: the poor are the electoral losers and the wealthy are the electoral winners.²⁴ First, when income distribution is relatively equal, the poor might not show much dissatisfaction with democracy. Their relative deprivation would be small even though their party loses the election. Given the level of economic equality, the poor—the electoral loser in this case—might even take the electoral defeat easily.

However, the rise in inequality introduces a new political dynamic. In their seminal work, Meltzer and Richard (1981) show that when the wage of mean income voters is higher than that

²⁴ I use this case as an illustrative example, and I do not assume the poor are always electoral losers. Our logic applies to the alternative scenario where the poor become electoral winners.

of median income earners, the latter demand higher levels of redistribution financed by higher tax rates on their richer fellow citizens. Specifically, the model predicts that the poor's demand for redistribution increases with greater levels of inequality. Therefore, if parties of the poor lose the election in an unequal society, the poor are likely to feel dismayed and discouraged by the democratic process as they will not be able to receive the redistributive benefits they anticipated. Importantly, the larger the wealth gap, the more acute the poor's sense of relative deprivation becomes. As the recent study by Tavits and Potter (2015) forcefully shows, the increase in economic inequality allows redistribution and material issues to become more salient than non-material issues at election time.²⁵ Specifically, as inequality grows, the poor focus more on redistribution issues when casting their votes. Under such circumstances, when the poor's party loses the election, the poor might react to electoral defeat more strongly and express deeper discontent, and this dissatisfaction with democracy is exacerbated further as inequality increases. Hence, we argue that when losing an election, the poor facing lower inequality will be more satisfied with democracy than the poor facing higher inequality:

$$L_L > L_H \quad (2)$$

The attitude of the rich toward electoral victory in this scenario is also critically dependent upon the level of inequality. When inequality is relatively low, redistributive pressure from the poor is also lower. Under such circumstances, the rich will not be too anxious about the

²⁵ I empirically test the validity of this assumption and examine whether parties are more likely to emphasize redistributive issue dimensions as inequality increases. Specifically, I follow the codebook of the Comparative Manifesto Project and Tavits and Potter's data, and I measure parties' emphasis on the redistribution dimension by summing up parties' emphasis on equality (per503), welfare state expansion (per504), and welfare state limitation (per505). To measure income inequality, I use the net (after tax) Gini coefficient measured by Solt (2014). I include the same set of control variables as Tavits and Potter. The results (available in Appendix, Table C3-1) provide clear evidence that inequality increases the issue salience of redistribution and hence lend strong empirical support for our theoretical assumption.

threat of future redistribution. The rich may not even appreciate the value of electoral winning under lower inequality, since future tax rates on the rich are likely to remain relatively low even if the party of the poor wins the election. As a result, facing low income inequality, rich electoral winners will not have much greater satisfaction with democracy than rich electoral losers.

The increase in economic inequality, however, changes the relative importance of winner-loser status on the rich's evaluation of democracy. As discussed above, the rise in inequality naturally increases the likelihood of tax hikes targeting the rich. An increase in inequality also makes redistribution issues more salient during elections. Together, rising inequality induces the rich's anxiety about possible redistributive policies. Thus, the election outcome matters much more under high inequality, since the scope of redistribution will be greater if the parties of the poor win the election. Seeing that the increase in inequality raises the stake of the electoral game, the electoral victory implies higher psychological relief and material benefits for the rich. Given this, the rich, boasting an electoral victory facing high inequality, will be more satisfied with democracy than if they had won an election in times of lower inequality:

$$W_L < W_H \quad (3)$$

Taking (2) and (3) together, it is straightforward to see that the difference in democratic satisfaction between electoral winners and losers widens under higher levels of inequality:

$$W_L - L_L < W_H - L_H \quad (4)$$

By the same logic, it can be shown that Equation (4) holds under the alternative scenario: when the poor win and the rich lose the election. In particular, with increasing inequality, if the poor win the election, they expect greater redistribution to compensate for the existing material gap between the classes. But, the poor facing low income inequality would not benefit much from winning the election. Meanwhile, democratic satisfaction for the losing rich is also tied to

levels of income inequality. Rich electoral losers facing higher income inequality are less satisfied with democracy (out of fear of possible tax hikes targeting the rich), while rich electoral losers facing lower income inequality are more satisfied with democratic practices (since the parties of the poor are unlikely to create much tax burden on the rich).

In sum, I posit that as economic inequality rises, voters become more concerned with election outcomes as both the rich and the poor expect their parties will be able to better address their redistributive preferences. It follows that when the level of inequality is high, electoral winners—whether the rich or the poor—are more likely to exhibit higher levels of democratic satisfaction than electoral losers, and consequently, the gap in satisfaction with democracy between winners and losers widens.

Hypothesis 1: The gap in satisfaction with democracy between electoral winners and losers is larger under high economic inequality than the gap under low economic inequality.

3.4 Data and Analysis

3.4.1 Data

To test the relationship between economic inequality, winner-loser status, and satisfaction with democracy, I use cross-national surveys from two recent modules (modules 2 and 3) of the Comparative Study of Electoral Systems (CSES) project, which covered 90 post-election surveys from 2001 to 2011. The CSES data provides consistent measures for satisfaction with democracy and winner-loser status across different countries, including both advanced and developing democracies. I focus on samples where 1) a country is considered a democracy at the given

election year²⁶ and 2) democratic satisfaction, the main dependent variable, is available. This decision leaves 76 cross-national election surveys covering 43 countries.

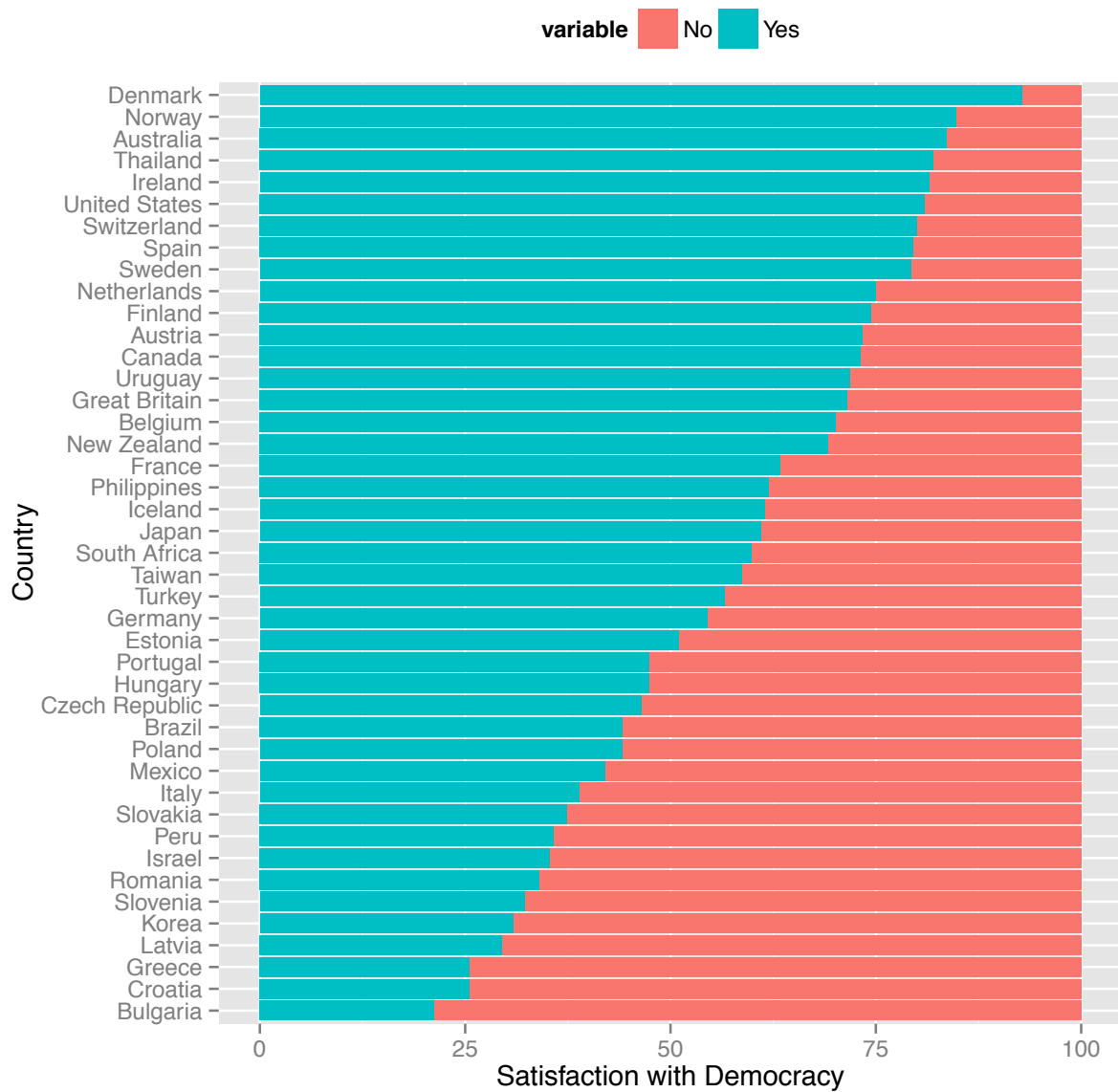
3.4.2 Dependent Variable

There is an ongoing debate regarding how best to conceptualize and operationalize popular attitudes toward democracy (Linde and Ekman 2003). I follow Anderson and Guillory (1997) and focus on voters' supports for democratic practices.²⁷ Following this scholarly tradition, I measure citizens' *satisfaction with democracy* using CSES' question: "On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the way democracy works in [country]?" I reverse the value ordering to ease interpretation, so higher values indicate greater levels of satisfaction with democracy. Figure 3-2 provides country-level averages in satisfaction with democracy. As we can see, there exists substantial cross-country variation.

²⁶ I use the dichotomous variable for democracy from Cheibub, Gandhi, Vreeland (2010).

²⁷ Other studies, such as Norris (1999), Blais and Gélinau (2007), Curini et al. (2012), Howell and Justwan (2013), and Singh (2014) also use this definition.

Figure 3-2 Satisfaction with Democracy across Countries



Note: Proportion of voters of being 'very satisfied' and 'fairly satisfied' with their democratic systems. (CSES 2 and CSES 3)

3.4.3 Independent Variables

I measure winner-loser status (*Winner*) based on whether respondents support parties of (coalition) governments in parliamentary elections or support winning candidates in presidential elections. To measure income *inequality* in a cross-national manner, I use the net Gini coefficient from Solt (2014)'s world income dataset.²⁸ I use the natural logarithm of *district magnitude* to measure proportionality of electoral systems.²⁹ To compare the explanatory power between my theory about the importance of income inequality and the conventional wisdom about the importance of electoral systems, I also include two cross-level interaction terms: one between economic inequality and winner-loser status (*Winner*Inequality*) and the other between (logged) district magnitude and winner-loser status (*Winner*DM*).

3.4.4 Control Variables

At the country-election level, I include a dummy variable for *presidentialism* from Bormann and Golder (2013) since voters in presidential systems might have different levels of democratic satisfaction. Persson and Tabellini (2004), for instance, suggest that presidential systems lead to greater accountability by allowing voters to directly punish and reward governments compared to parliamentary systems. Gerring et al. (2009), on the other hand, argue that parliamentary systems are associated with better democratic governance. I also include the *age of democracy* from Cheibub et al. (2010) to control the differences between old and new democracies, since voters

²⁸ I also used the market Gini coefficient for a robustness check. The result does not vary significantly.

²⁹ For measuring the district magnitude in mixed electoral systems, I follow Carey and Hix's (2011) recommendation and divide the numbers of legislators by the number of PR districts in mixed member PR systems (e.g., Germany and New Zealand). In case of mixed member majoritarian systems (e.g., South Korea and Japan), I divide the number of legislators by the number of whole districts (PR+SMD districts).

in newer democracies might not have sufficient time to develop stable democratic attitudes. The level of *corruption* within a country may also affect voters' satisfaction with democracy since graft affects the way citizens evaluate governmental performance and institutional trust (Anderson and Tverdova 2003). Therefore, I include a corruption perception index from the Transparency International.³⁰

Satisfaction with democracy is also related to economic conditions. Voters may express greater democratic satisfaction when they experience economic growth (Booth and Seligson 2009). Voters in economically developed countries might also have a higher level of democratic satisfaction because economic development enhances the sustainability of democracy (Lipset 1959). I thus include both *gross domestic product (GDP) per capita* and average *growth* from the World Development Indicators (WDI).³¹

At the individual level, *ideological proximity* to winning parties is thought to increase satisfaction with democracy (Ezrow and Xezonakis 2011; Curini et al. 2012). From this perspective, I expect voters to have higher democratic satisfaction when the winning parties are ideologically closer to their ideal points since those governments are more likely to adopt policies they prefer. I measure ideological proximity by taking the difference between ideological positions of winning parties and ideological positions of the respondents.³²

I also control for socio-economic status (i.e., *age* and *education*) of the respondents (Anderson et al. 2005). Respondents' other political attitudes (i.e., *partisanship*, self-identified

³⁰ Ideally I would like to use citizens' perception of corruption from the CSES data, but only Module 2 provides questions for corruption perception. Note that I reverse the order of the corruption variable to ease interpretation. As a result, higher values indicate higher levels of corruption.

³¹ I use the natural logarithm of GDP adjusted for purchasing power, and the 5-year average GDP growth rate to account for extreme observations.

³² The ideological position of each party is measured using the average of voters' subjective assessments to each party.

ideological orientation, and *political efficacy*) are also thought to affect satisfaction with democracy (Curini et al. 2012). For example, partisan voters are more likely to be satisfied with democracy than nonpartisan voters because voters can recognize political parties closer to their genuine preferences. These political attitudes are directly incorporated from the CSES data.

3.4.5 Empirical Estimation

The CSES data is an individual-level survey across different countries. Since our cross-national survey data follows a standard hierarchical structure where individual-level observations, such as the winner-loser status and citizens' satisfaction with democracy, are nested within higher-level groups (country-elections), the multilevel model is the appropriate choice of estimator (Steenbergen and Jones 2002). Also, since the dependent variable—satisfaction with democracy—is a four-point ordinal variable, I employ a multilevel ordered logit estimator.³³

Importantly, this study argues that the multilevel model possesses several analytical advantages over the conventional estimators. First, the multilevel model allows us to incorporate substantively important contextual variables into the analysis and offers a better theoretical account for causal heterogeneity. As Western (1998) suggests, the multilevel model enhances the generalizability of a study by giving researchers more leverage to explore contextual variations. In our case, the multilevel model allows us to explore whether the gap between winners and losers in their support for democracy differs across countries with different levels of income inequality. In addition, the multilevel models are essentially random coefficient models where the lower-level parameters are allowed to vary across at the higher level, and the higher-level variance components can also be explicitly estimated. These characteristics are desirable since

³³ I also double check our results using a multilevel logistic model by collapsing the dependent variable into a binary one. The substantive results remain unchanged.

researchers can estimate both the fixed and random components of the model simultaneously so as to more effectively model the unobserved heterogeneity among countries. Lastly, since citizens within a given country are likely to share similar characteristics to one another than with citizens in other countries, this intra-group dependence in our data structure is likely to render the conventional OLS assumption that the random errors are independent void.³⁴

Formally, using Model 3 in Table 3-1 as an example, our multilevel model includes the following equations:

$$\text{logit}(Y_{ij}^*) = \beta_{0j} + \beta_{1j}\text{Winner}_{ij} + \beta_{2j}\text{Proximity}_{ij} + \beta_{3j}\text{Age}_{ij} + \beta_{4j}\text{Education}_{ij} + \beta_{5j}\text{Partisanship}_{ij} + \beta_{6j}\text{Ideology}_{ij} + \beta_{7j}\text{Efficacy}_{ij} + \varepsilon_{ij}$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01}\text{Inequality}_j + \gamma_{02}\text{District Magnitude}_j + \gamma_{03}\text{Presidentialism}_j + \gamma_{04}\text{Democratic Age}_j + \gamma_{05}\text{Corruption}_j + \gamma_{06}\text{GDP pc (log)}_j + \gamma_{07}\text{Growth}_j + \delta_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}\text{Inequality}_j + \gamma_{12}\text{District Magnitude}_j + \delta_{1j}$$

where $Y_{ij}^* = \Pr(Y_{ij} > s | x_{ij}, \zeta_{1j})$, which is the probability that individual i in a given country's election j shows a certain level of democratic satisfaction higher than threshold s , and where subscripts $i \in \{1, 2, \dots, N\}$ and $j \in \{1, 2, \dots, J\}$ represent units for the individual and the country-election levels. I use a group mean centering for our individual level variables in our estimation.³⁵

³⁴ The intra-class correlation (ICC) coefficient –defined as the proportion of variance that is accounted for by the group level – is .175. This result provides another justification of using the multilevel model (Steenbergen and Jones 2002).

³⁵ I base our decision of centering on our key research question and theory. Specifically, since our paper is mainly interested in examining whether income inequality moderates the effects of citizens' winner-loser status on their democratic attitudes, the goal of our analysis falls squarely with the moderational paradigm that examines whether the relationship between two individual-level variables depend on the group level variables (Hoffman and Gavin 1998). Therefore, it is critical for us to get an unbiased estimate of the within-group slope coefficients. In the context of our paper, it is of paramount importance that I get a clear and unbiased estimate of the moderating effect of income inequality (γ_{11}). Under such circumstances, the group mean centering will be most appropriate since the group mean centering enables us to properly identify and separate out the cross-level interaction from between-group interaction and therefore always yields an unbiased estimate (Hofmann and Gavin 1998: 630-631).

3.4.6 Empirical Results

Model 1 in Table 3-1 replicates the conventional wisdom represented by Anderson and Guillory (1997). As we can see, the coefficient estimate for the interaction between electoral systems and winner-loser status is negative and significant. This result indicates that the satisfaction gap between electoral winners and losers becomes smaller as the district magnitude becomes larger. In other words, as extant studies suggest, more consensual systems have smaller winner-loser gaps in democratic satisfaction.

In accordance with prior scholarship (Curini et al. 2012), I also find that satisfaction with democracy increases as the ideological distance between governing parties and voters becomes closer. I interpret this finding as evidence that citizens' develop more favorable democratic attitudes when governing parties represent voters' ideological preferences. Democratic satisfaction is also higher for those who are highly educated, ideologically conservative, more partisan, and with greater political efficacy. As expected, our results also show that the level of satisfaction with democracy is higher in countries with recent economic growth, more democratic experiences, and with less corruption.

Table 3-1 Income Inequality, the Winner-Loser Status and Satisfaction with Democracy

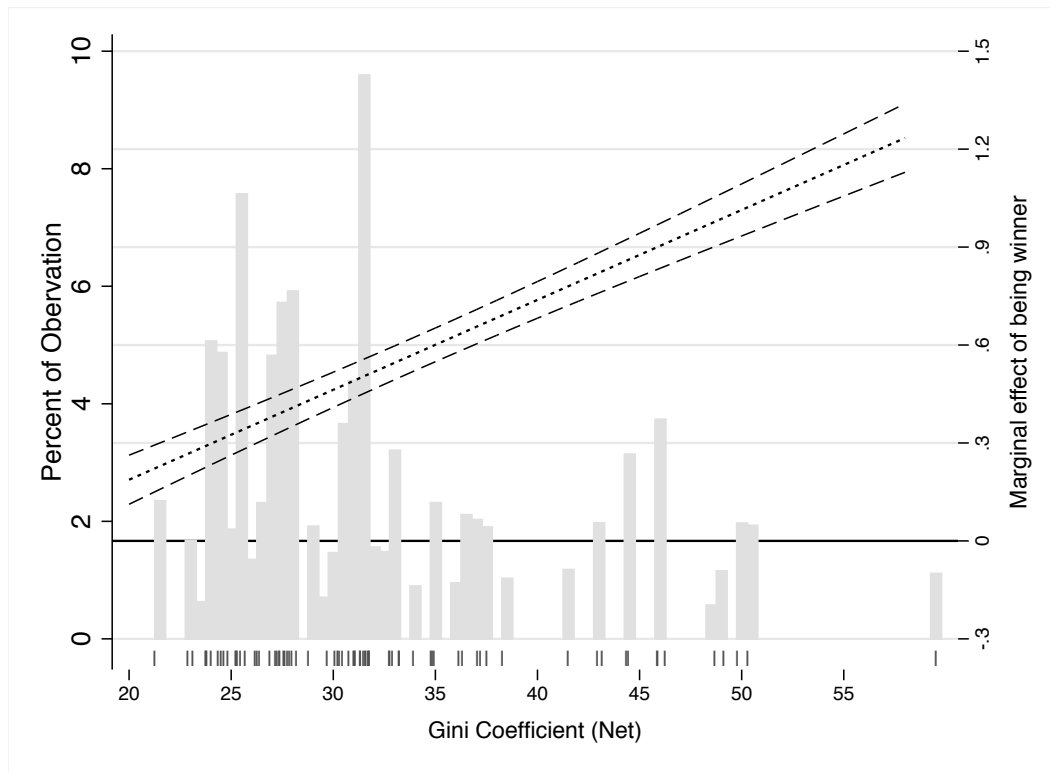
	Model 1	Model 2	Model 3
Winner	0.580*** (0.026)	-0.419*** (0.064)	-0.364*** (0.072)
District magnitude (log)	-0.035* (0.014)	-0.036** (0.014)	-0.036** (0.014)
Inequality	0.015 (0.012)	0.015 (0.012)	0.015 (0.012)
Winner*DM (log)	-0.043*** (0.010)		-0.016 (0.010)
Winner*Inequality		0.028*** (0.002)	0.028*** (0.002)
Ideological proximity	-0.051*** (0.005)	-0.058*** (0.005)	-0.058*** (0.005)
Age	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Education	0.027*** (0.004)	0.029*** (0.004)	0.029*** (0.004)
Ideological orientation	0.059*** (0.003)	0.062*** (0.003)	0.062*** (0.003)
Political efficacy	0.141*** (0.007)	0.140*** (0.007)	0.140*** (0.007)
Partisanship	0.246*** (0.016)	0.244*** (0.016)	0.245*** (0.016)
Presidentialism	-0.031 (0.193)	-0.033 (0.193)	-0.033 (0.193)
GDP Growth	0.142** (0.044)	0.142** (0.044)	0.142** (0.044)
Corruption	-0.243*** (0.060)	-0.243*** (0.060)	-0.243*** (0.060)
GDP per capita (log)	-0.273 (0.154)	-0.274 (0.154)	-0.274 (0.154)
Age of democracy	0.011*** (0.002)	0.011*** (0.002)	0.011*** (0.002)
Cut Point1	-4.663* (1.842)	-4.673* (1.843)	-4.676* (1.843)
Cut Point2	-2.634 (1.842)	-2.637 (1.843)	-2.640 (1.843)
Cut Point3	0.480 (1.841)	0.478 (1.843)	0.475 (1.843)
Country Variance	0.293*** (0.048)	0.293*** (0.048)	0.294*** (0.048)
Log-Likelihood	-75621.116	-75524.145	-75522.8
Observations	72,977	72,977	72,977
Number of Elections	76	76	76

Standard errors in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Model 2 tests the main theory of this paper regarding the mediating effects of economic inequality on the relationship between winner-loser status and democratic satisfaction. As we can see, the coefficient estimate for the interaction term between winner-loser status and economic inequality is positive and significant, indicating that democratic satisfaction is critically conditioned by income inequality. As the theory predicts, I find that the impact of winner-loser status becomes stronger as economic inequality increases.

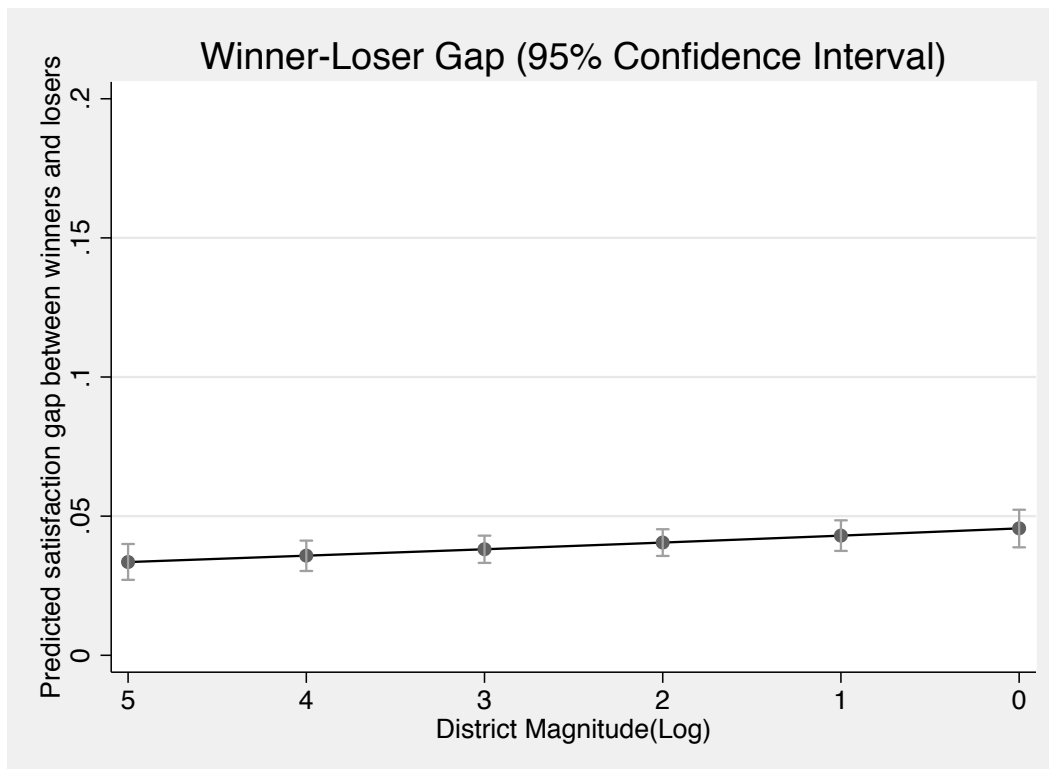
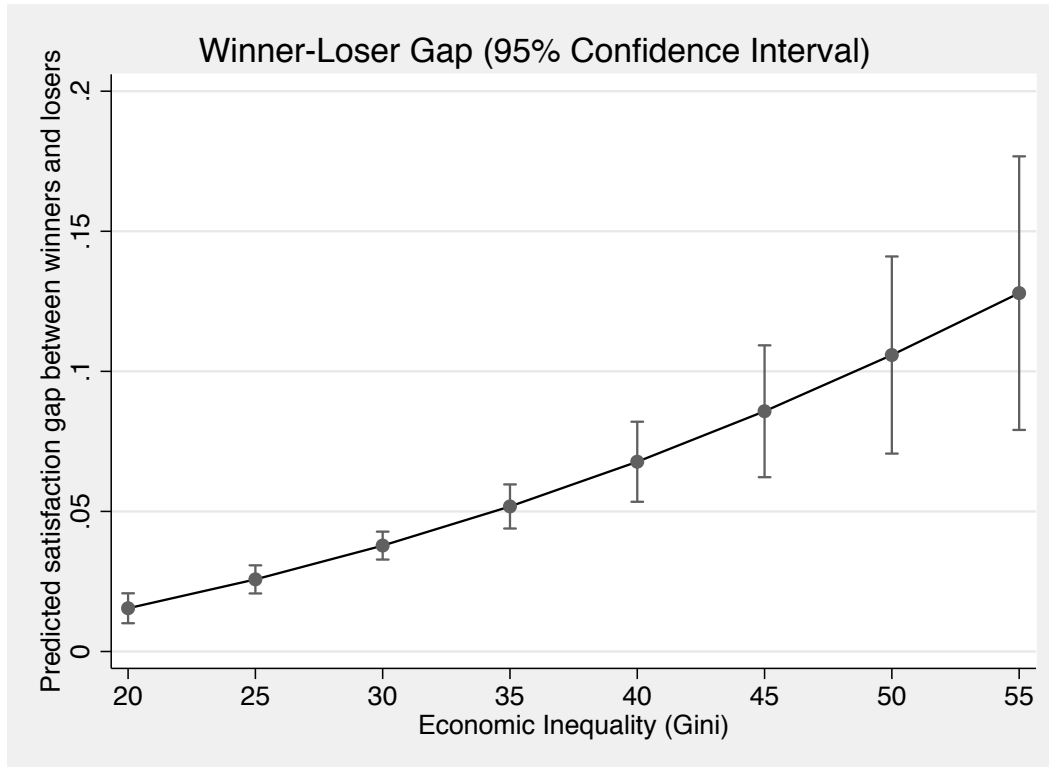
Most interestingly, from Model 3 I can see that the coefficient for the interaction term between electoral systems and winner-loser status becomes statistically insignificant once the interaction term between winner-loser status and economic inequality is also included in the same model. Recall that the interaction term between electoral systems and winner-loser status was statistically significant in Model 1 when I did not account for the interaction between inequality and winner-loser status. This result suggests that mediating effects of inequality on the relationship between democratic satisfaction and winner-loser status is much stronger than the mediating effects of electoral systems advocated by Anderson and his colleagues. This result further implies that previous findings regarding the mediating effects of electoral systems might be arbitrary, possibly because (1) they only focus on Western European democracies where the levels and the variation of income inequality are low and (2) electoral systems are strongly correlated with the level of economic inequality (Iversen and Soskice 2006). After simultaneously modeling mediating effects of electoral systems and economic inequality in a larger sample of countries, I can clearly see that income inequality critically conditions the satisfaction gap between electoral winners and losers, whereas electoral system only has a negligible effect on shrinking the chasm in democratic satisfaction.

Figure 3-3 Marginal Effect of the Winner-Loser Status on Satisfaction with Democracy as Economic Inequality Changes



Note: Marginal effect based on coefficient estimates in Model 3

Figure 3-4 Winner-Loser Gap by Inequality and Electoral Systems



To clarify the interpretation of the coefficient estimates for multilevel ordered logit model, I generate two figures showing the mediating impacts of economic inequality based on Model 3. First, I plot the marginal effect for winner-loser status coefficients by changing the value of Gini coefficient in Figure 3-3. Then I show predicted probabilities of democratic satisfaction for electoral winners and losers across different levels of economic inequality and district magnitude in Figure 3-4.³⁶

Together, Figure 3-3 and Figure 3-4 show that when the level of inequality is low, the satisfaction level for electoral winners is not as distinctive as that of losers. This suggests that winning an election does not generate higher benefits for winners over losers under the context of unpronounced distributional disparity. In contrast, the winner-loser gap of satisfaction widens with higher levels of inequality, as electoral winners are much more likely to be satisfied with democracy than electoral losers under greater wealth disparity. In this context, losing an election implies distributional losses.

Our findings further imply that distributional concerns, which are critically associated with the level of inequality, are as important as the electoral winner-loser status in evaluating democratic systems. This is an interesting result given that extant scholarship has suggested that decreasing the winner-loser gap in democratic satisfaction is crucial for enhancing democratic legitimacy (Anderson and Guillory 1997; Anderson et al. 2005). Our empirical results suggest that under fairly equal societies, winner-loser status is not that critical in explaining positive attitudes toward democracy. Instead, addressing income inequality and reducing distributive conflicts might be equally important to gain electoral losers' consent for democratic legitimacy.

³⁶ I chose 'very satisfied' as the category for predicted probabilities. Using the category of "somewhat satisfied" does not change the substantive result. I set other control variables at their mean.

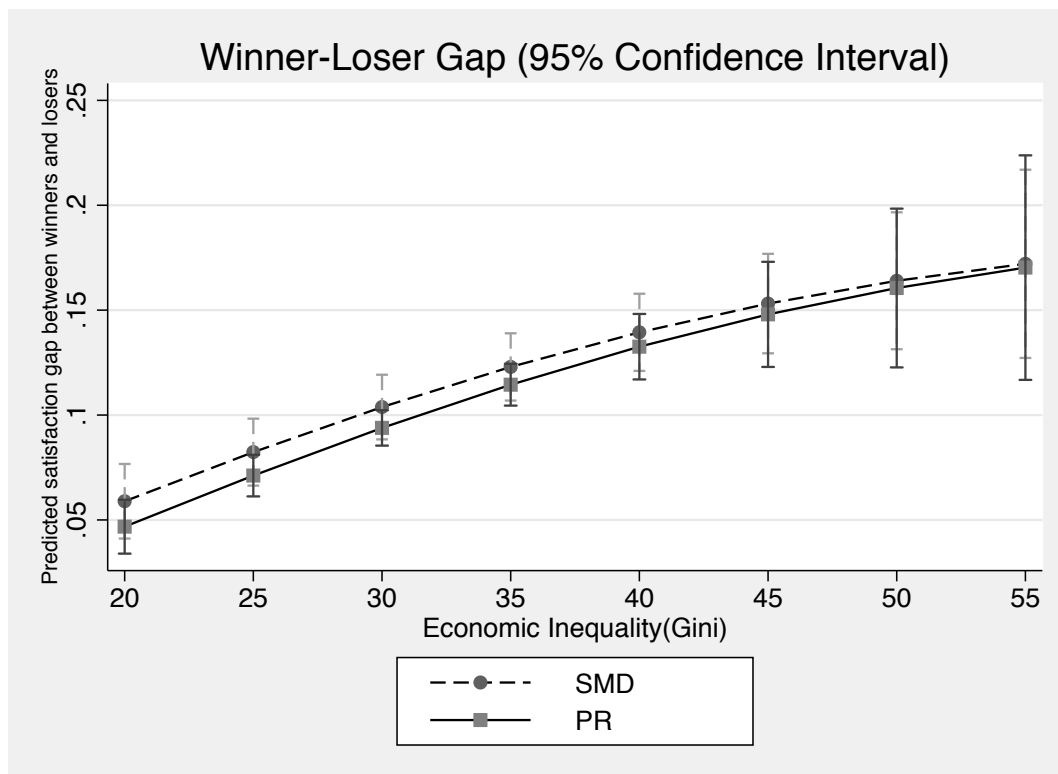
More importantly, Figure 3-4 illustrates that the mediating effects of economic inequality on the winner-loser gap in satisfaction with democracy are more critical than electoral system effects. The gap in satisfaction between winners and losers under high inequality (Gini coefficient equals 50) is about 10.5 percentage points whereas the gap under low inequality (Gini coefficient equals 25) is about 2.4 percentage points (Figure 3-4). Therefore, the change from high to low inequality leads to an 8.1 percentage point reduction in the satisfaction gap between winners and losers. On the other hand, the gap in satisfaction between winners and losers under SMD systems is 4.6 percentage points whereas the gap even under extremely permissive PR systems (district magnitude equals 150) is 3.4 percentage points. As discussed previously, our result complements the findings by Anderson and Guillory (1997). Again, I suspect that this incongruence stems from the difference in the sample: while Anderson and Guillory (1997)'s findings are based on Western European countries, our study comprises a larger sample of countries across various regions (e.g., Asia, Eastern Europe, and Latin America). Importantly, once I expand the sample size by including countries with higher levels of inequality, I find that inequality still dictates the satisfaction gap between electoral winners and losers as our theory predicts, whereas the moderating effects of electoral systems no longer exist.

Another interesting observation from Figure 3-3 is that electoral winners are always more satisfied with democracy than the losers across all levels of inequality.³⁷ This result is consistent with our theoretical expectation and the existing studies that electoral winners will express greater democratic satisfaction than losers because of either psychological satisfaction or policy benefits. I further examine whether this pattern holds across different institutional contexts.

³⁷ The negative coefficients of the winners variables alone in both Model 2 and Model 3 do not contradict our theory, as one can't interpret constituent terms only by themselves in an interaction model (Brambor et al. 2006)

Figure 3-5 compares the marginal effect of electoral winners in both SMD and PR systems.³⁸ As we can see, the effect of electoral winners is always positive in both typical SMD and PR systems. It also corroborates Anderson and his colleagues' finding that winners under SMD systems tend to show higher levels of democratic satisfaction than winners under PR systems.

Figure 3-5 Marginal Effect of Winners under SMD and PR systems



Note: To calculate the marginal effects of winners, we set the value of all other variables at their mean.

3.4.7 Robustness Check I: Alternative Measurements and Model Specifications

To ensure the robustness of our previous results, I re-estimate our original models using different measures for majoritarian/consensual systems. First, I use Gallagher's least squares index (Gallagher 2015) as an alternative measure of disproportionality. Conceptually, Gallagher's

³⁸ I set the value of the district magnitude to be 20, the mean value all PR systems.

index captures the disproportionality of an election based on the difference between parties' vote and seat shares, and higher value indicates more disproportionality. I also go beyond the electoral system and take into account broader institutional arrangements. I borrow the insights from Bernauer and Vatter's study (2012), which creates three indices (i.e., parties-interest groups index, federalism-unitarism index, and cabinets-direct democracy index) of consensual/majoritarian institutions in 24 advanced democracies during 1997-2006.

Table 3-2 summarizes coefficient estimates using these different institutional variables. The results regarding mediating effects of institutions on the relationship between winner-loser status and satisfaction with democracy are surprisingly mixed. Some consensual institutions (Gallagher's index, federal-unitarism index) seem to widen the gap in satisfaction, while other consensual institutions (parties-interest index, and cabinets-direct democracy index) seem to decrease the gap. However, the coefficient estimate for the interaction between the Gini coefficient and winner-loser status remains significant and positive in all three estimations. This provides further evidence that the mediating effects of inequality are stronger and more consistent than the mediating effects of political institutions.

Table 3-2 Robustness Check: Using Alternative Political Institutions

	Model 4	Model 5	Model 6	Model 7
	Gallagher's Index	Parties-Interest	Federal-Unitarism	Cabinets-Direct Democracy
Winner	-0.261*** (0.065)	-0.385 (0.256)	-0.765*** (0.191)	-0.639** (0.195)
Inequality	0.010 (0.013)	-0.011 (0.027)	-0.014 (0.021)	-0.006 (0.023)
Consensual Institutions	-0.029 (0.017)	-0.014 (0.135)	0.115 (0.099)	0.035 (0.104)
Winner*Inequality	0.027*** (0.002)	0.027** (0.009)	0.040*** (0.007)	0.035*** (0.007)
Winner*Consensual	-0.019*** (0.004)	-0.176*** (0.043)	0.243*** (0.026)	-0.253*** (0.028)
Ideological proximity	-0.054*** (0.005)	-0.003 (0.009)	-0.010 (0.009)	-0.005 (0.009)
Age	-0.002*** (0.000)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
Education	0.038*** (0.005)	0.032*** (0.008)	0.031*** (0.008)	0.031*** (0.008)
Ideological orientation	0.065*** (0.003)	0.100*** (0.006)	0.102*** (0.006)	0.099*** (0.006)
Political efficacy	0.157*** (0.007)	0.166*** (0.013)	0.172*** (0.013)	0.169*** (0.013)
Partisanship	0.233*** (0.016)	0.266*** (0.029)	0.269*** (0.029)	0.270*** (0.029)
Presidentialism	0.262 (.232)	-0.166 (0.434)	-0.180 (0.421)	-0.109 (0.469)
GDP growth	0.118** (0.042)	0.153* (0.066)	0.183** (0.068)	0.153* (0.065)
Corruption	-0.201** (0.059)	-0.137 (0.087)	-0.152 (0.084)	-0.151 (0.094)
GDP per capita (Log)	0.042 (0.178)	0.278 (0.243)	0.249 (0.225)	0.264 (0.231)
Age of democracy	0.009** (0.003)	0.008 (0.004)	0.007 (0.004)	0.007 (0.005)
Cut Point1	-1.752 (2.026)	0.373 (2.454)	-0.009 (2.396)	0.285 (2.451)
Cut Point2	0.298 (2.026)	2.411 (2.454)	2.036 (2.396)	2.329 (2.451)
Cut Point3	3.436 (2.026)	5.609* (2.454)	5.239* (2.396)	5.531* (2.452)
Country Variance	0.262*** (0.045)	0.176*** (0.053)	0.167*** (0.051)	0.176*** (0.053)
Log-Likelihood	-71499.728	-21903.886	-21867.48	-21872.498
Observations	69,403	21,685	21,685	21,685
Number of Elections	70	23	23	23

Standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Furthermore, recall that the dataset covers 76 election surveys in 43 countries. Astute readers might reasonably question whether it is appropriate to treat multiple elections in the same country as independent events. To address this issue, I re-estimate a model using just one

election per country, and another model with country clustered standard errors. These do not change the main finding of our theories. Furthermore, I add some additional controls that could possibly explain satisfaction with democracy. I include a dummy for the winner at the previous election, individual income, and days from election date. Including these new controls does not change coefficient estimates significantly nor alter the findings. These results are presented in Appendix.

3.4.8 Robustness Check II: Testing Further Implications

Our empirical analysis so far shows that inequality consistently mediates the winner-loser effect on satisfaction with democracy. Underlying our results is the implicit theoretical micro-foundation on inequality and redistributive politics. To a broader extent, our results imply that winning an election is more than just the victory itself; it also entails policy consideration. Borrowing the insights from what Anderson (2012) refers to as “policy winner,” I use the variable of ideological proximity as an alternative way to test our causal mechanism on redistributive politics. In other words, I argue that voters care about not just whether their favored parties win the election, they also care about whether governing parties effectively represent their policy preferences, especially with respect to redistribution.

Specifically, I use the *ideological proximity* between the government and the individual (in absolute value) as a measure for policy winner. Then I construct another multilevel model to examine whether the effect of citizens’ ideological proximity to the government on their satisfaction with democracy depends on the level of income inequality. I find that the coefficient estimate for ideological proximity is negative and significant (Table C3-3 in Appendix). As expected, this result indicates that voters are less likely to be satisfied with democracy as their

ideological distance from the government becomes larger. More importantly, the interaction term (*proximity*inequality*) is negative and significant, implying that the effect of policy distance on democratic satisfaction would be even more pronounced when inequality is higher. Notably, our results are consistent with the literature on policy winners (Anderson 2012; Curini et al. 2012), where they find the effect of electoral winners on democratic satisfaction depends on citizens' perceived ideological proximity with the government. In sum, by using an alternative measure of ideological distance, I find additional support of our theoretical mechanism that inequality magnifies the satisfaction gap between winners and losers.

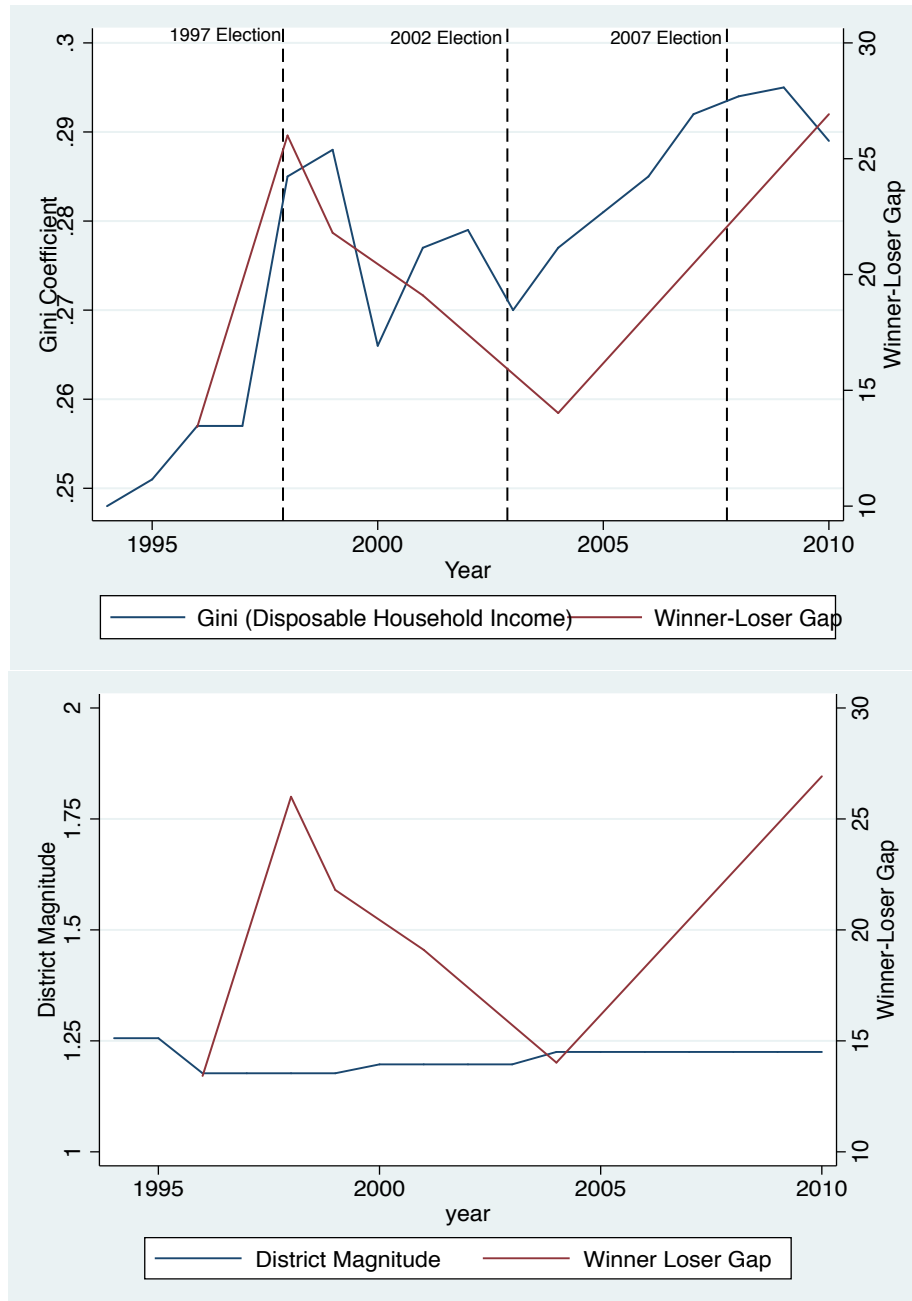
3.4.9 Robustness Check III: Intertemporal Analysis

Our analysis based on the CSES so far is all cross-sectional in nature, and incorporating a time component into our analysis would be very helpful to corroborate our findings. However, the CSES survey is not very useful for the purpose of inter-temporal analysis, since the CSES only covers just one election for most of the countries. Even for the few countries where the CSES does cover multiple elections, the maximum number of elections is only three, resulting in the scarce degrees of freedom problem. In light of the infeasibility of relying on the CSES to engage in an inter-temporal analysis, I chose to focus on South Korea to explore the inter-temporal relationship between the winner-loser gap in democratic satisfaction and economic inequality.

The case of South Korea provides several analytical leverages. First, using a different dataset, independent from the CSES, ensures that our findings do not result from an arbitrary choice of a particular dataset and hence increases the external validity of our finding. Second, South Korea has experienced a rise in economic inequality since democratization. Especially since the 1997 Asian financial crisis, the issue of inequality becomes even more important in

South Korea's political climate (Kang forthcoming). This confluence of rising inequality and growing salience on redistribution makes South Korea an ideal context for the evaluation of our hypotheses.

Figure 3-6 The Dynamics of Inequality and the Winner-Loser Gap in South Korea



Consistent with our variable operationalization in our cross-sectional analysis, I use the official Gini from Korea National Statistics Office³⁹ to measure income inequality, and I employ 6 Korean Barometer surveys (1996, 1998, 1999, 2001, 2004, and 2010)⁴⁰ to calculate the winner-loser gap in democratic satisfaction. Figure 3-6 plots the levels in economic inequality and citizens' satisfaction gap between 1996 and 2010. The results clearly demonstrate that the winner-loser gap moves in tandem with the level of inequality. As we can see, income inequality in South Korea skyrocketed in late 1990s during the Asian financial crisis, then slowly reduced during Kim Dae-jung's administration in early 2000s, and started to rise again in the late 2000s. Interestingly, the dynamics of the satisfaction gap between winners and losers follow very similar patterns of inequality: the gap widened in late 1990s, shrank in early 2000s, and then widened again. Finally, as we can see from the lower panel of Figure 3-6, the size of district magnitude remained relatively unchanged throughout the period. Taken together, our inter-temporal analysis reinforces our conjecture that the variation in satisfaction gap can be better explained by income inequality rather than electoral institutions.

3.5 Conclusion

The principal contribution of this study is that income inequality affects voters' satisfaction with democracy by mediating the effects of winner-loser status. The more equal wealth distribution, the smaller the democratic satisfaction gap between electoral winners and losers. Because voters care more about winning when facing higher inequality, electoral winners are much more satisfied with the way democracy works. Significant and strong mediating effects of economic inequality demonstrate that voters' evaluations of winning are critically dependent upon policy

³⁹ See: kostat.go.kr. Accessed on Feb, 15, 2016

⁴⁰ See: www.koreanbarometer.org. Accessed on Feb, 15, 2016

expectations about redistribution. Essentially, economic inequality provides a key factor in explaining varying political attitudes about democracy across countries. This also implies that the economic inequality may mediate different political attitudes other than satisfaction with democracy. For example, greater economic inequality in a democracy might increase different types of non-electoral political participation if voters cannot find ways to obtain their redistribution preferences via elections (Linz and Stephen 1996).

This study also contributes to the comparative democratization literature. Studies on comparative democratization have long highlighted the effect of inequality on democratization. For instance, Acemoglu and Robinson (2005) propose an inverted U-shaped relationship between inequality and democratic transition, suggesting that democratization is most likely to occur with a medium degree of economic inequality. Meanwhile, Boix (2003) argues that transition to democracy is most likely when inequality is low and asset mobility is high. More recently, Houle (2009) refutes the finding by both studies, finding neither a linear nor an inverted U-shaped relationship between inequality and democratization. Instead, Houle (2009) argues that when inequality rises, the rich are more likely to wage coups against democracies. As a result, inequality only hurts democratic consolidation while it has no bearing on democratic transition. This study engages in this debate by providing a micro-level explanation for how greater inequality undermines democratic consolidation. In consistent with Houle's theory, I argue that under high inequality, electoral losers are likely to resent democratic practices because of the redistributive conflict between the poor and the rich. Importantly, I suggest that increasing inequality pits electoral winners and losers against each other. In turn, this conflict of economic interest between electoral winners and losers can undermine citizens' democratic attitudes and induce democratic instability. Indeed, this study finds empirical evidence that increasing

inequality decreases overall democratic satisfaction.⁴¹ Our results are also consistent with several recent finding that inequality harms citizens' democratic support (Kang forthcoming, Krieckhaus et al. 2014). To weave these arguments together, economic inequality not only increases the satisfaction gap between electoral winners and losers, but also decreases overall democratic satisfaction.

Finally, this study suggests that the mediating impacts of political institutions on the relationship between inequality and winner-losers status might not be as critical as previous research suggests. This may partly be due to the fact that the role of electoral systems in other regions is different than the role in Western Europe. In new democracies with greater inequality, higher levels of political inclusiveness might not be sufficient to diminish electoral losers' disenchantment with democratic practices. Ultimately, this study suggests that in new democracies, reducing income inequality may better enhance democratic stability than changing a country's institutional structure.

⁴¹ Based on our Model 3, I calculate the predicted probabilities of satisfaction with democracy in each country-election year, and then I plot them against the level of economic inequality. I find that as income inequality increases, the aggregated level of democratic satisfaction decreases.

CHAPTER 4

POLICY DISTINCTIVENESS, INCOME, AND REDISTRIBUTIVE PREFERENCES

4.1. Introduction

Public support for redistribution is the foundation of welfare states and redistributive preference vary according to class, race, and religion.⁴² Various studies on redistribution and welfare states have attempted to find the factors behind peoples' redistributive preferences. Literature on cross-national redistributive attitudes suggests that individual income is considered one of the most important factors in explaining citizens' redistributive attitudes, and it is generally accepted that income has a negative impact on redistributive attitudes in advanced democracies (Dion and Birchfield 2010). Yet, studies also found that income and redistributive preferences are more connected in some countries, thereby showing diverged attitudes on redistribution among the poor and the rich, whereas in others, income does not explain the reasons for redistributive preferences (Benabou and Ok 2001; Shayo 2009; Dion and Birchfield 2010).

Figure 4-1 describes the support for redistribution across the poor (whose income is lower than the first income quintile) and the rich (whose income is higher than the fifth income quintile) in different countries. The bar plot of each country indicates the percentage difference between rich in their support for redistribution.⁴³ Figure 4-1 suggests that income impact does not only vary for rich and poor democracies but also changes even within advanced democracies. For example, the income effect is quite small in Portugal whilst its effects are more pronounced

⁴² In this chapter, the terms, “redistributive supports”, “redistributive attitudes”, and “redistributive preferences” are used interchangeably.

⁴³ Using a 5-point scale to measure redistribution by governments, the answers for ‘strongly agree’ or ‘agree’ were calculated to measure the support for redistribution by governments. I generated the country-level figure of redistributive support by averaging responses over time.

in Scandinavian countries (i.e., Finland, Norway, and Sweden), and New Zealand. Additionally, the variation of this income-support for the redistribution linkage is also observed over time within one country (Figure 4-2). This indicates that income becomes a strong predictor of redistributive preference depending on cross-national differences, as well as contextual factors varying within countries. Based on these evidences, this chapter asks the following questions: Why does income strongly predict redistributive preference in some countries more than others? According to the data for Spain in 2009, why do the rich support redistribution more than the poor given that the have-nots have been more supportive of redistribution in the country in other years?

Figure 4-1 Cross-National Patterns of Income-Redistributive Attitudes

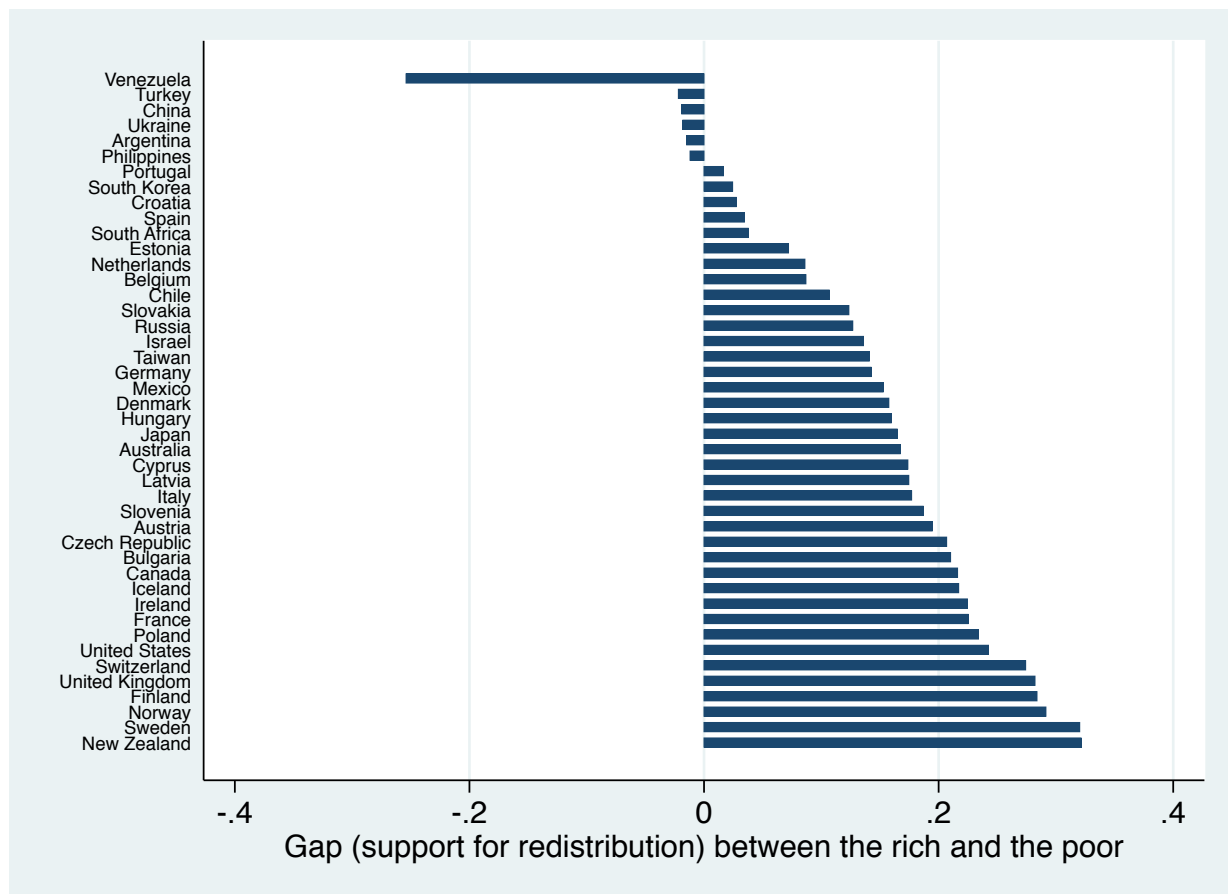
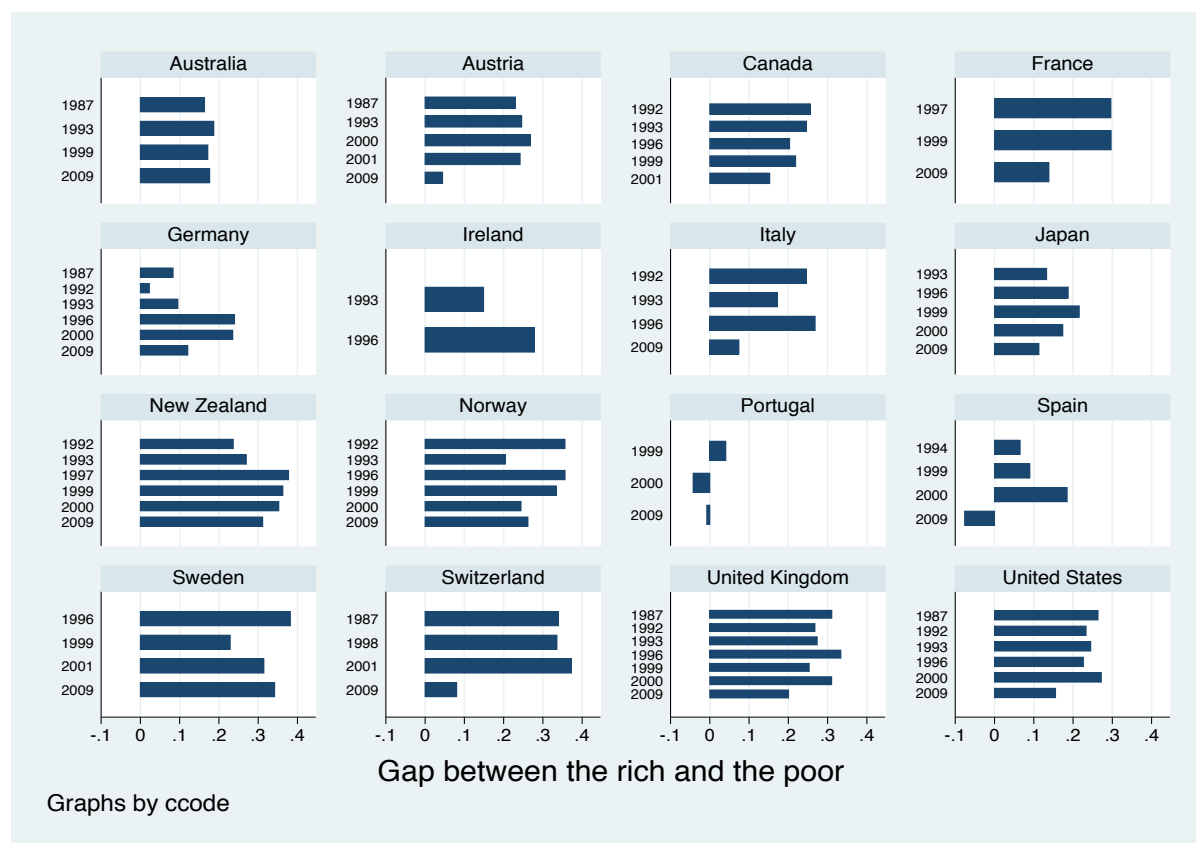


Figure 4-2 Changes in Income-Redistributive Preferences within Countries



Recently, studies on redistributive attitudes suggest a number of factors for the relationship between income and welfare attitudes. More importantly, studies on redistributive attitudes have begun considering the role of political information (Boeri and Tabellini 2012; Gingrich 2014). Relatedly, studies on voting behavior have long pointed out that informational asymmetries exist between the poor and the rich (Bartels 2008). Particularly, limited political information obstructs voters in developing their redistributive preferences based on their material interest. For example, Bartels (2008) suggests that American voters' limited information regarding redistributive policies explains why many poor voters do not support redistributive policies even though the policies benefit them directly. This means that with more information, voters may show redistributive preferences that best reflect their material interest.

Extant studies on welfare states provide insights on how increasing information affects citizens' redistributive support. For example, Gingrich (2014) suggests that welfare state visibility creates a context where voters clearly perceive the current scope of welfare states, making it more likely for them to utilize their ideological positions on vote choices. However, the effect of policy dimensions on welfare state contestation has not been studied much. This is surprising given that policy dimension is quite related with how voters perceive and evaluate the current level of welfare state and redistribution.

I argue that the current redistributive policies, particularly the changes in redistributive budgets, provide critical information to voters in understanding the scope of redistribution. Citizens' redistributive attitudes reflect their understanding of redistributive policy outcomes. Thus, voters' understanding on the scope of redistribution could be enhanced depending on how governments maintain and change policies regarding redistribution. More specifically, changes in redistributive budgets would provide critical information regarding redistribution because voters clearly perceive redistributive policy differences across different types of government. Additionally, the change in redistributive policies increases the salience of redistributive issues because policy changes in redistribution benefit/hurt welfare recipients. Given that the poor are likely to be welfare recipients, the policy change in redistribution induces more voters to have income-based preferences.

4.2. Literature Review

The level of individual income is perceived as one of the most critical factors in explaining public support for redistribution. Theoretically, the median voter theorem (MVT) suggests that the individual income level is the most critical factor in determining redistributive preference (Meltzer and Richard 1981). The MVT shows that governments redistribute income in

accordance with the preference of the median voter, who is relatively poor. Because the level of redistribution is determined by the “poor” median voter, the MVT suggests that governmental redistribution benefits voters whose income is below the median income level whereas taxes are extracted by the government from voters whose income is higher than the median income one. To put it differently, the MVT posits that redistribution only benefits poor citizens, while the poor do not contribute to redistributive budgets. This implies that the poor are always strong supporters of redistribution by governments, whereas the rich always oppose the redistribution. Thus, the income level is a stronger predictor of citizens’ redistributive preferences.

However, the theoretical model linking individual income and the support for redistribution has received mixed empirical support. Even though various studies on redistribution have found the impact of income on redistributive support (Finseraas 2009; Burgoon 2014; Rehm 2009, 2011; Schmidt and Spies 2014), studies have also found that income does not explain redistributive attitudes in certain contexts (Shayo 2009; Dion and Birchfield 2010). For example, Dion and Birchfield (2010) suggest that income level does not explain redistributive support in developing countries or countries with higher inequality. More importantly, extant studies have found that income effect is conditioned by contextual factors (Alesina and Angeletos 2005; Shayo 2009). Alesina and Angeletos (2005) explain that individual evaluation of fairness significantly affects people’s attitudes on tax rates. According to authors, in a society where fortune and inheritance are important factors for wealth, citizens are more likely to support higher taxes and redistribution. Relatedly, Shayo (2009) emphasizes the importance of societal contexts in determining the relationship between income and redistributive support. He argues that the poor in countries with a strong national identity are less likely to support redistribution than those in countries without a strong national identity. This

owes to the fact that a strong national identity weakens the poor citizens' class identity and blurs the importance of class identity on redistributive support. Yet, these studies were inconclusive in explaining the discrepancy between cross-national patterns of income-redistributive support linkages because they did not consider how policy dimensions affect citizens' redistributive attitudes.

Recent studies on welfare states have started to consider the impact of information on welfare states and redistributive supports. For example, Gingrich (2014) explores how welfare state visibility modifies citizens' vote choices. She suggests that the structure of welfare states provides important information regarding redistribution and that welfare state visibility increases the salience of welfare issues. Relatedly, Mettler (2011) argues that different structures of social programs provide critical information to individuals about the scope of welfare states. These studies suggest that individuals' voting behaviors are quite dependent on information regarding redistribution. This means that if redistributive policies offer more exact information, voters' redistributive attitudes will be more dependent upon their material interests since individuals would have a better understanding of the scope of redistribution.

4.3 Theory

I argue that policy distinctiveness on redistribution provides critical information to voters regarding redistribution which in turn strengthens the relationship between income and redistributive support. To develop redistributive preferences based on their material interest, citizens, in particular poor citizens need to understand the redistributive policies. Without a clear perception of the redistributive policies, it is hard for voters, especially for those who do not have political knowledge, to develop their redistributive preferences since not all voters are aware of

the outcome of the redistribution. Even if one were to assume that government redistribution would be progressive so that most contribution would come from the rich whereas the beneficiaries would be the poor, this does not guarantee support from the poor.

Although governmental redistribution is quite progressive and has significantly decreased the income gap between the poor and the rich, some poor voters still do not support governmental effort for redistribution. I argue that this is related to voters' experiences of the policy distinctiveness on redistribution because they affect voters' information regarding the redistributive outcomes. When there is more information, citizens, in particular the poor ones, become more supportive of the redistribution by governments.

If voters do not have a clear idea of specific policy outcomes, they are less likely to show definite preferences on given policies. For example, respondents tend to take moderate positions when they asked about their attitudes on specific policies if they are uncertain about their policy preferences (Iversen and Soskice 2012). The behavioral model of voting also suggests that a number of voters do not have strong policy preferences (Zaller 1992; Bartels 2008). As such, these studies imply that with less information on redistribution, voters are less likely to have strong policy preferences. Furthermore, voters may misunderstand the scope of redistribution if they do not have much information on given policies, leading to preferences that are inconsistent with their material interest. In other words, contexts providing clearer signs regarding redistribution would lead to stronger redistributive preferences, where they either support or oppose redistributive policies.

Behavior theorists have long argued that voters are rationally ignorant or do not have clear ideas on certain policy outcomes. For instance, studies show that there is informational asymmetries between the haves and who have-nots (Bartels 2008; Erikson 2015) because the

rich have greater access to the various information sources than the poor. Using the American National Election Studies (ANES), Erikson (2015) shows that support for government spending can be explained by voters' income level only among those who have more political information. This indicates that voters, in particular the poor ones may not show policy preferences consistent with their economic status because they have limited political information. On the other hand, this implies that if citizens can easily perceive the scope of redistribution, they are better able to develop their redistributive preferences based on their material interest since they have a better idea of redistribution.

Relatedly, burgeoning studies in the political behavior show that political contexts and institutional arrangements, which reveal policy information, critically affect citizens' political attitudes (Powell and Whitten 1993; Hopkins 2010; Lupu 2013). These lines of research suggest that different contexts produce different amounts and types of information that citizens have access to them to evaluate governmental policies and performance. Powell and Whitten (1993) suggest that with different sets of institutional clarities, voters evaluate incumbent candidates differently due to the fact that institutional clarities provide different levels of information to voters. Lupu (2013) also suggests that distinguishing information regarding parties' positions could increase voters' attachments to specific parties, simply because voters have better access to information regarding the parties' policy positions.

Putting these arguments together, I argue that policy distinctiveness of redistributive programs generates better information for voters regarding the current level of redistribution is progressive or regressive, or of who will be the beneficiaries. Here are two reasons why policy distinctiveness on redistribution provides better information to citizens. First, it increases the clarity of redistributive policies and citizens can perceive the policy distinction of redistribution

without much effort or underlying information. Second, it increases the salience of welfare issues in societies and thus other political actors (i.e., news media and political parties) will produce more information regarding redistribution in response to the salience of welfare issues. Both features will make the income effect on individual redistributive attitudes becomes stronger as more voters will have more access to information regarding redistribution.

Conceptually, policy distinctiveness refers to whether or not citizens can perceive the difference in redistributive programs and policies across different governments. It is easier for citizens to perceive the distinction of the policies when they can recognize the policy changes that take place. If governmental redistributive policies are quite stable and have not changed much over the past couple of years, it would be hard for voters to perceive the distinction. However, if citizens could distinctively identify the difference in governmental redistributive policies based on their experiences, they would have a better understanding of the redistribution.

With more information regarding the level of redistribution, voters are likely to convey stronger policy preferences. For example, a clearer signal of redistributive policies will induce more poor voters to support redistribution because better information would have induced them to correctly understand the level of redistribution. Furthermore, because of the existing informational asymmetry between the poor and the rich, more poor citizens will change their redistributive preferences than the rich. This leads to a stronger income effect on redistributive preferences. Finally, policy distinctiveness of redistribution also makes the issue of redistribution more salient. This in turn will encourage political parties and the news media to emphasize issues of redistribution more than before. Redistributive emphases by these political actors will provide additional information on redistribution to voters, making them more likely to develop redistributive preferences based on their material interest. Therefore,

Hypothesis 1: The greater the policy distinctiveness on redistribution is, the stronger the relationship between income and redistributive preference.

4.4 Research Design and Empirical Finding

4.4.1 Data

To test the relationship between income level, policy distinctiveness, and redistributive preference, I combined cross-national surveys from different modules of the International Social Survey Programme (ISSP)⁴⁴, which covered 72 country-years in 21 countries.⁴⁵ I restrict the samples to advanced industrialized regions only because many new democracies usually undergo more frequent policy changes in order to adjust to the market economy (i.e., Eastern Europe) and new political systems. Therefore, citizens in new democracies tend to have less political information on changes in redistributive expenditures. The ISSP data provides a number of questions regarding citizens' redistributive attitudes and income level. Additionally, I incorporate policy distinctiveness measures based on the budget expenditure on redistribution data from the Statistics on Public Expenditures for Economic Development (SPEED).

4.4.2 Dependent Variable

To measure individual redistributive preference, I chose the commonly used measure in current literature (Rehm 2009; Rueda and Stegmueller, forthcoming). The ISSP measures an individual *preference for redistribution* using the following question, "Do you agree with the following statements? It is the responsibility of the government to reduce the differences in income

⁴⁴ I incorporate 1985, 1987, 1992, 1993, 1999, 2000, and 2009 ISSP modules.

⁴⁵ This includes This includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and United States.

between people with high incomes and those with low incomes.” (1) Strongly Agree, (2) Agree, (3) Neither Agree nor Disagree, (4) Disagree, (5) Strongly Disagree. To ease the interpretation, I reversed the scale of the extant measure. This means that the higher the value, the more support for government redistribution.⁴⁶

4.4.3 Independent Variables

Two main independent variables – policy distinctiveness and individual income level – are used to test the theoretical argument.

Policy distinctiveness of redistribution is measured using changes in budget expenditures on redistribution. If governments changed their budget expenditures on redistribution in recent years and the magnitude of change is relatively large, it is easier for voters to perceive the scope of redistribution. I use a budget distance index from Tsebelis and Chang (2004) to measure changes in budget expenditures on redistribution. Tsebelis and Chang argue that the budget distance index captures changes in budget structures in an n-dimensional Euclidean issue spaces. They define the budget distance (BD) as

$$BD = \sqrt{(a_{1,t} - a_{1,t-1})^2 + \dots + (a_{n,t} - a_{n,t-1})^2}$$

where $a_{n,t}$ refers to percentages of expenditures of n policy spaces at time t .

So, the measure of the budget distance is the policy change in n-dimensional issue spaces between time t and time $t-1$. In this paper, I calculated the budget distance of two redistributive

⁴⁶ Some ISSP modules were not incorporated because they measure voters' redistributive preferences based on a 4-point ordinal scale instead of a 5-point scale. Using different surveys questions and scales may lead to different responses from the respondents. In particular, voters would have very different responses depending on whether or not there is an option for a moderate position.

related expenditures, health and social protection expenditures, from the SPEED data.⁴⁷ I then calculated the 3-year, 5-year, and 10-year averages of policy distance between time t and time $t-1$. This shows the degree of changes in budget expenditures on social protection and health expenditures in the past 3, 5, and 10 years. I argue that as policy distance regarding redistribution increases, it becomes easier for voters to access information regarding redistribution. Thus, a greater value of budget distance indicates greater policy distinctiveness. To ease the interpretation, I standardized the policy distinctiveness to vary between 0 and 1, with higher values indicating greater distinctiveness.

In the ISSP data, individual and household income levels are measured based on each country's currency unit, making it necessary to develop a comparable measure of income level across countries. To make a comparable measure of income levels across countries, I calculated the standardized income level across each country based on country-specific income quintile and converted it into a 5-point ordinal scale. Additionally, household size needs to be addressed to correctly specify the income effect. To take into consideration the household size, I used the equivalised household income level divided by the square root of household size.⁴⁸ Therefore, *income level* in this analysis is the 5-point ordinal scale based on country-specific quintile of equivalised household income level.⁴⁹

⁴⁷ The SPEED dataset provides annual budget composition data on 9 different governmental expenditures in 147 countries from 1980 to 2012. With these 9 different governmental expenditures, I use the health and social protection expenditures to measure policy distinctiveness of redistribution.

⁴⁸ I used the square root scale for calculating equivalized income scale from the OECD. See: <http://www.oecd.org/eo/growth/OECD-Note-EquivalenceScales.pdf>

⁴⁹ I also measure standardized income level based on individual earning and test my argument. Using an alternative way of measuring income level does not significantly change the main result.

4.4.4 Control Variables

I first control socio-economic status of the respondents (*gender, age, and education year*).

These socio-economic factors are found to be associated with individual preference of redistribution (Iversen and Soskice 2001; Erikson 2015). The sense of insecurity is known to be associated with support for redistribution (Rehm 2009). Accordingly, I include a dummy variable for *unemployed* (1: unemployed) to control individuals with insecurity given that sense of insecurity leads to support for redistribution (Rehm 2009). For these individual variables, I use the group (country-year)-mean centering.

Proponents of the power resource theory suggest that it is the left government, which increases welfare spending and redistribution (Huber and Stephens 2001; Korpi and Palme 2003). If so, individuals under left governments may have a strong redistributive support tendency. To measure *government partisanship*, I use the Comparative Political Data Set (CPDS) by Armingeon et al (2015). The CPDS provides the annual data for government composition based on cabinet shares of right, center, and left parties, from total cabinet posts. Based on the information in the CPDS, I measure a dummy variable for left governments when the average share of left cabinet shares exceeds more than two thirds of total cabinet shares in a given year.

In addition, I include the measure of *progressivity*⁵⁰ by calculating the difference between market- and net (after redistribution) gini coefficient from Solt (2014) to control the suggested relationship between progressivity and redistributive preference in advanced democracies (Beramendi and Rehm 2015). I standardized the progressivity to vary between 0 and 1, with higher values indicating greater progressivity to ease the interpretation. Additionally, I control

⁵⁰ Progressivity is calculated as $\frac{(Market\ Gini - Net\ Gini)}{Market\ Gini}$

log of GDP per capita, economic growth, and population size (log) from the World Bank Indicators (WDI).

4.4.5 Model Specification

In this paper, I use the multilevel linear model to explore the relationship between party distinctiveness, income, and redistributive preference. ISSP data is an individual level survey across countries. This means that ignoring the hierarchical data structure where individual level data is nested within country- and country election- levels would lead to incorrect statistical inference (Steenbergen and Jones 2002).

Formally, my multilevel model has the following equation:

$$Y_{ij} = \beta_{0j} + \beta_{1j}Income_{ij} + \beta_{2j}Age_{ij} + \beta_{3j}Gender_{ij} + \beta_{4j}Education_{ij} + \beta_{5j}Marriage_{ij} + \beta_{6j}Unemployed_{ij} + \varepsilon_{ij}$$

$$\begin{aligned} \beta_{0j} = & \gamma_{00} + \gamma_{01}Policy\ Distinctiveness_j + \gamma_{02}Government\ Ideology_j + \\ & \gamma_{03} \log (GDP\ per\ capita)_j + \gamma_{04} \log (Population)_j + \gamma_{04} GDP\ Growth_j + \\ & \gamma_{06} Progressivity_j + \delta_{1j} \end{aligned}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}Policy\ Distinctiveness_j + \delta_{2j}$$

where subscripts *i* and *j* refer to individual level and country-election levels, respectively.

I argue that policy distinctiveness significantly mediates the relationship between income and redistributive preference. In order to test the mediating effect of policy distinctiveness, I include the cross-level interaction (*income*policy distinctiveness*). In addition, I include the

cross-level interaction (*income*progressivity*) to control the mediation effect of progressivity (Beramendi and Rehm 2015).

4.4.6 Findings

Table 4-1 summarizes the effects of income and policy distinctiveness on citizens' redistributive preferences. In accordance with a prior scholarship, I find that income level has a negative correlation with redistributive supports (Benabou and Ok 2001; Iversen and Soskice 2001; Scheve and Stasavage 2006; Shayo 2009; Dion and Birchfield 2010; Rehm 2011). Moreover, redistributive support is higher for the elderly, the less educated, females, and the currently unemployed. In accordance with previous studies (Dallinger 2010), redistributive preferences have a negative relationship with economic growth and GDP per capita. It can be interpreted that good economic conditions lead to less demand for redistribution. However, progressivity does not seem to directly affect redistributive preferences.

More importantly, the coefficient estimate for the interaction term between income level and policy distinctiveness is negative and statistically significant in Models 1 and 2, suggesting that the effect of income on redistributive preferences is conditioned by the level of policy distinctiveness. As expected, the impact of income level becomes stronger as redistributive policies become more distinctive. In Model 2, I include an additional interaction term between income and progressivity. As suggested by previous studies (Beramendi and Rehm forthcoming), it seems that progressivity also mediates the income effect on redistributive preferences. However, the coefficient estimate of the interaction term (*income* policy distinctiveness*) is still significant after including an additional interaction term (*income*progressivity*). Moreover, the magnitude of the coefficient estimate of the interaction (*income*policy distinctiveness*) is greater

than the coefficient estimate of the interaction (*income*progressivity*).⁵¹ This shows that the mediating effect of policy distinctiveness in Model 1 is not affected by omitting other contextual factors such as the level of progressivity.

To ease the interpretation of the coefficient estimate of the income effect, I generate Figure 4-3 showing the mediating effect of policy distinctiveness based on Model 1. I plot the marginal effect for income coefficients by changing the value of party distinctiveness from the minimum to the maximum value. As Figure 4-3 shows, this changes minimum to maximum value of policy distinctiveness change the income coefficient from -0.123 to -0.272. This finding suggests that citizens' understanding of the redistribution is quite related with policy dimension and how policy contexts generate clear information regarding redistribution policy. If individuals have better information on the redistribution due to policy distinctiveness, it is likely that citizens will show redistributive preferences based on their material interest.

⁵¹ I also include other potential mediating factors (i.e., GDP per capita and GDP growth) and find that coefficient estimate of the interaction (*income*policy distinctiveness*) is always significant and negative.

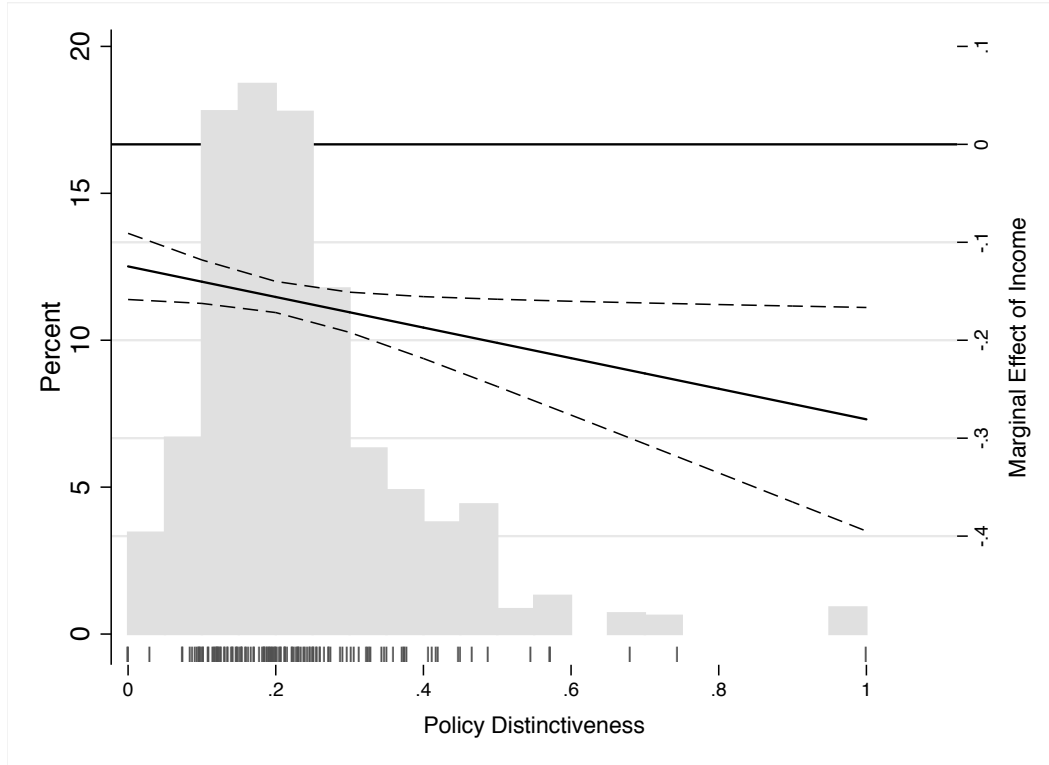
Table 4-1 Redistributive Preferences and Parties' Policy Platforms

Independent	Model 1	Model 2
Income	-0.123*** (0.006)	-0.067*** (0.018)
Policy Distinctiveness	-1.422*** (0.441)	-1.420*** (0.441)
Progressivity	-0.014 (0.388)	-0.005 (0.387)
Income*Policy Distinctiveness	-0.149*** (0.029)	-0.163*** (0.030)
Income*Progressivity		-0.079*** (0.024)
Age	0.001*** (0.000)	0.001*** (0.000)
Education year	-0.005*** (0.001)	-0.005*** (0.001)
Female	0.138*** (0.008)	0.139*** (0.008)
Unemployed	0.147*** (0.022)	0.147*** (0.022)
Population (log)	-0.071** (0.032)	-0.071** (0.032)
GDP per capita (log)	-0.275** (0.125)	-0.275** (0.125)
GDP growth	-0.048*** (0.015)	-0.048*** (0.015)
Left Government	0.074 (0.094)	0.073 (0.094)
Constant	7.825*** (1.287)	7.816*** (1.286)
<i>Random Effects</i>		
Country-Year	1.043***	1.043***
Variance	(0.084)	(0.084)
Individual Variance	0.126*** (0.003)	0.126*** (0.003)
Log Likelihood	-115371.75	-115366.34
Observations	74,585	74,585
N of country year	72	72

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 4-3 Marginal Effects of Income



Note: The solid line is the estimated coefficient of the income; the dashed lines are 95 % confidence intervals.

4.4.7 Robustness Check

To ensure the robustness of the previous finding, I conduct various robustness checks. First, I re-estimate Models 1 and 2 using multilevel logit⁵² and multilevel ordered logistic estimators (Table 4-2). A different estimation strategy, using either a multilevel linear model or multilevel logit model, does not significantly change the main finding regarding the mediating effect of policy distinctiveness.

⁵² When estimating the multilevel logit model, I transferred the 5-scale redistributive support to a dummy variable. I assume that both 'Strongly agree' and 'agree' concerning the statement 'It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes' indicate support for redistribution.

Table 4-2 Robustness Check: Using Different Estimation

Independent	Model 3 (Ologit)	Model 4 (Ologit)	Model 5 (Logit)	Model 6 (Logit)
Income	-0.205*** (0.011)	-0.138*** (0.030)	-0.209*** (0.013)	-0.085** (0.038)
Policy Distinctiveness	-2.477*** (0.726)	-2.472*** (0.726)	-2.411*** (0.765)	-2.392*** (0.764)
Progressivity	-0.267 (0.638)	-0.252 (0.638)	-0.323 (0.673)	-0.283 (0.672)
Income*Policy Distinctiveness	-0.172*** (0.047)	-0.190*** (0.048)	-0.129** (0.057)	-0.166*** (0.058)
Income*Progressivity		-0.093** (0.039)		-0.170*** (0.049)
Age	0.002*** (0.000)	0.002*** (0.000)	0.003*** (0.001)	0.003*** (0.001)
Education year	-0.009*** (0.001)	-0.009*** (0.001)	-0.007*** (0.001)	-0.008*** (0.001)
Female	0.198*** (0.013)	0.198*** (0.013)	0.187*** (0.016)	0.188*** (0.016)
Unemployed	0.240*** (0.035)	0.239*** (0.035)	0.269*** (0.044)	0.269*** (0.044)
Population (log)	-0.114** (0.053)	-0.114** (0.053)	-0.148*** (0.055)	-0.147*** (0.055)
GDP per capita (log)	-0.470** (0.205)	-0.470** (0.205)	-0.538** (0.216)	-0.536** (0.216)
GDP growth	-0.080*** (0.025)	-0.080*** (0.025)	-0.090*** (0.027)	-0.090*** (0.027)
Left Government	0.126 (0.154)	0.125 (0.154)	0.156 (0.163)	0.153 (0.162)
Cut Point 1	-10.214*** (2.118)	-10.197*** (2.117)		
Cut Point 2	-8.695*** (2.118)	-8.679*** (2.117)		
Cut Point 3	-7.822*** (2.118)	-7.806*** (2.117)		
Cut Point 4	-6.105*** (2.118)	-6.088*** (2.117)		
Constant			9.140*** (2.233)	9.076*** (2.228)
<i>Random Effects</i>				
Country-Year	0.337*** (0.057)	0.336*** (0.057)	0.373*** (0.063)	0.371*** (0.063)
Variance				
Log Likelihood	-106493.06	-106490.28	-46151.146	-46145.024
Observations	74,585	74,585	74,585	74,585
N of country year	72	72	72	72

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 4-3 Robustness Check: Using Different Time Dimension

Independent	Model 7 (5-year average)	Model 8 (10-year average)	Model 9 (5-year average)	Model 10 (10-year average)
Income	-0.135*** (0.007)	-0.108*** (0.007)	-0.091*** (0.019)	-0.079*** (0.020)
Policy Distinctiveness	-0.899** (0.394)	-0.949 (0.698)	-0.897** (0.394)	-0.948 (0.697)
Progressivity	-0.022 (0.405)	0.547 (0.410)	-0.016 (0.405)	0.551 (0.410)
Income*Policy Distinctiveness	-0.063** (0.025)	-0.346*** (0.046)	-0.071*** (0.025)	-0.356*** (0.046)
Income*Progressivity			-0.061** (0.024)	-0.041 (0.027)
Age	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Education year	-0.005*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)
Female	0.135*** (0.008)	0.143*** (0.009)	0.136*** (0.008)	0.143*** (0.009)
Unemployed	0.151*** (0.022)	0.172*** (0.024)	0.150*** (0.022)	0.172*** (0.024)
Population (log)	-0.081** (0.034)	-0.039 (0.034)	-0.081** (0.034)	-0.039 (0.034)
GDP per capita (log)	-0.284** (0.130)	-0.305** (0.140)	-0.284** (0.130)	-0.305** (0.140)
GDP growth	-0.047*** (0.016)	-0.049*** (0.015)	-0.047*** (0.016)	-0.049*** (0.015)
Left Government	0.029 (0.099)	0.055 (0.099)	0.029 (0.099)	0.055 (0.099)
Constant	8.054*** (1.378)	7.063*** (1.464)	8.047*** (1.377)	7.058*** (1.463)
<i>Random Effects</i>				
Country-Year Variance	1.008*** (0.085)	1.102*** (0.092)	1.008*** (0.085)	1.102*** (0.092)
Individual Variance	0.125*** (0.003)	0.127*** (0.003)	0.125*** (0.003)	0.127*** (0.003)
Log Likelihood	-112885.97	-100528.76	-112882.75	-100527.55
Observations	73,026	64,928	73,026	64,928
N of country year	71	60	71	60

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Additionally, I re-estimate the Models 1 and 2 in Table 4-1 using different measures of policy distinctiveness (Table 4-3). Instead of using policy distinctiveness based on a 3-year average of policy change in redistribution related budget expenditures, I use the measures of policy distinctiveness based on a 5-year and 10-year average of policy change in redistribution.

Using alternative measures of policy distinctiveness does not significantly change the main findings of the studies.

4.5 Conclusion

The main contribution of this chapter is to show that the income impact on redistributive preference becomes more pronounced as policy distinctiveness increases. Clearer policy positions in redistributive dimension result in more voters with redistributive preferences based on their material interest. The income-redistributive preference relationship becomes stronger if citizens have a clearer recognition of the redistributive policies. This also explains why some poor individuals do not support more redistribution even though redistribution by governments benefits them. If the poor cannot identify the scope of redistributive policies, it is hard for them to develop redistributive support.

Furthermore, this study shares the argument that information plays an important role in a welfare state. Clearer information in redistribution not only induces voters to use their ideological positions into voting consideration (Gingrich 2014) but also affects the formation of citizens' redistributive preferences. More importantly, clear information on redistribution lead citizens to develop policy preferences based on their material (class) interest.

Additionally, my argument is parallel to the recent evolvments in comparative political behavior that attempted to link micro- and macro-level analysis on preferences (Gingrich and Ansell 2012; Gingrich 2014; Beramendi and Rehm forthcoming), claiming that individual preferences are dependent upon different political contexts. As existing studies on political attitudes emphasize the importance of political contexts on formulating political attitudes in new democracies (Lupu 2013), this study also suggests that political contexts critically influence the

formulation of citizens' policy attitudes. Under environments where governments change their redistributive policies, citizens easily develop their redistributive preferences in accordance with their material (class) interest even without much political information. However, if citizens are not able to identify the policy distinction of redistribution, they need additional political information to have clear policy preferences.

Finally, this study finds that the mediating effect of policy distinctiveness is greater than other mediating effects such as the level of progressivity in the literature. This implies that greater redistributive progressivity may not lead to a polarization of redistributive support between the rich and poor. Some governments and countries may have greater redistribution or progressivity than other governments and countries. However, without party distinctiveness, it is hard to argue that these countries always have greater income-redistributive linkage.

CHAPTER 5

CONCLUSION

Mounds of evidence suggest the gap between the rich and the poor is not only growing in the United States, but also in the other world regions over the past 30 years (Erikson 2015). So, it is not surprising that scholarly attention has been paid on underlying causes of rising economic inequality, and how rising inequality leads to changes in political attitudes and policy outcomes. In particular, the current literature in the United States has paid a great attention to inequality-driven political changes: how it increases party polarization in the Congress (McCarty et al. 2006), whether it also increases participation gap between have and have-not (Bartels 2008; Erikson 2015), and how it affects the political responsiveness of the elites (Gilens 2005). Despite the growing concern and interests about rising inequality in the United States, the question of how changes in economic inequality affect party-voter's distributional linkage, redistributive attitudes, and democratic process and accountability has not yet fully answered in the cross-national contexts.

This dissertation project on political consequences of economic inequality aims to address this lacuna and revise conventional wisdom by highlighting the consequences of economic inequality on political institutions, democratic processes, public attitudes, and social policy.

In the chapter 2, I explain why party polarization in many countries does not track with a widening wealth gap. Combining insights from studies on economic inequality with studies on electoral systems, I argue that political polarization and income inequality move in tandem when countries are using proportional representation systems. Using time-series cross-national data on

inequality, electoral systems, and party polarization, I find that parties are more likely to respond to economic shocks with extreme policy positions when electoral systems facilitate parties' moves to the extreme.

Chapter 3 addresses how economic inequality mediates the electoral winner-loser gap in citizens' satisfaction with democracy. Challenging the conventional wisdom, this chapter suggests that existing studies have confounded the effect of electoral systems with the effect of economic inequality. As economic inequality increases, voters, regardless whether they are the poor or the rich, put more stakes on electoral outcomes. This is because increasing inequality induces voters to have different expectation on the tax rates and redistribution outcomes. I find that the winner-loser gap in satisfaction with democracy widens as income inequality increases. This study has an important implication to democratic stability by demonstrating that mediating effects of economic inequality are more critical than those effects of electoral institutions.

Chapter 4 explains why some poor voters do not support more governmental distribution. Drawing on theoretical insights from clarity of responsibility theory and studies on political information, I argue that when parties' policy positions on economics converge, the poor's demand for redistribution actually decreases. Specifically, I argue that party distinctiveness on their economic policy platforms significantly mediate the relationship between voter's income and redistributive preference. Voters are more likely to utilize their income dimension when they could clearly identify the difference among parties' policy dimensions regarding redistribution. Party distinctiveness generates critical information regarding parties' efforts/emphases on future redistributive policies. If parties' policy platforms on redistribution are too broad, it is challenging for the poor to develop preferences for redistribution and gauge future trends.

APPENDIX

Appendix

Chapter 2.

C2.1 Various measures for party polarization

C2.1.1 Dalton polarization index

Dalton polarization index for country k and election year t is

$$P_{kt} = \sqrt{\sum_{i=1}^n [\pi_{it} * \left\{ \frac{(y_{it} - y_{mt})}{5} \right\}^2]}$$

where $i \neq j$

n : number of parties

π_{it} : vote share of party i at year t

y_{it} : party position of the party i at year t

y_{jt} : party position of the party j at year t

y_{mt} : average ideological position of parties at year t

$$y_{mt} = \sum_{i=1}^n \pi_{it} * y_{it}$$

This index captures the weighted ideological distance among parties' left-right positions. This approach is simple and includes the ideological heterogeneity across parties and the size of each party. This index was originally suggested by Dalton (2008) and many comparative studies

(Ezrow 2008; Lachet 2008; Dow 2011; Curini & Hino 2012) also used a polarization index similar to the Dalton polarization index.⁵³

C2.1.2 Esteban and Ray index

Some argue that the scope of party competition might be better captured if an additional parameter is included (Esteban & Ray 1994). Esteban and Ray (1994) assert that polarization index should incorporate the group size and the heterogeneity across groups, as well as the group homogeneity. According to Esteban and Ray (1994)'s argument, polarization index should increase when political parties with more extreme positions gain votes from the center because it increases the group homogeneity. Therefore, they propose the following index:

$$P_{kt} = \sum_{i=1}^n \sum_{j=1}^n \pi_{it}^{1+\alpha} * \pi_{jt} * |y_{it} - y_{jt}|$$

In this index, $\pi_{it}^{1+\alpha}$ captures the homogeneity and the size of the party i , measured by the vote share of party i at election year t . $|y_{it} - y_{jt}|$, the ideological distance between party i and j , indicates the group heterogeneity between party i and j . α indicates sensitivity to polarization, ranging between 1 and 1.6. In this analysis, I set the value of α as 1.3 following the suggestion by Indridason (2011). Two party polarization measures by Dalton (2008) and Esteban and Ray (1994) are similar but capture different aspects of party polarization. Dalton's index estimates an average ideological distance of each party from the mean (y_{mt}) whereas Esteban and Ray's index shows an average ideological distance among parties.

⁵³ I change the range of party position from a -100 to 100 scale to a 0 to 10 scale before constructing a polarization measure.

C2.1.3 Distance index

In most countries in the data, two largest parties are left and right party, respectively. However, there are a few exceptions that two largest parties are not perceived as left and right party (e.g., Canada, Ireland, and Japan). To take into account these types of party competition, I picked two largest parties based on the vote shares and then subtracted ideological position of relative left party from the position of relative right party. Distance index for county k and election t is

$$P_{kt} = |y_{rt} - y_{lt}|$$

y_{rt} : ideological positions of largest right party

y_{lt} : ideological positions of largest left party

C2.2 Measuring Economic and Social Polarization Using the CMP Data

Original left-right scale in the CMP has some advantages over other measures of party positions, to the extent that it measures left-right ideological positions with longitudinal coverage from the 1940s. However, it might have some limitation if someone wants to compare pure economic and social positions across parties. For example, parties might have more emphasis on economic positions in response to economic inequality. In this vein, rises in economic inequality might show a stronger relationship with party polarization in economic scale than the relationship with party polarization in general left-right scale.

Based on Tavits (2007) and Tavits and Potter (2015), I measure economic left-right positions from the CMP and generate an economic polarization index. Building on Finseraas (2009) and Tavits (2007), I generate a social polarization index based on social left-right dimensions. I use a weighted average of the ideological distance (Dalton 2008; Curini & Hino 2012) to measure economic and social polarization index. Table C2-1 summarizes how I measure social and economic left-right positions in the CMP data. I measure economic and social left-right positions by subtracting the sum of economic/social left positions from the sum of economic/social right positions.

C2.2.1 About the Empirical Results

The direction and the magnitude of coefficient estimate for the relationship between party polarization in economic and social dimensions, and economic inequality do not differ much. Only difference is that the relationship between economic polarization and economic inequality becomes negative under SMD systems. Interestingly, Table C2-4 suggests that the relationship

between economic inequality and party polarization in social dimensions is mostly positive except under SMD systems.

This suggests that parties not only emphasize economic dimensions but also social dimensions in responses to rises in inequality. It might be related to the fact that left and right parties emphasize different types of issue dimensions in response to economic inequality (Tavits & Potter 2015). It is plausible that left parties emphasize more progressive economic positions to attract the poor voters, whereas right parties attempt to avert the eyes of left parties' core supporters by emphasizing conservative social positions with rises in economic inequality.

Table C2-1 Social and Economic Left-Right Positions from the CMP

Economic Left-Right		Social Left-Right	
Right	Left	Right	Left
Per 401: Positive references to free enterprise	Per 403: Market regulation	Per 104: Military, positive	Per 103: Anti-imperialism
Per 402: Incentives wage and tax politics for enterprise	Per 404: Long standing economic planning	Per 601: National way of left, positive	Per 105: Military, negative
Per 407: Protectionism, negative	Per 406: Protectionism, positive	Per 603: Traditional morality, positive	Per 602: National way of life, negative
Per 414: Economic orthodoxy	Per 412: Controlled economy	Per 605: Law and order, positive	Per 604: Traditional morality, negative
Per 505: Welfare state limitation	Per 413: Nationalization, positive	Per 608: Multiculturalism, negative	Per 607: Multiculturalism, positive
Per 702: Labour group, negative	Per 504: Welfare state expansion		
	Per 701: Labour group, positive		

Note: Economic left-right position is measured as follows: Economic left/right=Right dimensions: PER(401+402+407+414+505+702)-Left: PER (403+404+406+412+413+504+701). Social left-right position is measure as follows: Social left/right=Right dimensions: PER (104+601+603+605+608)-Left: PER(103+105+602+604+607)

C2.3 Party Positions based on Post-Election Surveys

Some might question about the validity of the CMP data. First of all, the CMP measures party positions at the presidential elections in the United States. This is contradictory to other European countries, given that the CMP measures party positions at the parliamentary elections in the European countries. Because the positions of presidential candidates are relatively moderate than the ones of each party, party polarization in the United States using the CMP is not as distinctive as the one in McCarthy et al (2006). Additionally, some scholars point out many limitations in the CMP (Laver & Benoit 2007) even though the CMP is the most comprehensive data in terms of longitudinal coverage.

To take into account these concerns regarding the validity of the CMP, I additionally measure parties' ideological positions using post-election surveys. I do not use the elite based survey because it is hard to find the elite surveys with more than two time points. Even though the Chapel Expert survey (Bakker et al. 2012) shows relatively longer time periods compared to other elite-based measures of party positions, it only covers limited number of European countries.

I collect 118 post-election surveys in advanced democracies. I cannot include some of the national election surveys because they did not have specific questionnaires on parties' ideological positions. Most surveys ask respondents to report parties' ideological positions using 11-point scale. However, some surveys use 7-point or 10-point scales. So, I convert party positions with 7-point and 10-point scales into 11 point scales before calculate the average party positions by the respondents. Table C2-2 summarizes the sources of the data.

Model 12 and 13 in Table C2-6 show the re-estimated coefficient estimates of Model 2 and 3 in Table 2-1 using a new party polarization measure based on post-election surveys. When

estimating model with a new polarization measure from election surveys, I did not use a lagged dependent variable because the number of observation is quite limited compared to the original estimation. Instead, I use Prais-Winsten AR (1) estimator to account for the time dependency. Overall, the direction and the scope of coefficient estimate for Model 12 and 13 look quite similar to the original estimates (Model 2 and 3 in Table 2-1). To interpret the Model 12 and 13 in a clear manner, I generate two marginal effect plots (Figure C2-2 and Figure C2-3). These two marginal effect plots show that party polarization increases as electoral systems become more permissive. Especially, Figure 2-3 shows that electoral systems have independent mediating effects on the relationship between party polarization and inequality. Except for very limited number of party systems (ENP=2), the effect of inequality becomes positive and stronger as the electoral systems becomes more permissive. This clearly indicates that my empirical finding is not generated by using specific party polarization measures from the CMP.

Table C2-2 National Election Surveys to Measure Parties' Ideological Positions

Country	Election Study	Sources
Australia	1984, 1987, 1996, 1998, 2001, 2004, 2007	Australian Election Study
Austria	2008	Austrian National Election Study
Canada	1965, 1979, 1984, 1997, 2004, 2008	Canadian Election Study
Denmark	1994, 1998, 2001, 2005, 2007	Danish Election Studies
Finland	2003, 2007, 2011	Finish Election Study
Germany	1976, 1980, 1983, 1987, 1990, 1998, 2002, 2005, 2009	German Society for Election Study (2005, 2009), German National Election Studies (1976, 1980, 1983, 1987, 1990, 1998, 2002)
Greece	1993, 1996	Comparative National Elections Project
Iceland	1987, 1991, 1995, 1999, 2003, 2007, 2009	Icelandic National Election Study
Ireland	2002, 2007	Irish National Election Study
Israel	1981, 1984, 1996	Israel National Election Studies:
Italy	1968, 1972, 1987, 1992, 1994, 1996, 2001, 2006, 2008	Italian National Election Study
Netherlands	1981, 1982, 1986, 1989, 1994, 1998, 2002, 2003, 2006	Dutch Parliamentary Election
New Zealand	1990, 1993, 1996, 1999, 2002, 2005, 2008	New Zealand Election Study
Norway	1977, 1981, 1985, 1989, 1993, 1997, 2001, 2009	Norwegian Election Studies
Portugal	2002, 2005, 2009	Comparative Study of Electoral Systems
Spain	1979, 1986, 1989, 1993, 1996, 2000, 2004, 2008, 2011	Centro de Investigaciones Sociologicas
Sweden	1979, 1982, 1985, 1988, 1991, 1994, 1998, 2002, 2006, 2010	Swedish National Election Studies
Switzerland	1971, 1995, 1999, 2003	Swiss Electoral Studies
United Kingdom	1983, 1997, 2001, 2005	British Election Study
United States	1972, 1976, 1980, 1984, 1988, 1992, 1996, 2000, 2004, 2008	American National Election Study

Table C2-3 Descriptive Statistics

Variable	Obs.	Mean	Std.	Min	Max
Polarization (Dalton)	334	1.74	0.71	0.42	3.97
Polarization (E & R)	329	2.86	1.77	0.26	9.83
Polarization (Distance)	318	51.04	24.79	6.86	131.08
Polarization (Economic)	334	1.11	0.45	0.30	3.19
Polarization (Social)	334	0.80	0.44	0.17	3.23
Polarization (Voter)	118	0.54	0.45	0.14	2.87
Lag Polarization (Dalton)	310	1.74	0.71	0.42	3.97
Lag Polarization (E&R)	307	2.91	1.80	0.26	9.83
Lag Polarization (Distance)	304	51.04	24.59	6.86	131.08
Lag Polarization (Economic)	310	1.10	0.46	0.30	3.19
Lag Polarization (Social)	310	0.78	0.42	0.17	2.75
Top Income (Solt)	291	7.89	2.35	3.49	17.89
Top Income (Original)	238	7.91	2.39	3.49	17.89
90/10 wage ratio (LIS)	136	3.72	0.81	2.46	5.92
District Magnitude (Log)	334	1.96	1.46	0.00	5.01
ENP	334	4.16	1.57	1.97	10.94
Coalition Habits	334	0.73	0.44	0	1
Voter Turnout	329	79.53	11.84	42.20	95.80
Economic Growth (WDI)	317	3.18	2.79	-7.28	13.57
Inflation rate	330	7.42	19.48	-0.95	316.60
Unemployment rate	329	5.42	4.06	0.003	22.96
Ethnic Fractionalization	334	0.22	0.20	0.01	0.71
President	334	0.07	0.26	0	1
Environmentalism	334	4.06	3.01	0.00	18.22
Culture	334	2.13	1.79	0.00	11.53
Multiculturalism	334	0.99	1.63	0.00	10.25
Euro	334	1.61	1.71	0.00	9.47
Net Immigration	323	0.01	0.02	-0.03	0.09

Table C2-4 Relationship between Economic/Social Polarization and Economic Inequality

	Model 4 Economic Polarization	Model 5 Social Polarization	Model 6 Economic Polarization	Model 7 Social Polarization
Lagged DV	0.439*** (0.054)	0.438*** (0.061)	0.454*** (0.053)	0.396*** (0.060)
Inequality	-0.029* (0.018)	0.004 (0.014)	-0.095** (0.046)	-0.078** (0.033)
Ln (District)	-0.124** (0.053)	-0.114** (0.047)	-0.022 (0.176)	0.032 (0.136)
Inequality*Ln(District)	0.013** (0.006)	0.015*** (0.005)	0.004 (0.018)	0.005 (0.013)
ENP	0.147*** (0.041)	0.132*** (0.035)	-0.089 (0.112)	-0.097 (0.084)
Coalition	0.416** (0.171)	0.167 (0.139)	-0.012 (0.070)	-0.135** (0.055)
ENP*Coalition	-0.116** (0.046)	-0.074** (0.037)		
Inequality*ENP			0.019 (0.013)	0.025** (0.010)
ENP*Ln(District)			-0.008 (0.041)	-0.012 (0.032)
Inequality*ENP*Ln(District)			0.000 (0.004)	-0.000 (0.003)
Turnout	0.005* (0.003)	0.001 (0.002)	0.003 (0.002)	0.000 (0.002)
Economic Growth	-0.012 (0.009)	-0.001 (0.007)	-0.015* (0.009)	-0.002 (0.007)
Inflation	-0.001 (0.002)	0.000 (0.001)	-0.001 (0.001)	0.001 (0.001)
Unemployment	0.005 (0.006)	0.008* (0.005)	0.003 (0.006)	0.008* (0.004)
President	0.236** (0.095)	0.264*** (0.090)	0.160* (0.088)	0.257*** (0.076)
ELF	-0.180 (0.154)	-0.359*** (0.125)	-0.097 (0.158)	-0.287** (0.120)
Environmentalism	-0.006 (0.008)	-0.002 (0.006)	-0.005 (0.008)	-0.001 (0.006)
Culture	-0.029** (0.013)	-0.030*** (0.009)	-0.031** (0.013)	-0.033*** (0.009)
Euro	-0.040*** (0.014)	-0.017* (0.010)	-0.032** (0.014)	-0.013 (0.011)
Multiculturalism	-0.016 (0.016)	0.037*** (0.012)	-0.018 (0.017)	0.039*** (0.011)
Immigration	0.344 (2.028)	1.883 (1.619)	0.220 (2.019)	1.707 (1.543)
Constant	0.163 (0.373)	-0.052 (0.304)	1.117*** (0.420)	0.776** (0.304)
Observations	265	265	265	265
Number of countries	24	24	24	24
R-squared by hand	0.428	0.622	0.429	0.639

Note: Panel Corrected Standard errors in parentheses. Coefficient estimates for time dummies are not reported.

*** p<0.01, ** p<0.05, * p<0.

Table C2-5 The Effects of District Magnitude and Income Inequality on Party Polarization

	Model 8 (E&R)	Model 9 (E&R)	Model 10 (Distance)	Model 11 (Distance)
Lagged DV	0.268*** (0.069)	0.264*** (0.068)	0.535*** (0.052)	0.529*** (0.052)
Inequality	-0.012 (0.057)	-0.120 (0.086)	0.216 (0.560)	-0.863 (0.740)
Ln(District)	0.143 (0.087)	-0.330 (0.237)	1.140 (0.876)	-3.622 (2.337)
Inequality*Ln(District)		0.056** (0.028)		0.564** (0.251)
ENP	-0.407** (0.187)	-0.462** (0.188)	8.484*** (1.857)	8.078*** (1.832)
Coalition	-0.469 (0.793)	-0.602 (0.786)	28.155*** (7.926)	27.484*** (7.783)
ENP*Coalition	0.030 (0.199)	0.083 (0.198)	-7.288*** (2.049)	-6.889*** (2.030)
Turnout	0.015 (0.012)	0.011 (0.012)	0.103 (0.127)	0.063 (0.129)
Economic Growth	-0.015 (0.039)	-0.014 (0.039)	0.036 (0.431)	0.046 (0.429)
Inflation	-0.002 (0.003)	-0.004 (0.004)	0.054 (0.051)	0.039 (0.047)
Unemployment	-0.026 (0.025)	-0.033 (0.025)	-0.035 (0.293)	-0.090 (0.293)
President	0.988** (0.421)	1.008** (0.419)	7.810 (4.905)	8.014* (4.837)
ELF	0.640 (0.604)	0.779 (0.615)	-12.453** (6.263)	-11.372* (6.151)
Environmentalism	-0.037 (0.029)	-0.025 (0.029)	-0.268 (0.391)	-0.156 (0.392)
Culture	-0.170*** (0.053)	-0.182*** (0.053)	-2.224*** (0.691)	-2.358*** (0.699)
Euro	-0.040 (0.055)	-0.031 (0.054)	-1.562** (0.620)	-1.488** (0.619)
Multiculturalism	-0.024 (0.042)	-0.042 (0.044)	0.575 (0.591)	0.376 (0.595)
Immigration	1.838 (8.366)	-0.310 (8.519)	-1.055 (77.643)	-18.613 (76.278)
Constant	3.152** (1.575)	4.675*** (1.773)	-12.858 (16.440)	1.981 (18.100)
Observations	262	262	251	251
Number of countries	24	24	24	24
R-squared	0.408	0.420	0.597	0.604

Note: Panel Corrected Standard errors in parentheses. Coefficient estimates for time dummies are not reported.

*** p<0.01, ** p<0.05, * p<0.1

Table C2-6 Relationship between Economic Inequality and Voter Polarization

	Model 12 Voter polarization	Model 13 Voter Polarization
Inequality	0.006 (0.018)	0.116** (0.048)
Ln(District)	-0.065 (0.081)	0.138 (0.230)
ENP	-0.086 (0.103)	0.064 (0.125)
Inequality*Ln(District)	0.020** (0.009)	-0.062** (0.031)
Inequality*ENP		-0.032* (0.017)
Ln(District)*ENP		-0.064 (0.055)
Inequality*Ln(District)*ENP		0.021** (0.008)
Coalition	-1.442*** (0.482)	-0.326*** (0.095)
Coalition*ENP	0.231** (0.108)	
Turnout	-0.001 (0.005)	-0.002 (0.004)
Economic Growth	-0.014 (0.012)	-0.011 (0.012)
Inflation	0.005** (0.002)	0.007*** (0.002)
Unemployment	0.007 (0.008)	0.009 (0.007)
President	-0.667** (0.295)	-0.871*** (0.239)
ELF	0.366 (0.291)	0.091 (0.219)
Environmentalism	-0.004 (0.009)	0.002 (0.008)
Culture	0.003 (0.014)	-0.004 (0.014)
Euro	-0.009 (0.020)	0.004 (0.018)
Multiculturalism	0.020 (0.020)	-0.001 (0.013)
Immigration	2.694 (3.093)	-0.004 (2.539)
Constant	0.936 (0.785)	0.520 (0.592)
Observations	114	114
Number of countries	20	20
R-squared	0.568	0.674

Note: Using a Prais-Winsten AR(1) estimator. Standard errors are in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table C2-7 Robustness Check: Inequality Measures and Using Prais-Winsten Estimator

	Model 14	Model 15	Model 16	Model 17	Model 18	Model 19
	Dalton	E&R	Dalton	E&R	Dalton	E&R
	(Original Top)	(Original Top)	(LIS)	(LIS)	(AR1)	(AR1)
Lagged DV	0.262*** (0.061)	0.184*** (0.065)	0.149* (0.082)	0.263*** (0.090)		
Inequality	-0.060* (0.033)	-0.181* (0.098)	-0.555*** (0.167)	-1.167*** (0.447)	-0.056* (0.032)	-0.218** (0.106)
Ln(District)	-0.233** (0.099)	-0.543** (0.267)	-0.793*** (0.211)	-1.080* (0.573)	-0.318*** (0.090)	-0.533* (0.296)
Inequality*District	0.028** (0.012)	0.090*** (0.033)	0.214*** (0.061)	0.346** (0.163)	0.036*** (0.010)	0.087** (0.034)
ENP	0.240*** (0.080)	-0.601*** (0.189)	0.052 (0.102)	-0.851*** (0.278)	0.315*** (0.069)	-0.695*** (0.195)
Coalition Habits	0.365 (0.352)	-1.425* (0.851)	-0.027 (0.412)	-2.469** (1.154)	0.769*** (0.296)	-0.754 (0.849)
ENP*Coalition	-0.116 (0.094)	0.274 (0.215)	-0.057 (0.099)	0.386 (0.252)	-0.205*** (0.079)	0.205 (0.210)
Voter Turnout	0.014*** (0.005)	0.015 (0.013)	-0.006 (0.006)	-0.003 (0.013)	0.006 (0.005)	0.006 (0.013)
Economic Growth	-0.010 (0.019)	-0.033 (0.043)	-0.036 (0.024)	-0.069 (0.063)	-0.008 (0.015)	-0.029 (0.035)
Inflation	-0.023** (0.011)	-0.045* (0.027)	-0.000 (0.002)	-0.002 (0.004)	-0.001 (0.001)	-0.004 (0.004)
Unemployment	-0.018 (0.012)	-0.060** (0.029)	-0.014 (0.012)	-0.014 (0.032)	-0.017 (0.011)	-0.067** (0.031)
President	0.499*** (0.162)	1.179*** (0.423)	0.237 (0.189)	0.765 (0.515)	0.541*** (0.156)	1.472*** (0.514)
ELF	0.324 (0.319)	1.514* (0.825)	-0.535* (0.285)	1.706** (0.694)	-0.594** (0.294)	1.099 (0.750)
Environmentalism	-0.009 (0.014)	-0.031 (0.031)	-0.010 (0.017)	-0.015 (0.040)	-0.008 (0.013)	-0.029 (0.028)
Culture	-0.081*** (0.024)	-0.157*** (0.051)	-0.099*** (0.023)	-0.133** (0.053)	-0.120*** (0.023)	-0.283*** (0.053)
Euro	0.002 (0.031)	0.029 (0.077)	-0.004 (0.024)	0.003 (0.057)	-0.039* (0.023)	-0.026 (0.052)
Multiculturalism	-0.020 (0.026)	-0.011 (0.054)	0.017 (0.025)	-0.008 (0.053)	0.005 (0.024)	-0.073 (0.050)
Immigration	-1.764 (3.578)	-1.476 (9.957)	2.320 (3.899)	-10.127 (10.055)	4.366 (3.269)	7.370 (9.250)
Constant	0.252 (0.706)	5.674*** (1.885)	4.570*** (1.199)	10.851*** (3.272)	0.981 (0.662)	7.361*** (1.883)
Observations	214	211	134	132	270	269
Number of countries	18	18	20	20	24	24
R-squared	0.368	0.421	0.491	0.562	0.523	0.503

Note: Standard errors are in parentheses. Coefficient estimates for time dummies are not reported.

*** p<0.01, ** p<0.05, * p<0.1

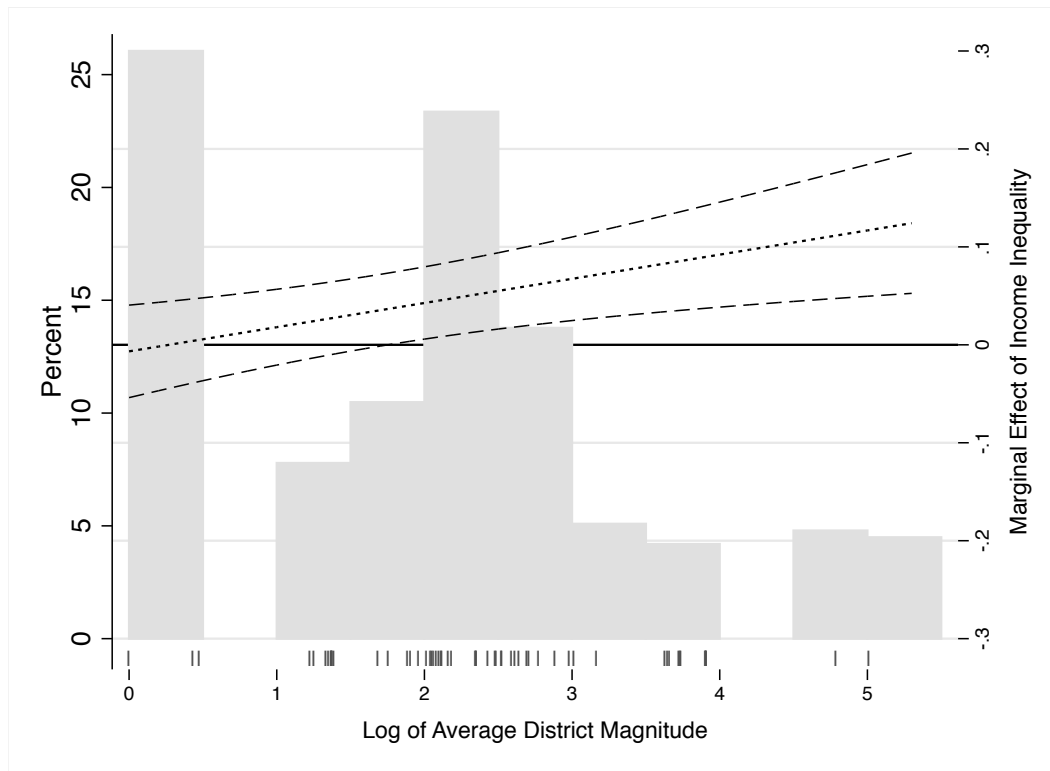
Table C2-8 Robustness Check: Endogeneity Problem and Fixed Effect

	Model 20	Model 21	Model 22	Model 23	Model 24	Model 25
	Dalton (Lagged)	E&R (Lagged)	Dalton (System GMM)	E&R (System GMM)	Dalton (Fixed)	E&R (Fixed)
Lagged DV	0.287*** (0.059)	0.252*** (0.068)	0.314*** (0.055)	0.259*** (0.053)		
Inequality	-0.007 (0.029)	-0.098 (0.087)	-0.025 (0.030)	-0.124* (0.068)	-0.062* (0.032)	-0.283** (0.121)
Ln(District)	-0.186** (0.085)	-0.570** (0.246)	-0.174* (0.095)	-0.307 (0.220)	-0.221 (0.151)	-0.502 (0.440)
Inequality*District	0.025** (0.010)	0.092*** (0.031)	0.023** (0.011)	0.055** (0.024)	0.045*** (0.015)	0.114** (0.048)
ENP	0.253*** (0.081)	-0.368* (0.189)	0.229*** (0.074)	-0.493*** (0.169)	-0.084 (0.135)	-1.065*** (0.337)
Coalition Habits	0.381 (0.323)	-1.405* (0.790)	0.619** (0.304)	-0.658 (0.697)	-0.520 (0.529)	-1.756 (1.365)
ENP*Coalition	-0.153* (0.090)	0.222 (0.205)	-0.183** (0.081)	0.103 (0.185)	0.152 (0.140)	0.532 (0.352)
Voter Turnout	0.007 (0.005)	0.004 (0.013)	0.007 (0.005)	0.010 (0.011)	0.008 (0.008)	0.021 (0.020)
Economic Growth	-0.001 (0.016)	-0.006 (0.039)	-0.006 (0.016)	-0.021 (0.037)	0.006 (0.015)	0.012 (0.036)
Inflation	-0.004 (0.010)	0.001 (0.026)	-0.001 (0.002)	-0.004 (0.004)	0.000 (0.001)	0.000 (0.004)
Unemployment	-0.002 (0.010)	-0.012 (0.023)	-0.006 (0.012)	-0.034 (0.027)	0.010 (0.014)	-0.044 (0.034)
President	0.410** (0.161)	0.904** (0.419)	0.455*** (0.175)	1.017** (0.399)		
ELF	-0.559** (0.242)	0.216 (0.620)	-0.428* (0.249)	0.834 (0.560)		
Environmentalism	0.019 (0.015)	0.053 (0.033)	-0.009 (0.014)	-0.034 (0.032)	-0.030** (0.012)	-0.074*** (0.028)
Culture	-0.049** (0.023)	-0.133** (0.054)	-0.095*** (0.023)	-0.173*** (0.053)	-0.107*** (0.026)	-0.231*** (0.063)
Euro	-0.043* (0.024)	-0.028 (0.060)	-0.033 (0.025)	-0.037 (0.058)	-0.048* (0.026)	-0.113** (0.056)
Multiculturalism	0.028 (0.026)	-0.027 (0.056)	0.011 (0.024)	-0.036 (0.055)	-0.032 (0.022)	-0.062 (0.049)
Immigration	1.875 (3.162)	8.354 (9.069)	1.592 (-0.072)	-0.714 (-0.460)	8.807*** (3.332)	14.995 (9.263)
Constant	-0.021 (0.660)	3.889** (1.773)	0.385 (0.659)	4.870*** (1.534)	0.885 (0.899)	4.854** (2.311)
Arellano-Bond Test			0.375	0.251		
Sargan Test			0.498	0.148		
Observations	256	251	265	262	270	269
Number of countries	23	23	24	24	24	24
R-squared	0.321	0.373	.	.	0.626	0.551

Note: Standard errors are in parentheses. Coefficient estimates for time dummies are not reported.

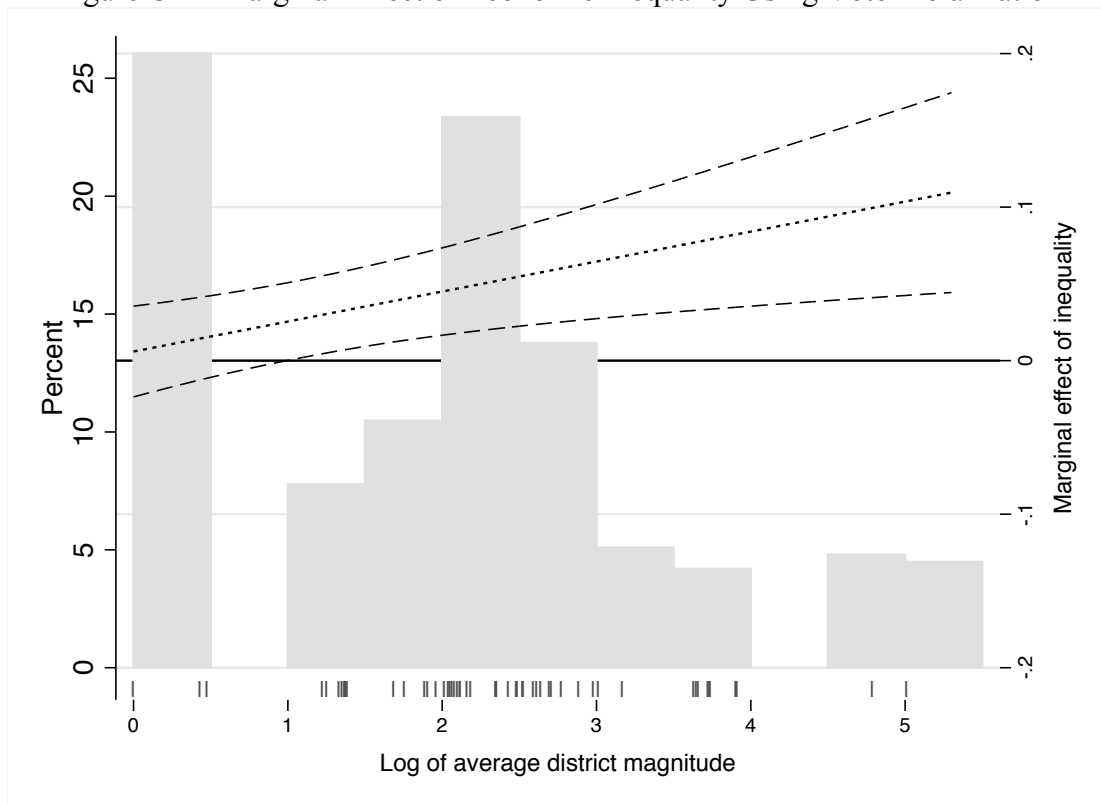
*** p<0.01, ** p<0.05, * p<0.1

Figure C2-1 Marginal Effect of Economic Inequality Using Lagged IVs



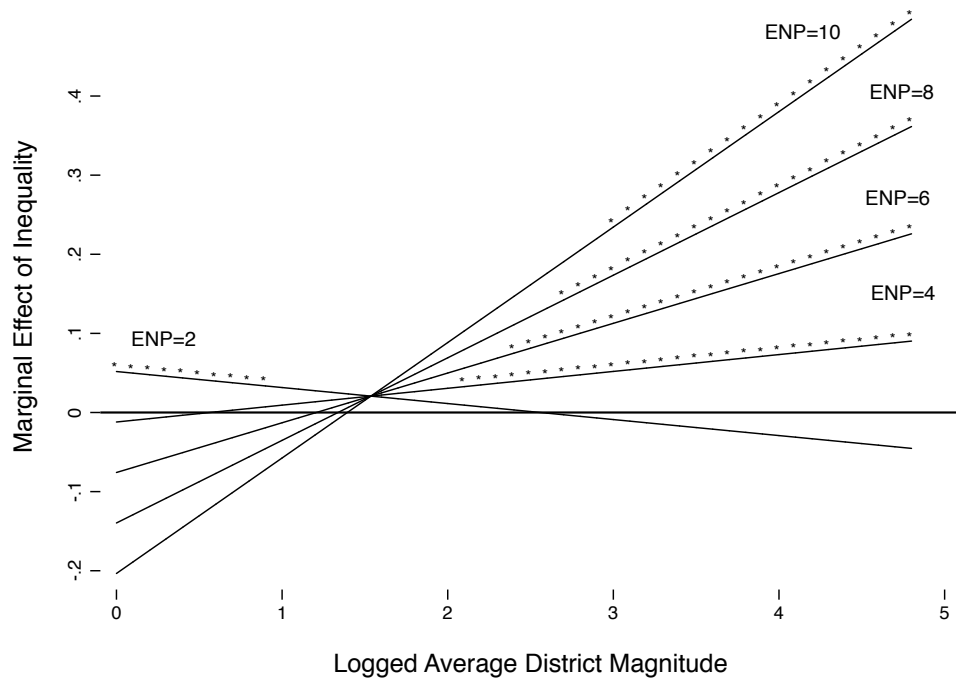
Note: The solid line is the estimated coefficient of income inequality; the dotted lines are 90% confidence intervals.

Figure C2-2 Marginal Effect of Economic Inequality Using Voter Polarization



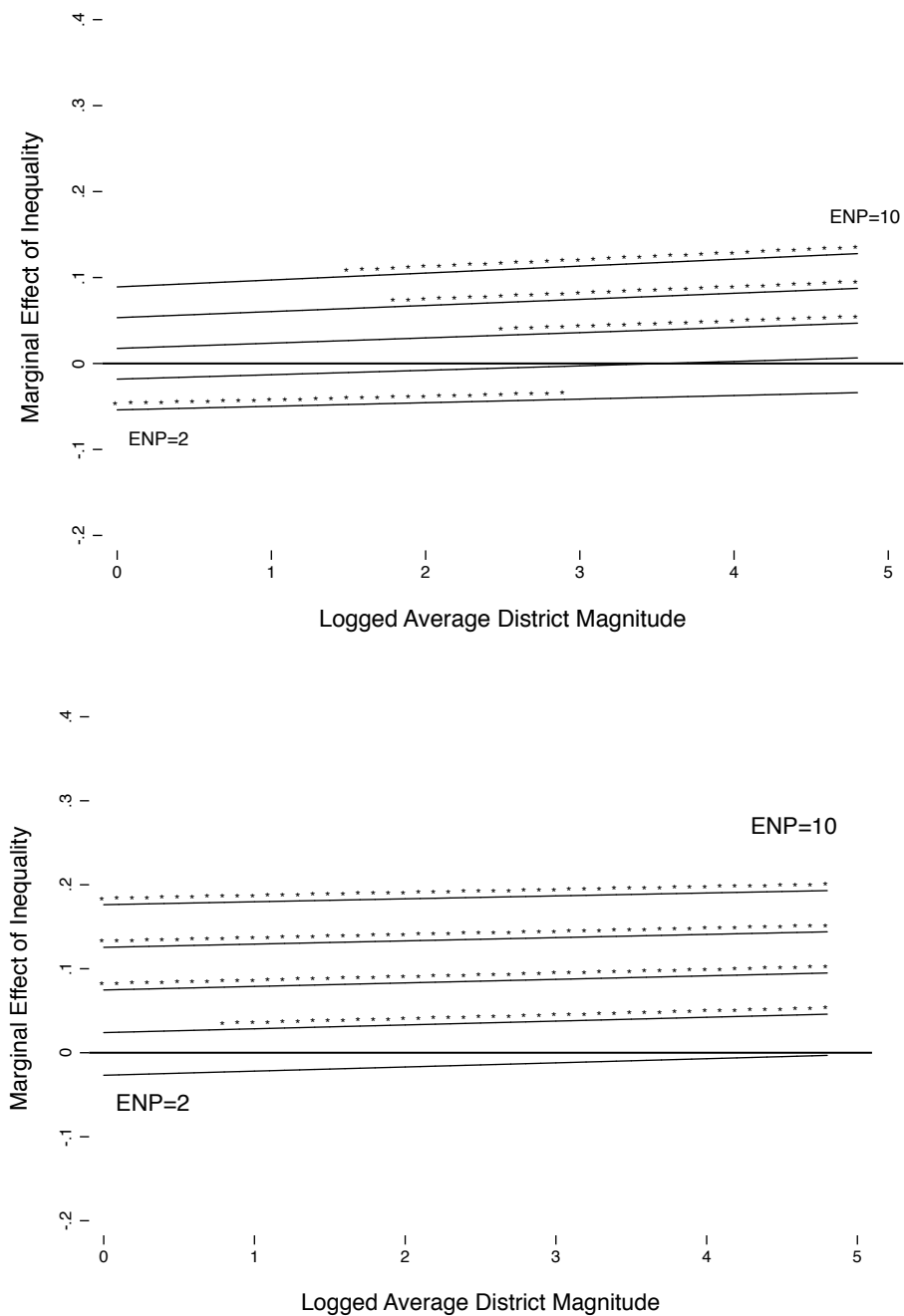
Note: The solid line is the estimated coefficient of income inequality; the dotted lines are 90% confidence intervals.

Figure C2-3 Marginal Effect of Economic Inequality at Different Party Competitions I



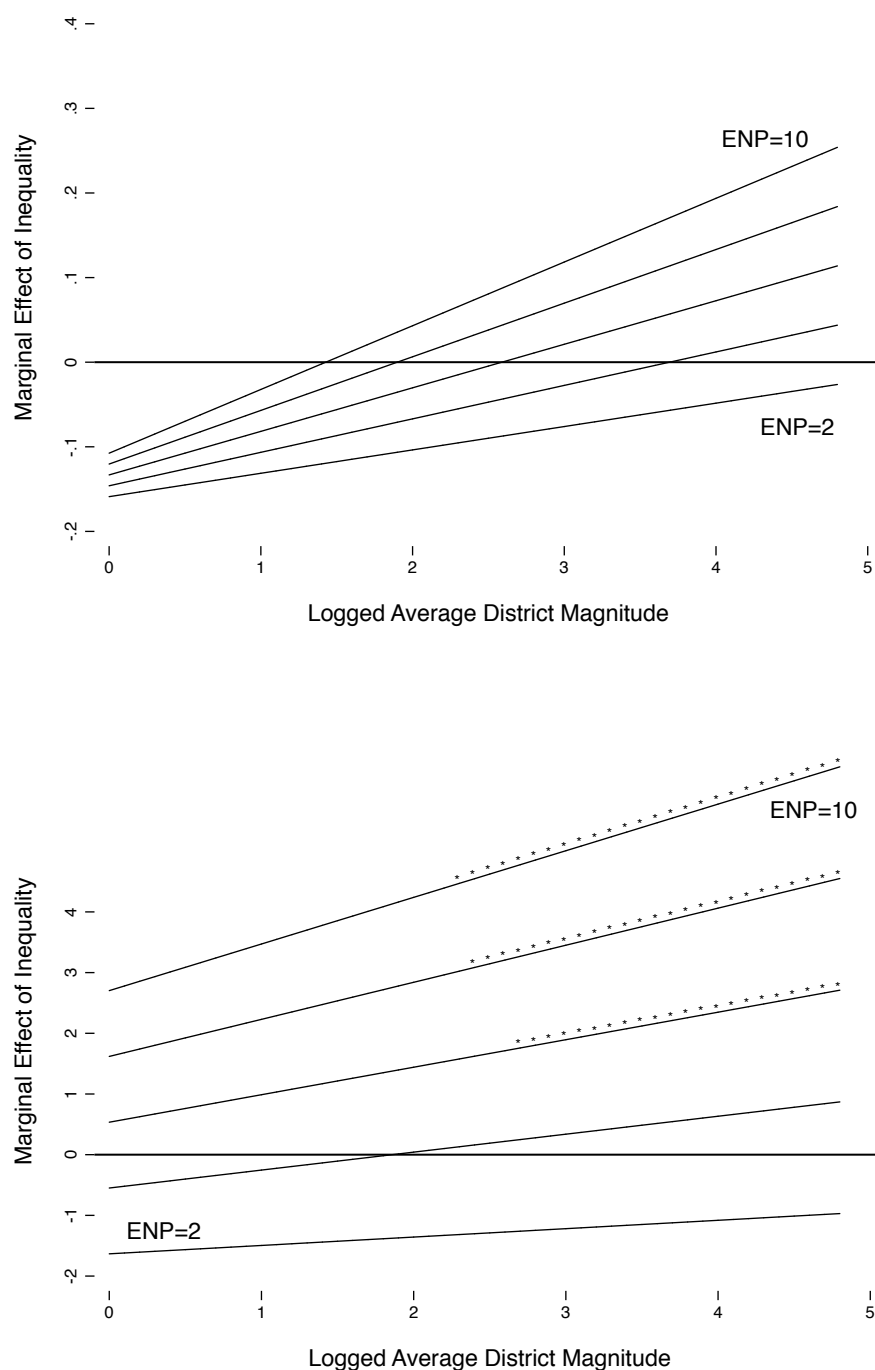
Note: Each line indicates the marginal effect of inequality if effective number of parties equals 2, 4, 6, 8, and 10. Asterisk (*) above the marginal effect lines indicates statistically significant regions at 95 %.

Figure C2-4 Marginal Effect of Economic Inequality at Different Party Competitions II



Note: Each line indicates marginal effect of inequality if effective number of parties equals 2, 4, 6, 8, and 10. Asterisk (*) above the marginal effect lines indicates statistically significant regions at 95 %. The upper panel is based on Model 6 (polarization measure in economic scale) and the below panel is based on Model 7 (polarization measure in social scale) in Table C2-4.

Figure C2-5 Marginal Effect of Economic Inequality at Different Party Competitions III



Note: Each line indicates marginal effect of inequality if effective number of parties equals 2, 4, 6, 8, and 10. Asterisk (*) above the marginal effect lines indicates statistically significant regions at 95 %. The upper panel is based on the estimator using the Esteban and Ray's index and the below panel is based on the estimator using the Distance index.

Chapter 3.

Table C3-1 Inequality and Issue Salience on Redistribution

	Model A1 Emphasis on Redistribution
Inequality (Net Gini)	0.172*** (0.067)
Rightist Party	-3.977*** (0.525)
New Party	-0.652 (0.498)
Niche Party	-0.413 (0.617)
Party Size	-0.005 (0.018)
GDP Change (per capita)	0.161*** (0.049)
ENEP	0.126 (0.133)
New Democracy	-1.381** (0.661)
Intercept	10.088*** (2.143)
Various Components	
Country-Party-Election	5.967
Party-Country Level	3.138
Country Level	3.428
Observations	1,747
Number of Parties	441
Number of Countries	41

Note: The dependent variable is the level of emphasis a party placed on the redistribution dimension. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C3-2 Robustness Check: Income Inequality, the Winner-Loser Status, and Satisfaction with Democracy

	Model A2 (one-country)	Model A3 Cluster s.e)	Model A4 (Added Controls)
Winner	-0.635*** (0.089)	-0.364 (0.416)	-0.324*** (0.085)
District Magnitude	-0.079*** (0.019)	-0.036 (0.042)	0.003 (0.015)
Inequality	0.024 (0.014)	0.015 (0.017)	-0.016 (0.016)
Winner*DM (log)	0.004 (0.013)	-0.016 (0.046)	0.024*** (0.002)
Winner*Inequality	0.032*** (0.002)	0.028* (0.011)	-0.006 (0.012)
Ideological proximity	-0.055*** (0.006)	-0.058** (0.017)	-0.057*** (0.005)
Age	-0.001 (0.001)	-0.002 (0.001)	-0.002*** (0.001)
Education	0.025*** (0.006)	0.029* (0.011)	0.015** (0.005)
Ideological orientation	0.075*** (0.004)	0.062*** (0.017)	0.060*** (0.003)
Political efficacy	0.124*** (0.009)	0.140*** (0.019)	0.150*** (0.008)
Partisanship	0.284*** (0.022)	0.245*** (0.028)	0.232*** (0.018)
Presidentialism	-0.357 (0.233)	-0.032 (0.275)	0.232 (0.222)
GDP Growth	0.167** (0.052)	0.142*** (0.035)	0.141** (0.050)
Corruption	-0.288*** (0.066)	-0.243*** (0.059)	-0.279*** (0.064)
GDP per capita (log)	-0.262 (0.173)	-0.274 (0.195)	-0.274 (0.169)
Age of democracy	0.008** (0.003)	0.011*** (0.003)	0.010*** (0.003)
Days from election date			-0.002*** (0.001)
Winner (Previous)			0.451*** (0.018)
Income			-0.065*** (0.007)
Cut Point1	-4.597* (2.050)	-4.676* (2.297)	-5.220** (2.008)
Cut Point2	-2.506 (2.050)	-2.640 (2.290)	-3.144 (2.008)
Cut Point3	0.498 (2.050)	0.475 (2.294)	0.008 (2.008)
Country Variance	0.257*** (0.056)	0.294*** (0.058)	0.318*** (0.056)
Log-Likelihood	-40680.218	-75522.8	-58690.9
Observations	38,510	72,977	57,385
Number of Elections	43	76	68

Standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Table C3-3 Income Inequality, Policy Winner, and Satisfaction with Democracy

	Model A5 Policy Winner
Inequality	0.014 (0.012)
Ideological Proximity	-0.041* (0.016)
Proximity*Inequality	-0.002** (0.000)
District Magnitude (log)	-0.036** (0.013)
Age	-0.001* (0.000)
Education	0.029*** (0.004)
Ideological orientation	0.064*** (0.003)
Political efficacy	0.173*** (0.006)
Partisanship	0.310*** (0.014)
Presidentialism	-0.029 (0.191)
GDP Growth	0.148*** (0.044)
Corruption	-0.251*** (0.059)
GDP per capita (log)	-0.296 (0.153)
Age of democracy	0.011*** (0.002)
Cut Point1	-4.853** (1.827)
Cut Point2	-2.857 (1.827)
Cut Point3	0.219 (1.827)
Country Variance	0.290*** (0.048)
Log-Likelihood	-94668.046
Observations	89,936
Number of Elections	76

Standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05

BIBLIOGRAPHY

BIBLIOGRAPHY

- Acemoglu, Daron, and James Robinson. 2005. *Economic Origins of Dictatorship and Democracy*. New York, NY: Cambridge University Press.
- Adams, James, Samuel Merrill, III, and Bernard Grofman. 2005. *A Unified Theory of Party Competition: A Cross-National Analysis Integrating Spatial and Behavioral Factors*. Cambridge: Cambridge University Press.
- Adams, James, Jane Green, and Caitlin Milazzo. 2012. "Has the British Public Depolarized Along With Political Elites? An American Perspective on British Public Opinion." *Comparative Political Studies*, 45(4): 507–530.
- Alesina, Alberto, and George-Marios Angeletos. 2005. "Fairness and Redistribution" *American Economic Review* 95(4): 960-980
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003. "Fractionalization." *Journal of Economic Growth* 8: 155-194.
- Alesina Alberto, Edward Glaeser. 2004. *Fighting Poverty in the US and Europe: A World of Difference*. Oxford: Oxford University Press.
- Alt, James E, and David Dreyer Lassen. 2006. "Transparency, Political Polarization, and Political Budget Cycles in OECD countries". *American Journal of Political Science* 50(3): 530–550.
- Alvaredo, Facundo, Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez. 2013. "The Top 1 Percent in International and Historical Perspective" *Journal of Economic Perspectives*, 27(3): 3-20.
- Armingeon, Klaus, Christian Isler, Laura Knöpfel, David Weisstanner and Sarah Engler. 2015. *Comparative Political Data Set 1960-2013*. Bern: Institute of Political Science, University of Berne.
- Anderson, Christopher J. 2012. "How Electoral Systems Shape What Voters Think About Democracy." Paper presented at the conference on "Duty and Choice: Participation and Preferences in Democratic Elections" On the occasion of André Blais's 65th birthday.
- Anderson, Christopher J. and Pablo Beramendi. 2012. "Left Parties, Poor Voters, and Electoral Participation in Advanced Industrial Societies" *Comparative Political Studies*, 45(6) 714–746.

- Anderson, Christopher J., Andre Blais, Shaun Bowler, Donovan Todd, and Ola Listhaug. 2005. *Losers' Consent: Elections and Democratic Legitimacy*. New York, NY: Oxford University Press.
- Anderson, Christopher J., and Christine Guillory. 1997. "Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems." *American Political Science Review*, 91(1): 66–81.
- Anderson, Christopher J., and Yuliya V. Tverdova. 2003. "Corruption, Political Allegiances and Attitudes toward Government in Contemporary Democracies." *American Journal of Political Science*, 47(1): 91–109.
- Bakker, Ryan, Erica Edwards, Liesbet Hooghe, Seth Jolly, Gary Marks, Jonathan Polk, Jan Rovny, Marco Steenbergen, and Milada Vachudova. 2012. *Measuring Party Positions in Europe: the Chapel Hill Expert Survey Trend File, 1999-2010*. Unpublished manuscript.
- Bartels, Larry M. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age*. NJ, Princeton: Princeton University Press.
- Bawn, Kathleen and Frances Rosenbluth. 2006. "Short versus Long Coalitions: Electoral Accountability and the Size of the Public Sector." *American Journal of Political Science*, 50(2): 251–265.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not to Do) with Time Series Cross-Section Data in Comparative Politics." *American Political Science Review*, 89 (3): 634–47.
- Benabou, Roland and Efe a. Ok. 2001. "Social Mobility and the Demand for Redistribution: The POUM hypothesis" *Quarterly Journal of Economics* 116(2): 447-487.
- Beramendi, Pablo and Philipp Rehm. *forthcoming*. "Who Gives, Who Gains? Progressivity and Preferences" *Comparative Political Studies*
- Bernauer, Julian and Adrian Vatter. 2012. "Can't Get No Satisfaction with the Westminster Model? Winners, Losers and the Effects of Consensual and Direct Democratic Institutions on Satisfaction with Democracy." *European Journal of Political Research*, 51(4): 435–468.
- Bernhard, Michael, Timothy Nordstrom, and Christopher Reenock. 2001. "Economic Performance, Institutional Intermediation, and Democratic Survival." *Journal of Politics*, 63(3): 775–803.
- Berry, William D., Matt Golder, and Daniel Milton. 2012. "Improving Tests of Theories of Positing Interaction." *Journal of Politics* 74(3): 653-671.
- Blais, André and François Gelineau. 2007. "Winning, Losing and Satisfaction with Democracy." *Political Studies*, 55(2): 425–441.

- Boeri, Tito and Guido Tabellini 2012. "Does Information Increase Political Support for Pension Reform?" *Public Choice*, 150(1): 327-362.
- Bormann, Nils-Christian and Matt Golder. 2013. "Democratic Electoral Systems around the World, 1946-2011." *Electoral Studies* 32(2): 360-369.
- Boix, Carles. 2003. *Democracy and Redistribution*. Cambridge, UK: Cambridge University Press.
- Booth, John A., and Mitchell, A. Seligson. 2009. *The Legitimacy Puzzle in Latin America: Democracy and Political Support in Eight Nations*. Cambridge, MA: Cambridge University Press.
- Bormann, Nils-Christian, and Matt Golder. 2013. "Democratic Electoral Systems Around the World, 1946-2011." *Electoral Studies*, 32(2): 360-369.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analysis" *Political Analysis*, 14(1): 63-82.
- Bradley, David, Evelyne Huber, Stephanie Moller, Francois Nielsen and John Stephens. 2003. "Distribution and Redistribution in Post-Industrial Democracies." *World Politics* 55(2):193-228.
- Brady, Henry E. 2004. "An Analytical Perspective on Participatory Inequality and Income Inequality." In Kathryn Nechkerman (Ed.), *Social Inequality* (pp. 667-702). New York, NY: Russell Sage.
- Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Eric Tannenbaum, and Judith Bara eds. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments 1945-1998*. Oxford: Oxford University Press.
- Burgoon, Brian. 2014. "Immigration, Integration, and Support for Redistribution in Europe?" *World Politics* 66(3): 365-405.
- Calvo, Ernesto and Timothy Hellwig 2011. "Centripetal and Centrifugal Incentives under Different Electoral Systems" *American Journal of Political Science*, 55(1): 27-41.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. IL, Chicago: Chicago University Press.
- Carey, John. M., and Simon Hix. 2011. "The Electoral Sweet Spot: Low-Magnitude Proportional Electoral Systems." *American Journal of Political Science*, 55(2), 383-397.
- Cheibub, José Antonio, Jennifer Gandhi, and James Raymond Vreeland. 2010. "Democracy and Dictatorship Revisited." *Public Choice*, 143(2-1): 67-101.

- Chang, Eric, Yun-han Chu and Wen-chin Wu. 2014. "Consenting to Lose or Expecting to Win? Inter-temporal Changes in Voters' Winner-Loser Status and Satisfaction with Democracy." In Jacques Thomassen (Ed.), *Elections and Democracy: Representation and Accountability*. (pp. 232-253). New York, NY: Oxford University Press.
- Cox, Gary. 1990. "Centripetal and Centrifugal Incentive of Electoral Systems." *American Journal of Political Science*, 34(4): 905-935.
- Curini, Luigi, and Airo Hino. 2012. "Missing Links in Party-System Polarization: How Institutions and Voters Matter." *Journal of Politics*, 74(02): 460-473.
- Curini, Luigi, Willy Jou, and Vincenzo Memoli. 2012. "Satisfaction with Democracy and the Winner-loser Debate: The Role of Policy Preferences and Past Experience." *British Journal of Political Science*, 42(2): 241-261.
- Dallinger, Ursula. 2010. "Public Support for Redistribution: What Explains Cross-national Difference?" *European Journal of Social Policy* 20(4): 333-349.
- Dalton, Russell J. 2008. "The Quantity and the Quality of Party Systems: Party System Polarization, Its Measurement, and Its Consequences." *Comparative Political Studies* 41(7): 899-920.
- De La O, Ana L. and Jonathan A. Rodden. 2008. "Does Religion Distract the Poor? Income and Issue Voting Around the World" *Comparative Political Studies* 41(4-5): 437-476.
- Dion, Michelle L. and Vicki Birchfield. 2010. "Economic Development, Income Inequality, and Preferences for Redistribution" *International Studies Quarterly*, 54(2): 315-334.
- Diamond, Larry. 1999. *Developing Democracy Toward Consolidation*. Baltimore, MD: Johns Hopkins University Press.
- Dow, Jay K. 2001. "A Comparative Spatial Analysis of Majoritarian and Proportional elections." *Electoral Studies* 20(1): 109-25.
- Dow, Jay K. 2011. "Party-system extremism in Majoritarian and Proportional electoral Systems." *British Journal of Political Science* 41(2): 341-361.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Easton, David. 1965. *A Systems Analysis of Political Life*. New York, NY: John Wiley & Sons.
- Erikson, Robert S. 2015. "Income Inequality and Policy Responsiveness" *Annual Review of Political Science* 18: 11-29.
- Esteban, Joan and Debraj Ray. 1994. "On the Measurement of Polarization" *Econometrica* 62(4): 819-851.

- Ezrow, Lawrence. 2008. "Parties' Policy Programmes and the Dog that Didn't Bark." *British Journal of Political Science* 38(3): 479-497.
- Ezrow, Lawrence, and Georgios Xezonakis. 2011. "Citizen Satisfaction with Democracy and Parties' Policy Offerings." *Comparative Political Studies*, 44(8): 1152-1178.
- Finseraas, Henning. 2009. "Income Inequality and Demand for Redistribution: A Multilevel Analysis of European Public Opinion" *Scandinavian Political Studies* 32(1): 94-119.
- Garand, James C. 2010. "Income Inequality, Party Polarization, and Roll-Call Voting in the U.S. Senate." *Journal of Politics* 72(4): 1109-1128.
- Gerring, John, Strom C. Thacker, and Carola Moreno. 2009. "Are Parliamentary Systems Better?" *Comparative Political Studies*, 42(3): 327-359.
- Gilens, Martin. 2005. "Inequality and Democratic Responsiveness." *Public Opinion Quarterly*, 69(5): 778-796.
- Gallagher, Michael, 2015. Election indices dataset at http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/index.php, accessed on Feb, 15, 2016.
- Gingrich, Jane. 2014. "Visibility, Values, and Voters: The Informational Role of the Welfare States" *Journal of Politics* 76(2): 565-580.
- Gingrich, Jane and Ben Ansell. 2012. "Preferences in Context: Micro Preferences, Macro Contexts, and the Demand for Social Policy" *Comparative Political Studies* 45(12): 1624-1654.
- Golder, Matt. 2003. "Explaining Variation in the Success of Extreme Right Parties in Western Europe." *Comparative Political Studies* 36(4):432-66.
- Heath, Anthony F., Roger Jowell and John Curtice. 2001. *The Rise of New Labour: Party Policies and Voter Choices*. Oxford: Oxford University Press.
- Hetherington, Marc J. 2009. "Review Article: Putting Polarization in Perspective." *British Journal of Political Science* 39(2): 413-448.
- Hino, Airo. 2012. *New Challenger Parties in Western Europe*. London: Routledge.
- Hopkins, Daniel J. 2010. "Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition" *American Political Science Review* 104(1): 40-60.
- Houle, Christian. 2009. "Inequality and Democracy: Why Inequality Harms Consolidation but Does Not Affect Democratization." *World Politics*, 61(4): 589-622.

- Howell, Patrick, and Florian Justwan. 2013. "Nail-biters and No-contests: The Effect of Electoral Margins on Satisfaction with Democracy in Winners and Losers." *Electoral Studies*, 32(2): 334–343.
- Hofmann, D. A., & Gavin, M. B. 1998. "Centering decisions in hierarchical linear models: Theoretical and methodological implications for organizational science." *Journal of Management* 24: 623-641.
- Huber, Evelyn and John Stephens. 2001. *Development and Crisis of Welfare State: Parties and Policies in Global Markets*, IL, Chicago: University of Chicago Press.
- Huber, Evelyn, Charles Ragin, John D. Stephens, David Brady, and Jason Beckfield. 2004. *Comparative Welfare States Dataset*, University of North Carolina.
- Indridason, Indridi. H. 2011. "Coalition Formation and Polarisation." *European Journal of Political Research*, 50(5): 689–718.
- Iversen, Torben, and David Soskice. 2001. "An Asset Theory of Social Policy Preferences" *American Political Science Review* 95(4): 875-893.
- Iversen, Torben, and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More Than Others" *American Political Science Review*, 100(2): 165–181.
- Iversen, Torben and David Soskice. 2009. "Distribution and Redistribution." *World Politics* 61 (3): 438-486.
- Iversen, Torben, and David Soskice. 2012. "Information, Social Networks and Interest-based Voting: Consequences for Distributive Politics" Welfare Societies Working Paper No. 06. Bremen, Germany: University of Bremen.
- Iversen, Torben, and David Soskice. 2015 "Democratic Limits to Redistribution: Inclusionary versus Exclusionary Coalitions in the Knowledge Economy." *World Politics*, 67(2): 185-222.
- Kang, WooJin. Forthcoming. "Inequality, the Welfare System and Satisfaction with Democracy in South Korea." *International Political Science Review*.
- Kedar, Orit. 2005. "When Moderate Voters Prefer Extreme Parties: Policy balancing in Parliamentary Elections." *American Political Science Review* 99(2): 185-199.
- Keefer, Philip and Stephen Knack. 2002. "Polarization, Politics and Property Rights: Links between Inequality and Growth." *Public Choice* 111:127-154.

- Keele, Luke, and Nathan J. Kelly. 2006. "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables" *Political Analysis* 14(2): 186–205.
- Kitschelt, Herbert. 1994. *The Transformation of European Social Democracy*. New York: Cambridge University Press.
- Korpi, Walter and Joakim Palme. 2003. "New Politics and Class Politics in the Context of Austerity and Globalization: Welfare State Regress in 18 Countries, 1975–95" *American Political Science Review* 97(3): 425–446.
- Krieckhaus, Jonathan., Byunghwan Son, Nisha Mukerjee Bellinger, and Jason M. Wells. 2014. "Economic Inequality and Democratic Support." *Journal of Politics*, 76(1): 139–151.
- Lachat, Rachet. 2008. "The Impact of Party Polarization on Ideological Voting." *Electoral Studies*, 27(4): 687–698.
- Laver, Michael, and Kenneth Benoit. 2007. "Estimating Party Policy Positions: Comparing Expert Surveys and Hand-Coded Content Analysis." *Electoral Studies* 26(1): 90–107.
- Leigh, Andrew. 2007. "How Closely Do Top Income Shares Track Other Measures of Inequality?" *Economic Journal* 117(524): 619–633.
- Lijphart, Arend. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven, CT: Yale University Press.
- Linde, Jonas and Joakim Ekman. 2003. "Satisfaction with Democracy: A Note on Frequently Used Indicator in Comparative Politics." *European Journal of Political Research*, 42(3): 391–408.
- Lindqvist, Erik, and Robert Östling. 2010. "Political Polarization and the Size of Government." *American Political Science Review* 104(03): 543–565.
- Linz, Juan J. 1990. "The Perils of Presidentialism." *Journal of Democracy* 1(1): 51–69.
- Linz, Juan and Alfred. Stepan. 1996. *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe*, Baltimore, MD: Johns Hopkins University Press.
- Lipset, Seymour M. 1959. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review*, 53(1): 69–105.
- Lupu, Noam. 2013. "Party Brands and Partisanship: Theory with Evidence from a Survey Experiment in Argentina" *American Journal of Political Science* 57(1): 49–64.
- McCarty, Nolan, Keith T. Poole and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge: The MIT Press.

- McCarty, Nolan and Jonas Pontusson. 2009. "The Political Economy of Inequality and Redistribution." In Wiemer Salverda, Brian Nolan and Timothy Smeeding, eds., *Handbook on Economic Inequality*, London: Oxford University Press, 2009.
- Mainwaring, Scott. 2006. "The Crisis of Representation in the Andes." *Journal of Democracy*, 17(3): 13–27.
- Meltzer, Allan and Scott Richard. 1981. "A Rational Theory of the Size of Government" *Journal of Political Economy* 89(5): 914-927.
- Mettler, Suzanne. 2011. *The Submerged State: How Invisible Government Policies Undermine American Democracy*. Chicago: University of Chicago Press.
- Norris, Pippa. 1999. "Institutional Explanations for Political Support." In Pippa Norris (Ed.), *Critical Citizens: Global Support for Democratic Governance* (pp. 217–236). New York, NY: Oxford University Press.
- Persson, Torsten and Guido Tabellini. 2004. "Constitutions and Economic Policy." *Journal of Economic Perspectives*, 18(1): 75–98.
- Plümper, Thomas, Vera E Troeger, and Philip Manow. 2005. "Panel Data Analysis in Comparative Politics: Linking Method to Theory." *European Journal of Political Research* 44 (2): 327-354.
- Pontusson, Jonas, and David Rueda. 2008. "Inequality as a Source of Political Polarization: A Comparative Analysis of Twelve OECD Countries." In *Democracy, Inequality, and Representation*. eds. Pablo Beramendi and Christopher J. Anderson. Russell Sage Foundation.
- Pontusson, Jonas, and David Rueda. 2010. "The Politics of Inequality: Voter Mobilization and Left Parties in Advanced Industrial States" *Comparative Political Studies* 43(6): 675-705.
- Powell, Bingham and Guy Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context" *American Journal of Political Science* 37(2): 391-414.
- Rehm, Philip. 2009. "Risks and Redistribution: An Individual-Level Analysis." *Comparative Political Studies* 42(7): 855–881.
- Rehm, Philip. 2011. "Social Policy by Popular Demand" *World Politics* 63(2): 271-299.
- Rothstein, Bo, and Eric Uslaner. 2005. "All for All: Equality, Corruption, and Social Trust." *World Politics*, 58(1): 41–72.

- Rueda, David and Daniel Stegmueller. Forthcoming. "The Externalities of Inequality: Fear of Crime and Preferences for Redistribution in Western Europe." *American Journal of Political Science*
- Scheve, Kenneth, and David Stasavage. 2006. "Religion and Preferences for Social Insurance." *Quarterly Journal of Political Science* 1(3): 255–286.
- Schmidt, Alexander W. and Dennis C. Spies. 2014. "Do Parties "Playing the Race Card" Undermine Natives' Support for Redistribution? Evidence from Europe" *Comparative Political Studies* 47(4): 519-549.
- Shayo, Moses. 2009. "A Model of Social Identity with an Application to Political Economy: Nation, Class, and Redistribution." *American Political Science Review* 103(2): 147–174.
- Singh, Shane. 2014. "Not All Election Winners Are Equal: Satisfaction with Democracy and the Nature of the Vote." *European Journal of Political Research*, 53(2): 308–327.
- Singh, Shane, Ekrem Karakoc, and Andre Blias. 2012. "Differentiating Winners: How Elections Affect Satisfaction with Democracy." *Electoral Studies*, 31(1): 201–211.
- Soci, Anna, Anna Maccagnan, and Daniela Mantovani. 2014. "Does Inequality Harm Democracy? An Empirical Investigation on the UK." Quaderni - Working Paper DSE N°935.
- Solt, Frederick. 2009. "Standardizing the World Income Inequality Database." *Social Science Quarterly* 90(2): 231-242.
- Solt, Frederick. 2014. "The Standardized World Income Inequality Database." Working paper. SWIID Version 5.0, October 2014.
- Somer-Topcu, Zeynep. 2009. "Timely Decisions: The Effects of Past National Elections on Party Policy" *Journal of Politics* 71(1): 238-248.
- Steenbergen, Marco R. and Bradford S. Jones. "Modeling Multilevel Data Structures." *American Journal of Political Science*, 46(1): 218-237.
- Stiglitz, Joseph E. 2012. *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W. W. Norton & Company.
- Strøm, Kaare, Wolfgang C. Müller and Torbjörn Bergman eds. 2008. *Cabinets and Coalition Bargaining: The Democratic Life Cycle in Western Europe*. Oxford: Oxford University Press.
- Tavits, Margut. 2007. "Principle vs. Pragmatism: Policy Shifts and Political Competition." *American Journal of Political Science* 51(1): 151-165.

- Tavits, Margit and Joshua D. Potter. 2015. "The Effect of Inequality and Social Demand on Party Strategies." *American Journal of Political Science*, 59(3): 744-758.
- Theriault, Sean. 2008. *Party Polarization in Congress*. New York: Cambridge University Press.
- Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.
- Tsebelis, George, and Eric C. C. Chang. 2004. "Veto Players and Structure of Budgets in Advanced Industrialized Countries" *European Journal of Political Research* 43(3): 449-476.
- Vowles, Jack. 1995. "The Politics of Electoral Reform in New Zealand." *International Political Science Review* 16(1): 95-115.
- Western, Bruce. 1998. "Causal Heterogeneity in Comparative Research: A Bayesian Hierarchical Modeling Approach." *American Journal of Political Science* 42(4): 1233-1259.
- Yu, Bingxin, Eduardo Magalhaes, and Samiel Benin. 2015. "Statistics on Public Expenditures for Economic Development (SPEED)", International Food Policy Research Institute (IFPRI)
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. MA, Cambridge: Cambridge University Press.