

**DIVIDED WE VOTE...  
TURNOUT DECLINE IN ESTABLISHED DEMOCRACIES:  
EVIDENCE FROM COSTA RICA**

by

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Submitted to the Graduate Faculty of  
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of the requirements for the degree of  
Doctor of Philosophy

University of Pittsburgh

2016

UNIVERSITY OF PITTSBURGH  
DIETRICH SCHOOL OF ARTS AND SCIENCES

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Ronald Alfaro-Redondo, PhD

University of Pittsburgh, 2016

Turnout has decreased in 23 out of 36 established democracies since 1945. Among all worldwide cases Costa Rica is a good laboratory for studying turnout oscillations. During three decades between 1958 and 1994, political participation average rates remained high in a comparative perspective. Following that trend, one would easily predict that individuals socialized during that period of time must replicate automatically their parents' and grandparents' levels of high political activism. However, turnout patterns in the country since 1998 do not fit very well in that story. Older voters are no longer voting at the rates they usually did and the younger are entering into politics during times of lower participation. The combination of these two factors can have big deleterious and long-lasting effects on turnout trends.

Estimating the causal relationship between consecutive voting decisions has proven to be intrinsically difficult for social scientists. Drawing on an exceptionally rich and unique turnout dataset and a mixed-methods approach that includes longitudinal multivariate analysis, face-to-face interviews and geospatial statistics this contribution seeks to explain why in Costa Rica, currently the oldest and most stable democracy in Latin America, turnout has declined? And more importantly: what factors drive these changes?

Individual characteristics, although still relevant in static theories regarding turnout determinants, have proved to be insufficient for understanding why individuals' turnout behavior varies over time. Instead, I theorize that the partisan (group) identity that makes people turn out because they are loyal to the party in a context of conflict produces stronger motivation but it is activated selectively, and it only works in a context of "threat" or polarized deliberation. Nevertheless, these incentives may change over time, they may increase or decrease under certain circumstances impacting turnout. Essentially, the more polarized the electoral competition, the easier it will be for citizens to cast their vote.

A polarized deliberation, the key factor in my causal story, creates the conditions for the activation of strong partisan identities that stimulate voters' mobilization to the polls. Therefore, people vote more in a context of polarization. Conversely, if polarization declines, people will vote less.

## TABLE OF CONTENTS

<b>PREFACE</b> .....	<b>XII</b>
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
<b>1.1 TURNOUT CHANGES IN ESTABLISHED DEMOCRACIES</b> .....	<b>9</b>
<b>1.1.1 Worldwide</b> .....	<b>9</b>
<b>1.1.2 Turnout changes in Costa Rica</b> .....	<b>14</b>
<b>1.2 METHODOLOGICAL APPROACH OF THE DISSERTATION</b> .....	<b>16</b>
<b>1.2.1 Data Collection and Description</b> .....	<b>18</b>
<b>1.2.2 Chapters Summary</b> .....	<b>22</b>
<b>2.0 TURNOUT AND ITS DETERMINANTS: A GENERAL OVERVIEW</b> .....	<b>25</b>
<b>2.1.1 What explains turnout behavior?, sociodemographic explanations</b> .....	<b>27</b>
<b>2.2 DATA DESCRIPTION AND BASELINE MODELS</b> .....	<b>32</b>
<b>2.3 FINDINGS</b> .....	<b>34</b>
<b>2.4 CONCLUSIONS</b> .....	<b>37</b>
<b>3.0 IS TURNING OUT TO VOTE A HABIT?</b> .....	<b>39</b>
<b>3.1 THEORETICAL FRAMEWORK</b> .....	<b>41</b>
<b>3.1.1 Voting as Habit</b> .....	<b>41</b>
<b>3.1.2 Relocation and Turnout Habits</b> .....	<b>48</b>
<b>3.1.2.1 Relocation in a broader perspective: mobility in other contexts</b> .....	<b>55</b>
<b>3.1.2.2 Residential Mobility in Costa Rica</b> .....	<b>59</b>
<b>3.2 DATA DESCRIPTION AND STATISTICAL MODELS</b> .....	<b>64</b>
<b>3.3 MULTIVARIATE ANALYSIS AND FINDINGS</b> .....	<b>66</b>
<b>3.4 CONCLUSIONS</b> .....	<b>77</b>
<b>4.0 LIKE PARENTS LIKE CHILDREN: PARENTAL INFLUENCE ON TURNOUT</b> .....	<b>79</b>
<b>4.1 THEORETICAL FRAMEWORK</b> .....	<b>86</b>
<b>4.1.1 Parental Effects</b> .....	<b>86</b>

4.2	<b>CHILDREN EARLY EXPERIENCES WITH POLITICS .....</b>	<b>99</b>
4.2.1	<b>Growing up in Democracy .....</b>	<b>99</b>
4.2.2	<b>Are parents of new voters habitual voters as well?.....</b>	<b>101</b>
4.3	<b>DATA DESCRIPTION AND STATISTICAL MODELS.....</b>	<b>103</b>
4.4	<b>MULTIVARIATE ANALYSIS AND RELEVANT FINDINGS .....</b>	<b>110</b>
4.5	<b>CONCLUSIONS.....</b>	<b>117</b>
5.0	<b>TWO BECOME ONE...: SPOUSES' INFLUENCE ON VOTERS' TURNOUT .....</b>	<b>120</b>
5.1.1	<b>Literature review .....</b>	<b>125</b>
5.2	<b>DATA DESCRIPTION AND MODEL SPECIFICATION.....</b>	<b>134</b>
5.3	<b>KEY FINDINGS.....</b>	<b>136</b>
5.4	<b>CONCLUSIONS.....</b>	<b>148</b>
6.0	<b>TURNOUT IN POLARIZED DELIBERATION SETTINGS .....</b>	<b>151</b>
6.1	<b>MACRO EXPLANATIONS TO TURNOUT CHANGES.....</b>	<b>155</b>
6.2	<b>POLARIZATION AND TURNOUT .....</b>	<b>162</b>
6.3	<b>HISTORICAL BACKGROUND OF THE CASE STUDY.....</b>	<b>169</b>
6.4	<b>DELIBERATION MEASURE AND MODELS SPECIFICATION.....</b>	<b>174</b>
6.5	<b>MAIN FINDINGS.....</b>	<b>180</b>
6.5.1	<b>“Divided we vote...” in comparative perspective.....</b>	<b>184</b>
6.6	<b>CONCLUSIONS.....</b>	<b>192</b>
7.0	<b>TURNOUT IN AN ERA OF (DE)POLARIZATION: CONCLUDING REMARKS.....</b>	<b>194</b>
7.1	<b>CENTRAL FINDINGS .....</b>	<b>195</b>
7.2	<b>FUTURE RESEARCH AGENDA .....</b>	<b>203</b>
7.2.1	<b>Turnout changes in the long-term.....</b>	<b>203</b>
7.2.2	<b>Turnout reductions or changes in consolidating democracies .....</b>	<b>204</b>
7.2.3	<b>Deliberation measure.....</b>	<b>204</b>
7.2.4	<b>Tense equilibrium in democratic regimes.....</b>	<b>205</b>
	<b>APPENDIX A.....</b>	<b>207</b>
	<b>VARIABLES DESCRIPTION .....</b>	<b>207</b>

<b>Dependent variable.....</b>	<b>207</b>
<b>Independent variables .....</b>	<b>207</b>
<b>Interactive predictors .....</b>	<b>211</b>
<b>APPENDIX B.....</b>	<b>212</b>
<b>APPENDIX C.....</b>	<b>217</b>
<b>BIBLIOGRAPHY.....</b>	<b>218</b>



## LIST OF TABLES

Table 1.1: Individuals’ voting behavior in the previous election (at time t-1).....	22
Table 2.1: Baseline Models for Explaining Voter Turnout.....	34
Table 3.1: Internal Immigrants (%) in Costa Rica over time using census data .....	61
Table 3.2: Voters who moved between elections in Costa Rica .....	63
Table 3.3: Habitual Voting and Relocation Models .....	66
Table 3.4: Habitual Voting and Relocation Models with first-time voters in 1994 and after .....	70
Table 3.5: Predicted probabilities for future turnout at different voters’ profiles .....	76
Table 4.1: Number of times mothers, fathers and individuals voted. 1994-2010. ....	102
Table 4.2: Voters and Parents identified in the network data .....	105
Table 4.3: Parental Effects on Voters’ Turnout Models .....	111
Table 4.4: Parental Effects on Voters’ Turnout Models if both Mother and Father were successfully identified .....	116
Table 5.1: Model with biased estimates.....	137
Table 5.2: First Stage Model.....	144
Table 5.3: Second stage Models .....	146
Table 5.4: Predicted probabilities of voters’ turnout based on spouses’ political behavior.....	147
Table 6.1: Deliberation effects on Turnout Models.....	181
Table Appendix B.1: Descriptive Statistics for Existed Mother (all voters) .....	212
Table Appendix B.2: Descriptive Statistics for Existed Father (all voters) .....	212
Table Appendix B.3: Descriptive Statistics for Both Parents Existed (all voters).....	212
Table Appendix B.4: Descriptive Statistics for Only Mother Voted (all voters).....	212
Table Appendix B.5: Descriptive Statistics for Only Father Voted (all voters) .....	213
Table Appendix B.6: Descriptive Statistics for Both Parents Voted (all voters).....	213
Table Appendix B.7: Descriptive Statistics for Unknown Parents in the dataset (all voters).....	213

Table Appendix B.8: Descriptive Statistics for Times since eligible (all voters) .....	213
Table Appendix B.9: Descriptive Statistics for Existed Mother (first-time voters subpopulation) .....	214
Table Appendix B.10: Descriptive Statistics for Existed Father (first-time voters subpopulation).....	214
Table Appendix B.11: Descriptive Statistics for Both Parents Existed (first-time voters subpopulation) .....	214
Table Appendix B.12: Descriptive Statistics for Only Mother Voted (first-time voters subpopulation) .....	214
Table Appendix B.13: Descriptive Statistics for Only Father Voted (first-time voters subpopulation).....	215
Table Appendix B.14: Descriptive Statistics for Both Parents Voted (first-time voters subpopulation).....	215
Table Appendix B.15: Descriptive Statistics for Unknown Parents in the dataset (first-time voters subpopulation) .....	215
Table Appendix B.16: Descriptive Statistics for Times since eligible (first-time voters subpopulation).....	215
Table Appendix B.17: Number of cases of Only Mother Voted when both parents were fully identified.....	216
Table Appendix B.18: Number of cases of Only Father Voted when both parents were fully identified .....	216
Table Appendix B.19: Number of cases of Both Parents Voted when both parents were fully identified.....	216
Table Appendix B.20: Number of cases of Only Mother Voted when only mother was fully identified.....	216
Table Appendix B.21: Number of cases of Only Father Voted when only father was fully identified .....	216

## LIST OF FIGURES

Figure 1.1: Turnout rates worldwide 1945 - 2015 .....	10
Figure 1.2: Voter Turnout (%) among free democratic countries in parliamentary elections .....	11
Figure 1.3: Voter Turnout (%) among free democratic countries in presidential elections .....	12
Figure 1.4: Voter Turnout (%) among free democratic countries and compulsory voting .....	13
Figure 1.5: Turnout rates in Costa Rica 1953-2014.....	14
Figure 1.6: Abstention rates in 2006 presidential election by municipality.....	15
Figure 2.1: Predicted probabilities of voting at different combinations of age and gender .....	35
Figure 2.2: Predicted probabilities of voting at different combinations of gender and cohort .....	36
Figure 3.1: Conditional effects coefficients of Turnout (t-1) at different values of First Turnout and Relocation .....	72
Figure 3.2: Predicted probabilities for turnout mediated by first turnout and relocation.....	73
Figure 4.1: Conditional coefficients for voters' turnout based on parents' voting behavior and time since being eligible for the first time .....	113
Figure 4.2: Predicted probabilities for voters' turnout based on parents' voting.....	115
Figure 5.1: Absolute number of marriages and its rate per 1.000 people in Costa Rica. 1950-2014.....	132
Figure 5.2: Turnout rates by marital status groups. 1982-2010 .....	133
Figure 6.1: Respect of counterarguments in Costa Rica. 1900-2012.....	178
Figure 6.2: Predicted probabilities for voters' turnout based on gender, eligibility and respect for counterarguments.....	184
Figure 6.3: Voters' turnout and respect of counterarguments in presidential elections.....	186
Figure 6.4: Voters' turnout and respect of counterarguments in parliamentary elections .....	187
Figure 6.5: Respect of counterarguments in Latin America 1953-2010 and 1995-2010.....	189
Figure 6.6: Turnout and respect of counterarguments in free democratic countries (Freedom House).....	190
Figure 6.7: Turnout and respect of counterarguments in Eastern European countries .....	191

## PREFACE

I would not be able to finish this personal and professional ambition without the help and support of many people, with whom I am very grateful.

First among many are my family members. My greatest debt of gratitude is to my wonderful wife, Anne Letendre. She has been always a constant source of inspiration, confidence, love, motivation and patience. Without her, this long journey would not have been possible. Her support helped me navigate the many difficult times in graduate school. My kids motivated me to accomplish my goals. Mariaceleste was born within the first weeks of the program and Benjamín two years after. They have taught me, in their own fascinating way, that although finishing a dissertation is a great thing, there are some many important and happy things out there that matter much more than that. It is with great appreciation that I dedicate this dissertation to all them.

My advisors Aníbal Pérez-Liñán and Scott Morgenstern taught me first-hand the real meaning of what a mentor is and does. They did an extraordinary job with invaluable intellectual guidance, suggestions and encouragement. I am particularly grateful for the significant amount of time they dedicated to review, criticize and comment on my chapters and provide me extremely useful insights. Both are great mentors and role models. I also thank the other members of my dissertation committee, Jennifer Bricks and Victoria Shineman, for long conversations, encouragement, and practical advice.

Other people have been helpful, either through comments on the project, or because of interactions or instruction that continue to benefit me. I owe a special debt of gratitude to Jorge Vargas Cullell, my colleague in Programa Estado de la Nación (PEN), one of the first who suggested me to study abroad. His sharp comments on this and other projects have taught me to think like a

political scientist. Miguel Gutiérrez, the former PEN director, also supported my professional ambitions.

I also thank Fernando Zeledón, Steffan Gómez, Constantino Urcuyo, and Ciska Raventós for reading early drafts of some chapters of this dissertation and providing useful feedback. Other people took the time to discuss my project or share data. I especially thank Luis Diego Brenes, Mitchell Seligson and Fabrice Lehoucq.

The project also benefitted from feedback received at presentations I made at several Midwest Political Science Association and other meetings, including the *Comparative Politics Reading Group* in Pittsburgh in which people like me share their ideas and preliminary findings to get free feedback. I also received feedback and suggestions in presentations at University of Costa Rica and Electoral Supreme Court in Costa Rica. I gratefully acknowledge the financial support from the Department of Political Science at the University of Pittsburgh, the Dietrich School of Arts and Sciences at the University of Pittsburgh, and the Center for Latin American Studies at the University of Pittsburgh. Also, I thank the Department of Political Science and the Office Of International Affairs at the University of Costa Rica. I received fellowships from all these institutions which allowed me to focus full time on my dissertation research and other research projects.

During the course of my fieldwork in Costa Rica, I accumulated many debts. I especially thank all the persons I contacted for the interviews and accepted to share their experiences with me. These interviews were crucial for my research project. Without the knowledge I compiled in these conversations I would not be able to develop the theoretical argument of chapter 6.

In Pitt, I was also fortunate to share time with several great friends. In particular I thank Yu Xiao, Bruno Hoepers, Eric Leop, Hakan Gunaydin, Néstor Castañeda-Angarita, Hirokazu

Kikuchi, Yen-Pin Su, Alejandro Trelles, Natalia Zacipa, Nicolás Restrepo, Soledad Díaz, Lulú Barajas, Beatriz Maizeiro and Javier Santiesteban.

Finally, I thank my family, especially my parents Dionisio and Cecilia and my siblings César, Daniel, and María Angélica for their love and support. I thank both my father and mother for leaving such a big “footprint” in my life and taught me discipline, effort and courage. I also thank my grandmothers Rosmery and María and the memory of my grandfathers Abraham and José Francisco with whom I talk about this project at some point.

*To Anne, Mariaceleste (“mana”) and Benjamín (“jamín”)*

## 1.0 INTRODUCTION

Why do we see a secular turnout decline over time in many established democracies and, which micro and macro factors can help us to explain this downward trend are the two main puzzles I address in this contribution. Voter turnout has decreased in 23 out of 36 established democracies worldwide in the last fifty years, including a ten percentage point drop in Costa Rica, my in-depth case study. Individuals' political behavior persistence in the long-run has intrigued scholars for decades. Although, why do people vote is definitely not by any means a new research topic, a careful examination of the vast amount of literature demonstrates that explaining aggregate turnout changes over time remains as one of the classic political science challenges.

Turnout reductions are not trivial in democratic regimes. They have serious implications for the survival and consolidation of democracy. As stated by *The Latin American Voter* recently, participating in elections can inculcate good habits of citizenship and, as exemplars of democratic politics, elections can spread and reinforce democratic values (Carlin et.al 2015). If under typical circumstances big portions of the electorate do not show up at the polls this may call into question the legitimacy of the authorities. Furthermore, episodes of lower turnout can be interpreted as showing fragile voters' commitments to democratic norms and values. In addition, the circumstances related to lower turnout may cause an enduring effect on individuals' political behavior, alienating disenchanted voters from the political system. In sum, falling turnout is often seen as signal of voters' dissatisfaction or disengagement with the political system. Especially for



younger voters, this could have long term and dramatic impacts on support for and viability of the political system in the long-run. Finally, in democracies elections are seen as the formal mechanisms to contest for power rather than via rebellion and/or bullets (Carlin et.al. 2015).

The worst case scenario would be one in which this pattern could extend individuals' apathy toward politics during lifetime, causing low turnout to freeze for decades. Therefore, if we want to understand the implications of turnout decline in established democracies, we first need to comprehend the conditions under which these changes take place. This contribution seeks to explain why in Costa Rica, currently the oldest and most stable democracy in Latin America, turnout has declined, and more importantly, what factors drive these changes?

In this dissertation I build a theoretical framework that combines insights from the study of the micro-foundations of political behavior, the influence of political socialization agents like parents and partners and life-cycle changes on voters' political participation, and the role of macro-forces that determine individuals' likelihood to turn out to vote, to provide novel and better explanations of the dynamics of turnout.

If political participation rates were higher in the past as they have been well documented, where is this turnout decline coming from? Drawing on an exceptionally rich and unique turnout dataset that includes the universe of voters I identify several mechanisms that can account for the decline we have seen. Turnout reductions in the long run can mainly be explained by changes in the political behavior patterns of the eligible population. The magnitude and implications of these changes varies depending upon the segment of the electorate we are looking at. Before fully describing these mechanisms we cannot ignore the fact that the electorate is a dynamic group that consists of at least three different kinds of people: those who remain eligible during several

electoral cycles, those who either leave that population or enter to the electorate at any time point. The first group is bigger and the other two are considerably smaller.

I have identified at least two different mechanisms that could account for the aggregate turnout decline over time. The first of these mechanisms refers to the process experienced by what are call here as high-frequency voters. Among a significant portion of the electorate who remained eligible during several electoral cycles, experiencing of being socialized during a critical juncture prompts an effect that makes voters more likely to vote every time they can, a condition that leaves a strong behavioral legacy that remains in place for a long period of time. As a result of the kind of political context under which they achieved eligibility they were early and easier adopters of strong partisan identities. During several elections they usually cast a vote and got engaged in politics in a very energetic way. Most of the time they ended up voting, even if the elections were not very salient.

Two things can happen with these high-frequency voters. On one hand, as they get older some of them naturally drop from the electorate because they get sick or have difficulties to go to the polls. On the other hand, some people who used to vote at higher rates in the past got demobilized gradually and showed up at lower rates. When the time to transmit political values and behaviors to younger voters arrived, preparing them for their entrance to politics, rather than transferring solid political participation role models they, instead, transmitted weak political identities and lower turnout dispositions. This change does not necessarily impact turnout rates immediately but incubates a lagged effect on voters' turnout pushing down political participation rates later on.

The second mechanism is related to the incorporation of new voters to the eligible population. The younger generations of voters, those new electors that will replace older ones years

later, are entering politics during times of lower participation. Thus, they are incorporating to the electorate as a low-frequency voters. Achieving eligibility under that circumstances determines their entry turnout threshold and future actions during subsequent turnout exposures. This may cause turnout rates to “freeze” in the long-term. The new ones will be low-frequency voters because they entered to the electorate when turnout has already started to decline. Due to, on average, aggregate turnout rates are lower than before, they lack of the stimulus that boost and mobilize people to the polls. In addition to that, partisan identities are not as salient for them as they were for older voters. They are not fully aware about what contending parties stand for and would do if elected (Carlin et.al. 2015). Therefore, they are not easily mobilized by party machineries. Hence, they are less committed to participate in politics. Given that first turnout exposures leave a “footprint” on individuals’ future behavior, one may expect that lower turnout rates will remain in invariable for several decades.

In sum, the fact that high-frequency voters either drop from the population due to the generational replacement process or because some of them vote at lower rates than before, combined with a steady increasing trend of low-frequency voters entering to the population can account for the aggregate turnout decline over time. The combination of these two factors can have big deleterious and long-lasting effects on turnout trends. Both of these are related to a lack of a high polarizing event. Traditionally, political behavior studies have devoted more effort to explain why some individuals are more likely to cast their vote than others under given circumstances. Less attention has been paid to elucidate why people change their voting patterns over time.

Identifying and disentangling these mechanisms among groups of voters and across time is a very difficult mission to accomplish. Knowing that, I chose to develop this research based on a sequential steps strategy. More concretely, I decided to start from very basic theoretical

assumptions and methods in the initial chapters in order to build primary knowledge and go beyond that in later chapters refining both key aspects by incorporating more complex theories and much more sophisticated approaches. In other words, I build a theoretical story about the weakness of the models in every chapter and I show that all of them are missing a key factor that I add in the last chapter.

Hence, this study aims to isolate these effects and provide an innovative approach for studying voters' political behavior in a dynamic perspective. Looking at voters' cohorts does allow me to emphasize in the level of polarization at the period when voters entered politics in the last chapter. This strategy allowed me to determine under which circumstances individuals develop habitual voting; the role played by politically active parents at the beginning of voters' turnout exposures; the reciprocal effects of husbands and wives that reinforce political participation; and the transcendental influence of a polarized competition for mobilizing voters to the polls.

The architecture of this dissertation which reflects this research logic consists of two broad sections. The first one, that includes chapters 2 through 5, relies heavily in micro variables traditionally proposed to explain political participation. The results in these four chapters mentioned suggest two things. First, the findings of the micro explanations of turnout are quite consistent with what the specialized literature has shown. Second, in those cases in which I transform individuals-level based mechanisms -like age, habituation and parental influence- adapting them for explaining turnout changes over time, they also proved to expand our knowledge regarding individuals' political behavior persistence.

Despite that, individual-level based variables -including both the original and their transformed version I implemented here- have a serious drawback. They are undeniably useful for providing static turnout explanations, which basically means that they can help us to understand

voters' political participation at a given certain time point. Unfortunately, they do not fully capture the universe of factors that help us to explain aggregate turnout reductions over time. The practical implication of this is that turnout changes in the long-run are partially explained by individual-level attributes and political socialization processes. Therefore, there must be something else driving voters' likelihood to go to the polls.

In the second big section of the dissertation I argue that a macro-factor is the key determinant of individuals dispositions to vote. The causal story in chapter 6 holds that episodes of polarized deliberation structure party competition by establishing powerful incentives to mobilize voters to the polls throughout the emergence of strong political identities. When these incentives erode the motivations to turn out decline in the long run.

I theorize that the partisan (group) identity that makes people turn out because they are loyal to the party in a context of conflict produces stronger motivation but it is activated selectively, and it only works in a context of "threat" or polarized deliberation. Nevertheless, these incentives may change over time. They increase or decrease under certain circumstances impacting turnout. Essentially, the more polarized the electoral competition the more motivated citizens will feel to cast their vote. This will make individuals more likely to get involved in politics. Hence, politicized identities that become salient in polarized contexts to shape voters' political behavior trigger higher turnout rates.

Polarized deliberation, the key factor in this story, creates the conditions for the activation of strong partisan identities that stimulate voters' mobilization to the polls. Therefore, people vote more in a context of polarization. Conversely, if polarization declines, people will vote less. Despite the fact that extreme polarization can destabilize democracy (Mainwaring and Pérez-Liñán 2005), under given circumstances it may be beneficial for voters' mobilization. A polarized

competition setting makes party differences more salient and motivates voters to ground their electoral choices in identities, issues or outputs (Carlin et. al. 2015). Under circumstances of substantial turnout reductions, like those experienced in Costa Rica since 1998, this kind of approach can elucidate and provide better explanations of the factors associated with these changes.

Costa Rica is an ideal laboratory to study turnout changes for several reasons. First, there is a long tradition of free and fair electoral contests since early 1950s. Also, Costa Rica is a stable nation and the oldest established democracy in Latin America. Second, voter registration in the country is automatic and there is a record of turnout for the universe of voters. One can expect that if voter turnout is conditioned by the formation of habitual voting, individual and political factors, one must find evidence in the most stable democracy in Latin America.

In terms of broader significance, the expectation is that my study of Costa Rica will establish relevant findings for other societies that have experienced major changes in turnout. In fact, two thirds of the established democracies around the globe, those with at least 20 consecutive years with no political breakdowns, have undergone extensive reductions in political participation. Finding explanations of the current trends in turnout there will contribute to illuminate what factors drive this phenomenon and why we see similar patterns in other places. Therefore, this is a perfect timing for studying the impacts turnout changes may have in one of them and their long-term implications.

Furthermore, the theory and methods in this dissertation will also be pertinent for scholars in other disciplines or fields in at least three different issues. First, my research will contribute to political psychology approaches that have conceptualized habits as repetitive actions and suggest that they can be disrupted by changes in the contexts in which those actions are usually performed.

Also, the assumption that voting is a social action affected by the tendency of individuals' networks to participate, postulated by political socialization theories, will benefit from my study as well. Finally, my dissertation will expand the literature and knowledge on deliberation and polarization examining how macro-political changes impact voter turnout in the long-run.

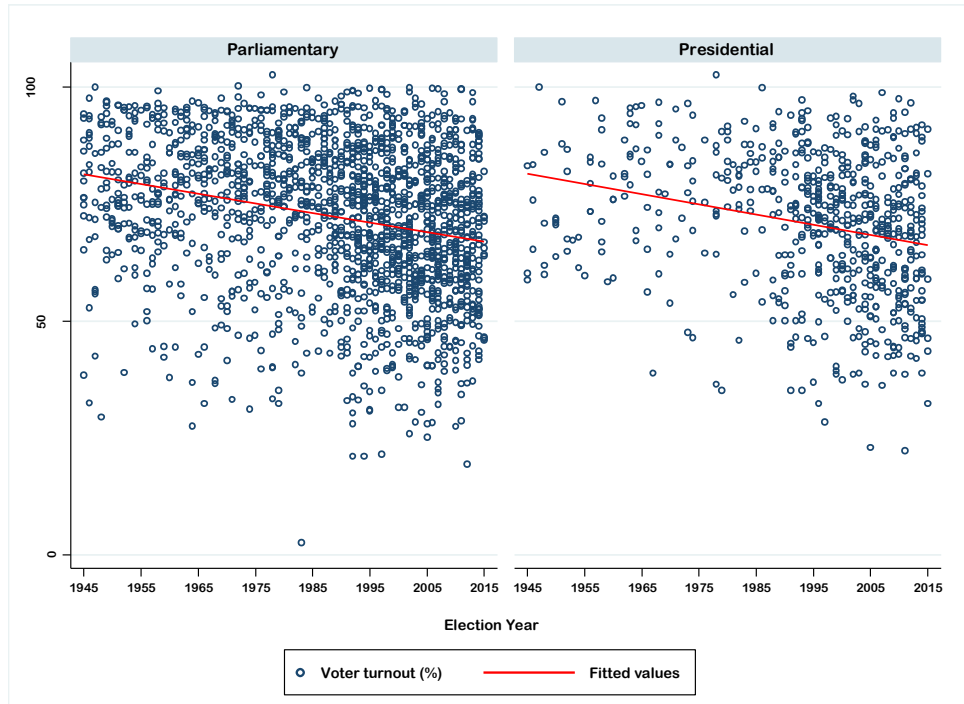
## 1.1 TURNOUT CHANGES IN ESTABLISHED DEMOCRACIES

### 1.1.1 Worldwide

How has turnout changed in the long run worldwide? Before analyzing which factors can explain individuals' propensity to show up at the polls, this section provides a comprehensive -historical and geographical, view of the aggregate turnout trends in the last seventy years around the globe. Using the *Voter Turnout Dataset* compiled by the International Institute for Democracy and Electoral Assistance with 2,608 country observations in total (IDEA, available here: <http://www.idea.int/vt/viewdata.cfm>) I plot turnout rates for all 199 countries included in the dataset, separated by presidential and parliamentary elections, between 1945 and 2015. The trends in figure 1.1 are quite clear: turnout has declined over time and the reduction seems to be steeper in parliamentary elections than presidential ones.



Figure 1.1: Turnout rates worldwide 1945 - 2015



The previous interpretation can be misleading and problematic because figure 1.1 ignores, for illustration purposes, countries' democratic status at different points in time. Given the fact that elections are held in some non-democratic countries as well it is better to refine the description by plotting turnout rates in democratic nations. Drawing in the well-known Freedom House classification of political regimes, figures 1.2 and 1.3 show voter turnout among "free" and democratic cases. As it becomes evident, turnout changes are more prominent in presidential contests.

Figure 1.2: Voter Turnout (%) among free democratic countries in parliamentary elections

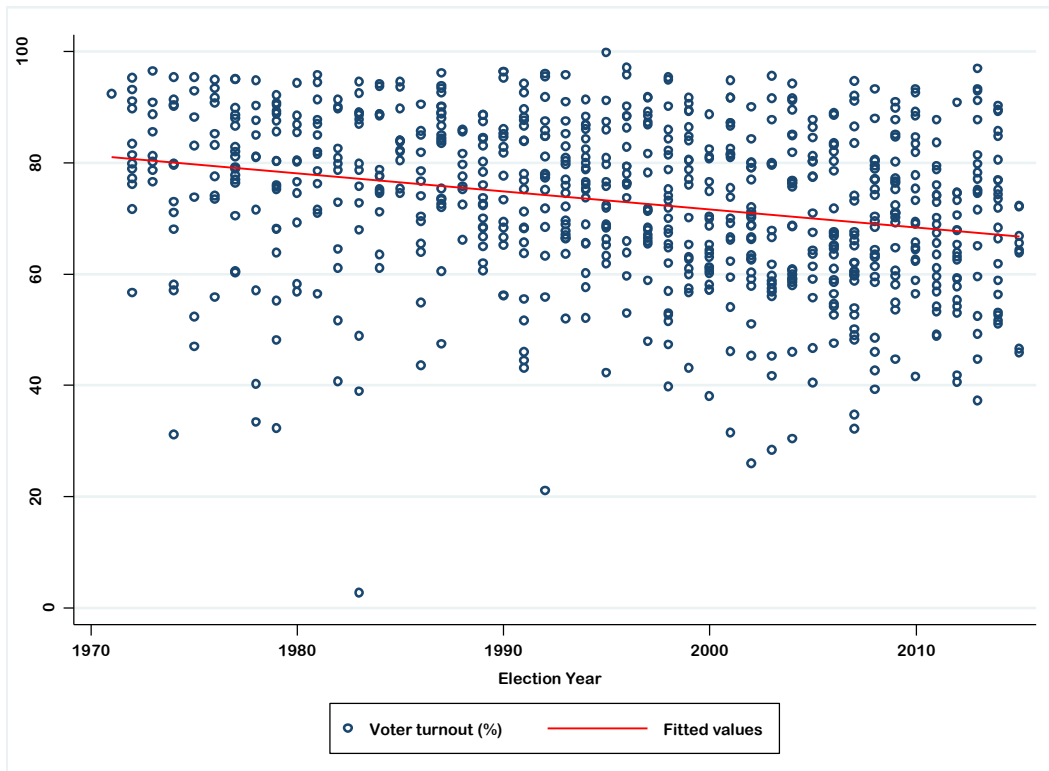
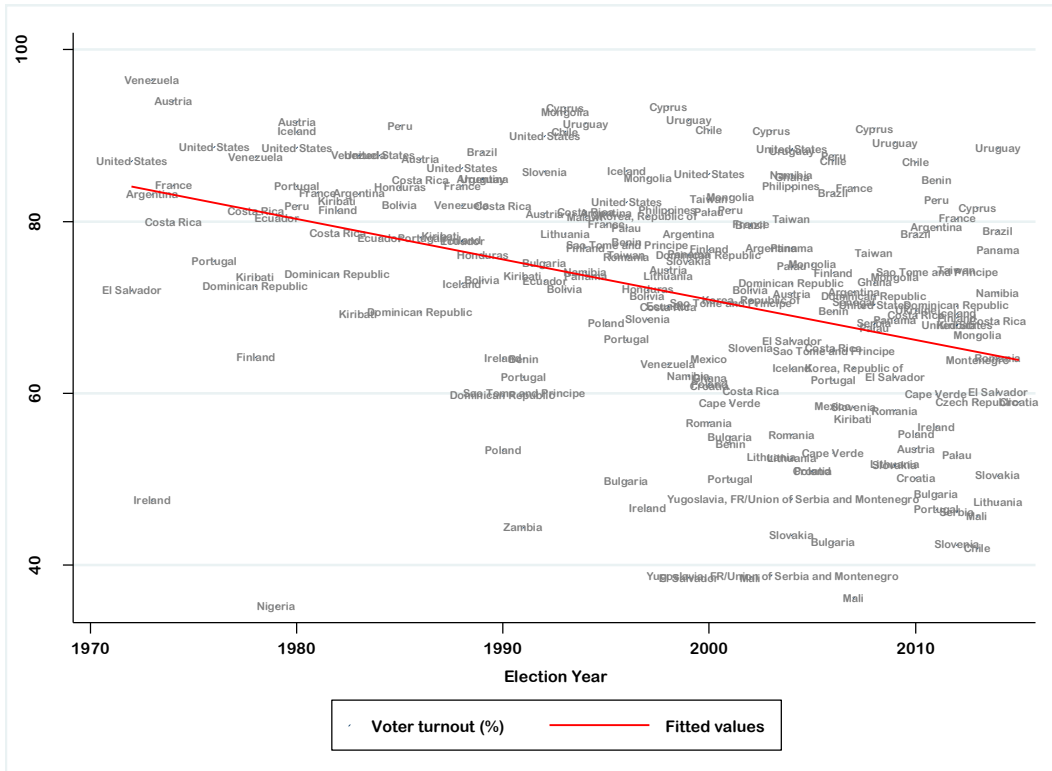
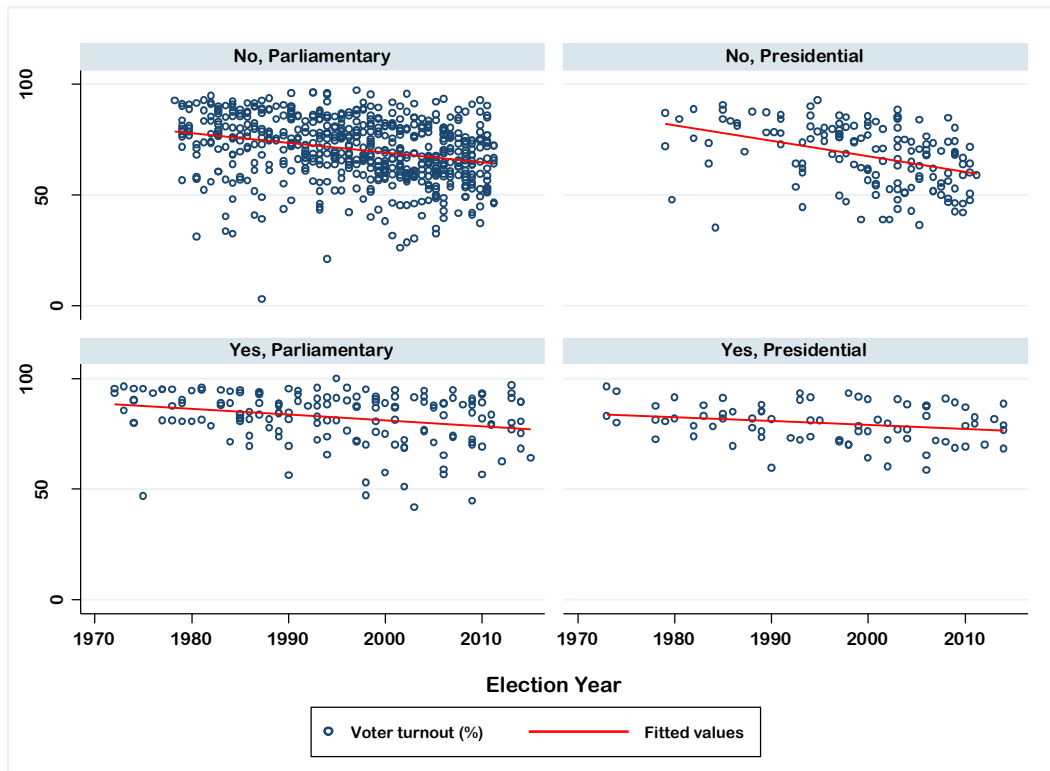


Figure 1.3: Voter Turnout (%) among free democratic countries in presidential elections



But again, this leads us to examine whether another factor, like compulsory voting, is driving these results? The literature has demonstrated that individuals where compulsory voting is enforced tend to vote at higher rates than in non-compulsory cases (Hirczy 1994, Franklin 1999, Blais 2006, Hill 2006, Carreras 2016). Data available suggest that the decrease in political participation over time is bigger among countries without compulsory voting, and especially in presidential elections, than those with enforced political participation.

Figure 1.4: Voter Turnout (%) among free democratic countries and compulsory voting

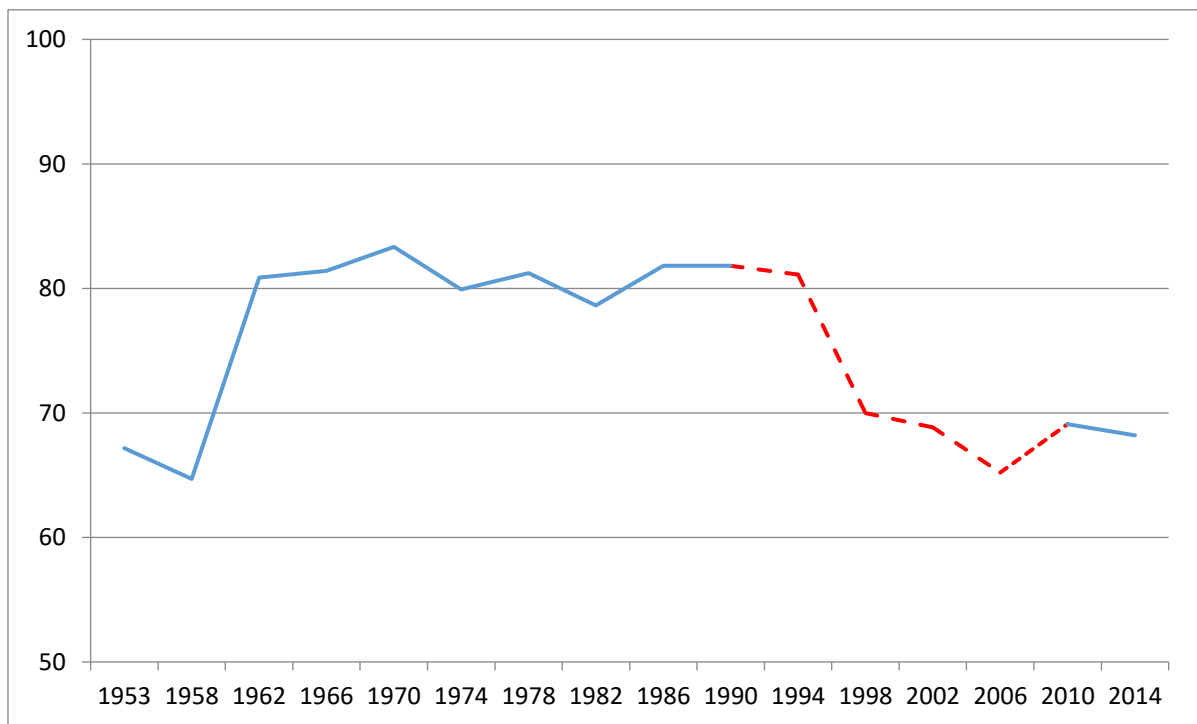


When I limit the analysis to established democracies, which basically means those countries classified as democracies in 2010 and have been democratic more than 20 consecutive years, the empirical evidence confirms two previous findings. First, the drastic reduction mature democracies have experienced in voter turnout in the long run. Second, the trend is very similar when we compare presidential and parliamentary elections. Overall, the description I have provided reveals the long-term slide of political participation worldwide in the last seventy years. The implications for the survival and consolidation of democracy of this all-over-the-place pattern may vary among cases due to countries’ political background and can leave a big “footprint” in those new voters who enter to politics with turnout as it lowest rates ever. In the next section I describe the historical evolution of voter turnout in Costa Rica.

### 1.1.2 Turnout changes in Costa Rica

Overall Costa Rica has followed a very similar path regarding turnout drops. After a long tradition of high electoral participation, with turnout rates usually above 75% between 1962 and 1998<sup>1</sup>, turnout has decreased significantly in Costa Rica in the last five electoral contests (1998-2010) as we can see in Figure 1.5. Indeed, in 2006 national election turnout fell to an historic low: 65% of the electorate voting. In 2010 there was a small increment that did not change the tendency observed since 1994.

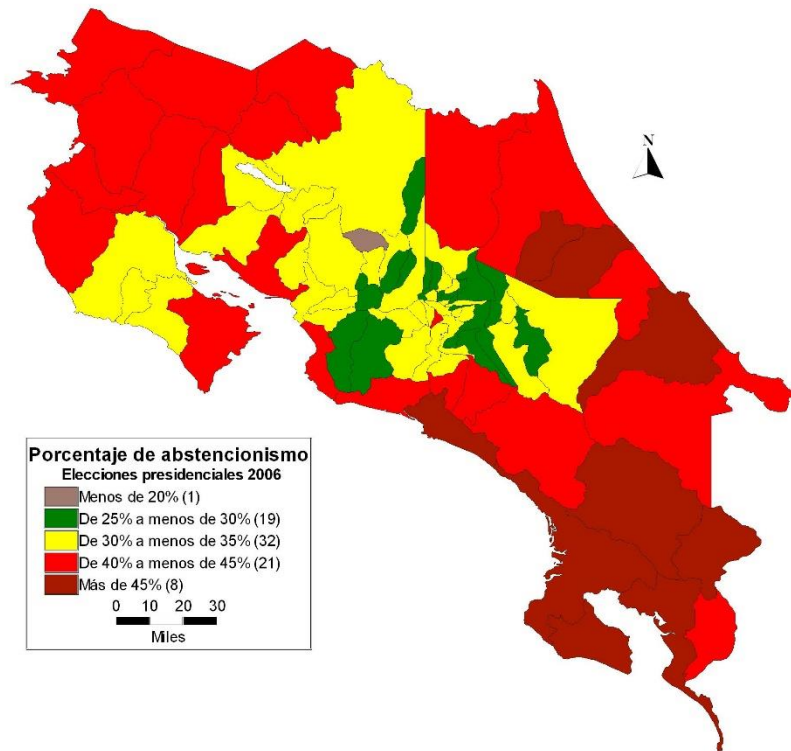
Figure 1.5: Turnout rates in Costa Rica 1953-2014



Note: The red dots line corresponds to the period I analyze in depth in this dissertation.

<sup>1</sup> The lower rates during the 1950s are attributed to the post-conflict effects like the forced exile of part of the political elite and some voters. The increment in 1962 has been attributed to the reincorporation of exiled voters after the civil war episode.

Figure 1.6: Abstention rates in 2006 presidential election by municipality



Among all worldwide cases Costa Rica is a country in which lower turnout presents an intriguing puzzle. For more than three decades, between 1958 and 1994, political participation rates remained, virtually invariable, at a high level: more than 80% of the electorate used to cast their votes on election day. Therefore, one would easily predict that individuals socialized during that period of time must have learned and later reproduced, almost mechanically, their parents' and grandparents' levels of high political activism. However, turnout patterns in the country in the last five national elections do not fit very well in that story, as rates have fallen around 65%. Here the reader can find a theoretical framework and an empirical approach that put together micro and macro explanations of individuals' political behavior in the long run.

## 1.2 METHODOLOGICAL APPROACH OF THE DISSERTATION

Now that we know the historical and spatial trends of turnout in Costa Rica, the goal of this section is to fully describe the main characteristics of the methodological approach I apply for explaining individuals' turnout changes over time. For achieving this goal this research intends to use both quantitative and qualitative methods (a mixed-methods approach). The quantitative analysis involves two phases. The first one implies the estimation of several longitudinal models. In each chapter I provide a complete description of the models I estimate. In all six chapters I use a lagged dependent (dichotomous) variable model. This method is a very common way of modeling temporal dependence in longitudinal analyses. It has been called *State Dependence Model* since the current value of Y depends on its prior state, and future states of Y depend on current ones. In this kind of analysis I also use interactive hypothesis through the incorporation of several multiplicative terms between, for instance, prior turnout and the influence of parents and couples. In this particular case, interaction effects allow me to examine not simply whether some relationship exists between previous turnout and political socialization, but the conditions under which and in what manner such relationships exist.

In the second phase I exploit the fact that individuals in my dataset are nested into several electoral cycles using hierarchical models. In these models it is possible to estimate cross-level effects on turnout using micro and macro level predictors at different levels of aggregation.

Also I complement the quantitative research questions of 'what, where and when' with a qualitative approach that, by contrast, investigates the 'why and how' of individuals' behavior in a way that a quantitative approach cannot be. The goal of the 19 interviews I conducted is to understand voters' behavior in its habitual context and to interpret how voters give meaning to their experiences and help researchers to obtain a grasp of the role of the individual as a social

actor. I use a convenience sample, which means I chose people with very diverse experiences with politics through their lives. They are from different ages, gender, educational background, income and political preferences. Given that in two of my chapters I discuss the role of family members and partners in political socialization some of the people I talked to were parents and offspring and couples. Among the interviewees are individuals I met at different moments in my life, that for some particular reason I thought it would be interesting to talk to them about campaigns, elections and politics. Another group of interviewees were contacted via alternative methods like Facebook post or friends' suggestions. In the Appendix there is a detailed list of the persons who shared their thoughts with me.

I structure the conversations as a life story interview emphasizing in their political experience (socialization, family, and other personal factors). I explore aspects such as how important is to cast a vote for them, what motivates them to get involved and participate, how powerful is citizens' voting history in predicting future behavior, how influential are their family members' voting trends in individuals' voting behavior, how strong (or weak) are voters' linkages to parties and other political institutions, and what other contextual factors may influence them in making electoral decisions. In doing so, individuals were asked to provide a narrative about their voting decisions and reveal their experiences. For each chapter I choose individuals based on specific political behavior profiles, interview them and use the information they provide me to contextualize my analysis. The use of the interviews allows me to examine more in depth their own experience regarding turnout decisions, talk about who are influential in their decision making process and identify the aspects of a phenomenon best captured by directly talking to subjects. The interviews were crucial for two reasons. First, for putting together both micro and macro factors that influence political participation, traditionally treated as separated one from another. Second,



to understand, develop and test the central thesis of this dissertation regarding the role of polarization in electoral politics fully explained in chapter 6.

### **1.2.1 Data Collection and Description**

Estimating the causal relationship between consecutive voting decisions has proven to be intrinsically difficult for social scientists. One of the most common methods used to understand changes in voters' turnout trends is through longitudinal studies that track how individuals behave over time. Surveys are another method commonly used to examine individuals' political behavior. Each of these methods has important drawbacks. The main disadvantage is that both rely entirely on self-reported measures of turnout that misreport or inflate voting rates. An important challenge to panel studies and surveys is that they require data on validated electoral behavior that is often unavailable. An individual-level panel data that includes the actual voting behavior for the universe of voters overcome these limitations providing causal insight for explaining the dynamics of turnout.

Individual-level panel data in this dissertation includes the *actual voting behavior* for the *universe of voters* in five of the most recent presidential elections in Costa Rica (1994-2010). These data are uniquely designed for establishing the causal relationship between individually based and macro factors on voter turnout.

Data for the analysis are based on the official turnout information collected by the Electoral Supreme Court (Tribunal Supremo de Elecciones) after each national election. As soon as voters turn 18 years old they appear in the list of eligible voters. Because voter registration is a necessary condition for turnout, automatic registration removes from the analysis the problem of conflating

two different types of behavior: the decision to register and the decision to vote. Furthermore, the use of official records of voter participation at the individual level allows me to study the full population of voting age, including those voters who have never participated in any election. Automatic registration also means that I eliminate desirability bias related to voluntary registration because I examine the universe of potential voters. Also, data enable better tracking of the changes in individuals' behavior every time there is a significant event in their life.

In addition to that, all the voters in the dataset but perhaps the very old ones, were born and grew up under democracy. It means that they have lived under a democratic regime all the time. This condition is clearly absent in any other place in Latin America. Therefore, all voters in this study have been exposed to the same stimuli (democracy), a peculiar condition that allows me to discard, in this study, the short-term effect of regime change on turnout.

This dataset is an exceptionally rich source of voting behavior. It includes approximately 2 million observations for each electoral contest and 10 million observations in total<sup>2</sup>. There will be no missing data in the dependent variables across all cases. Some of the individual level variables (sex, age, and residence) are included in the dataset. The unit of analysis is voters in five different electoral contests and twenty years in total. I complement the longitudinal electoral data for voters with the information for identifying voters' family members and spouse and their turnout behavior for the same elections mentioned before. Instead of relying on self-reports of individuals' networks that ask them if they know whether their relatives voted or not, I propose to first identify voter's family networks and their behavior and second, incorporate their voting patterns into the models.

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<sup>2</sup> Absentee balloting is not available in Costa Rica and those voters living abroad were not able to cast their vote until the 2014 presidential election.

This study required putting together several pieces of information. First, I collected voters' behavior and additional socio-demographic information for each election. Secondly, I assembled a dataset identifying voters' parents and spouses that includes the behavior of all of them between 1994 and 2010. This step implied multiple validations in the field in order to avoid problems or mistakes regarding data reliability. Particular attention was given to older voters with missing key information. Thirdly, I put together the electoral results for national elections at the district level in the last twenty years.

The use of actual voting turnout avoids the problems of the inflated rate of reported turnout which characterizes all survey data (Monroe, 1977). Individual-level panel data in this contribution includes the *actual voting behavior* (participation or not) for the *universe of voters* in five of the most recent presidential elections in Costa Rica (1994-2010). To the best of my knowledge only Costa Rica makes this unique database available for the entire electorate. This allows me to fully explore voters' turnout determinants and the conditions under which political behavior changes take place.

The information for the analysis is based on the official turnout database collected by the Electoral Supreme Court ESC (Tribunal Supremo de Elecciones) after each national election. As soon as voters turn 18 years old they appear in the list of eligible voters. Because voter registration is a necessary condition for turnout, automatic registration removes from the analysis the problem of conflating two different types of behavior: the decision to register and the decision to vote. Furthermore, the use of official records of voter participation at the individual level allows me to study the full population of voting age, including those voters who have never participated in any

election. Automatic registration also means that I eliminate desirability bias related to voluntary registration because I examine the universe of potential voters<sup>3</sup>.

In addition to that, all voters in the dataset but perhaps the very old ones, were born and grew up under democracy. It means that they have lived under a democratic regime all the time. This condition is clearly absent in any other place in Latin America due to the “bouncing” democratization pattern that has prevailed in the region. Therefore, all voters in this study have been exposed to the same stimuli (democracy), a peculiar condition that allows me to discard, in this study, the short-term effect of regime change on turnout.

This is a panel of the universe of individuals entitled to vote in Costa Rica in five of the most recent presidential elections 1994, 1998, 2002, 2006, and 2010. This dataset is an exceptionally rich source of voting behavior. There are no missing data in the dependent variables across all cases. Some of the standard individual level variables (sex, age, and residence) are in the dataset. The unit of analysis is voters in four different electoral contests and twelve years in total.

According to the dataset I have mentioned, among those eligible to vote in 1998 and 1994, 83% did vote in 1994 whereas only 66% of those registered to vote in 2010 and 2006, cast their vote in 2006. This is a remarkable change (17 percentage points less) in sixteen years. The biggest change occurs between those who voted between 1994 and 1998 with a reduction of 12 percentage points. If we see this from a dynamic perspective, of those who have voted in previous elections, 55% of them have cast their vote in all 4 elections (using the lag of turnout) and, among those who have failed to vote at time t-1, 25% have never voted in any electoral contest. Turnout rates changes in the late 1990s and early 2000s facilitated the conditions for the erosion of the support among

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<sup>3</sup> According to Wolfinger and Rosenstone (1980) registration raises the cost of voting. Citizens must first perform a separate task that lacks the immediate gratification characterizing other forms of political expression (such as voting).

traditional political parties and the emergence of new party competitors, transforming the two-party system into a multi-party one. If we analyze this trends by gender, 47% and 53% of male and female voters cast their vote in previous elections. Finally, there are not significant differences by age among those who voted in the past and those who did not.

Table 1.1: Individuals' voting behavior in the previous election (at time t-1)

<b>Voter turnout</b>	<b>Election</b>					
	<b>Lag</b>	<b>1998</b>	<b>2002</b>	<b>2006</b>	<b>2010</b>	<b>Total</b>
No		368,703	706,589	822,513	1,047,362	2,945,167
%		16.92	28.93	29.84	33.78	28.11
Yes		1,809,763	1,735,796	1,934,076	2,053,373	7,533,008
%		83.08	71.07	70.16	66.22	71.89
Total		2,178,466	2,442,385	2,756,589	3,100,735	10,478,175

Finally, because I have a very large N the estimation of the models and results were only possible by PittGrid service at the University of Pittsburgh. More specifically, PittGrid is a series of hardware nodes, or CPUs, controlled by a single master server. The master server communicates with all of the nodes in the PittGrid, querying status and sending commands. The aggregate power of several hundred machines provide high computational power for people who have computationally intensive jobs.

## 1.2.2 Chapters Summary

I structured my dissertation in five chapters besides the introduction and the conclusions. Chapter 2 has two main goals. The first one is to examine whether the widely known results regarding the determinants of political participation, offered by behavioral approaches, hold in a setting that has

an objective measure of turnout and political participation records for the universe of eligible voters. The second one will be establishing a baseline estimation of turnout and its determinants with the purpose of contrasting these models with more elaborated ones. Therefore, I build several models replicating those available in the literature.

The main theoretical and empirical purpose of Chapter 3 is showing that the probability of voting in the future gets bigger gradually if someone started voting at an early age and voted in the previous election. In addition to that, it argues that relocation impact voters differently. Accordingly, I found that, even under favorable conditions –i.e. small countries where distances in general are not as determinant- prior turnout does not lead to habituation if individuals relocate.

The key purpose of Chapter 4 is explaining how the political behavior of parents and spouses affects voters' electoral patterns. I argue that voting is a joint action affected by the tendency of politically significant others to participate. Scholars have said that voters are affected by the individuals with whom they share time and political discussions. Different studies have demonstrated that when persons make decisions, they take into account the cues of those who matter in their lives. In this chapter I analyze the effects of social networks on turnout in a methodological way that it has not done before. Rather than using self-reported measures of relatives' political behavior I select parents and spouses and observe how the behavior of voters interact with the way their parents and couples behave using the validated measures of turnout. The main hypothesis of this chapter says that the effect of parents' turnout on individuals' probability of voting declines over time.

In Chapter 5 I propose a methodological way to address the endogenous relationship between spouses' behavior and voters' turnout. Briefly, different studies have demonstrated that when persons make decisions, they take into account the cues, knowledge, values, and expectations

of their spouse, parents, children, friends, work-mates, and others around them –those who matter in their lives. The same logic is applicable to electoral politics. The compiled evidence shows that the higher the spouses’ turnout rates the greater the levels of voters’ turnout finding holds after controlling for the endogeneity issue.

The findings of chapters 2 through 5 provide readers a way to understand lots of old and new details about the micro-foundations of voting before getting to the main puzzle of this contribution. They are in that way ancillary findings.

In Chapter 6, building upon a set of robust individual-level factors I go beyond that by examining the impact of a key macro factor in this story. Here I test whether changes in polarization impact individuals’ turnout patterns. I argue that the partisan identity that makes people turn out because they are loyal to the party in a context of conflict produces stronger motivation but it is activated selectively: only works in a context of “threat” or polarization. However, these incentives can change over time. In sum, politicized identities that become salient in polarized contexts to shape voters’ political behavior trigger higher turnout rates.

## **2.0 TURNOUT AND ITS DETERMINANTS: A GENERAL OVERVIEW**

Voter turnout is one of the most studied topics in mass political behavior worldwide. The literature on turnout is immense. An extraordinary amount of efforts have been devoted to study its patterns, determinants as well as its implications. There are multiple and diverse theories available for explaining why individuals show up at the polls. The list is long covering a broad array of theoretical traditions including economic, institutional, behavioral, biological, sociological, anthropological, historical, and psychological frameworks. Similarly, the methodologies applied to study voters' political participation include surveys, longitudinal studies and more recently experiments. Furthermore, the topics analyzed are ample, encompassing all regions of the world, and the groups studied are abundant too: young, elderly, women, minorities, and median voters. Moreover, turnout has been analyzed in a wide-ranging set of political regimes including both established and new democracies.

Why do some people vote and others do not, has been the topic of an impressive amount of research attention and expansive literature (Matsusaka and Palda 1999). A similar devotion has been given to the debate whether there is evidence of turnout decline in industrialized democracies and other developing nations (Nie et al. 1976, Powell 1986, Teixeira 1987, Flickinger and Studlar 1992, Wattenberg 1998, Blais et al. 2004, Franklin 2004, Lewis-Beck 2008). Two important contributions in the last decade have also shed light about this salient issue in Costa Rica (Raventos-Vorst et al. 2005, Ramírez et al. 2010). As a whole, all these contributions have amassed compelling evidence on the main determinants of individuals' political behavior.

Within the micro-foundations of turnout literature some scholars have argued that individuals' turnout behavior increases with age and differs by cohorts, gender and marital status. It has been



widely accepted in the political behavior literature that a set of sociodemographic characteristics make individuals more likely to vote. This chapter does nothing else than replicating, corroborating, and reinforcing that knowledge. In fact, as the readers will see the hypotheses I propose in this initial “baseline” chapter look like empirical facts rather than theoretical assumptions. Despite that, they play a very important role as initial and preliminary assumptions. Factors like age, gender, cohort, and marital status account, although in an incomplete manner, for the static dimension of turnout. Particularly relevant for subsequent sections is the emphasis I paid to the analysis of voters’ cohorts given that they enter into politics under circumstances that determine their turnout entry level. This is what I show in this initial chapter. In later chapters I address the main drivers of aggregate turnout change in the long run through a dynamic point of view.

Here, the readers can find a brief overview of turnout behavior literature combined with a statistical model similar to those available in the field. This overview considers exclusively the socio-demographic component of political participation. I chose to start with a general turnout overview chapter because we need to consider how sociodemographic factors determine whether voters mobilize on election day before analyzing the forces behind the aggregate declines in turnout over time. In later chapters I complement this baseline analysis with more sophisticated explanations. I organize the presentation of the theories in four different lifecycle topics: age, cohorts, gender and marriage. This chapter in addition to other three (chapters 3, 4 and 5) belong to a section of this document in which I theorize about the key forces, at the micro-level, driving individuals’ political behavior.

### 2.1.1 What explains turnout behavior?, sociodemographic explanations

A distinctive relationship that has intrigued electoral behavior experts since at least the early 1960s is the age-turnout connection. In a paper published in 1974 Nie et al. suggest that the widespread evidence found in many studies has led scholars to conclude that there is a great deal of regularity in the relationship between age and political activism (Nie et al. 1974). The life cycle explanation approach states that low turnout among the young is a time-based phenomenon that will vanish as the young grow to adopt several “adult roles” and get more integrated into society (Wass 2007: 648). This assumption asserts that as individuals’ age, they acquire greater experience with the political system and its processes. Consequently, as experience increases, the probability of voting increases (Niemi et al. 1984, Lyons and Alexander 2000, Highton and Wolfinger 2001). In this chapter I test the age-turnout link using the following hypothesis:

#### *Hypothesis 2.1*

*Voter turnout increases with age.*

In contrast to just arguing that turnout increases as individuals get older the *generational explanation* views political participation as a relatively permanent feature common to the whole generation throughout their life cycle. Generational replacement is related to, but is conceptually distinct from, age. Regardless of when people are born, they age as they and their cohorts vote in successive elections. There is a “generational effect to the degree that those in different birth cohorts bring different life experiences to their political participation” (Lyons and Alexander 2000: 1017). A *generation* is traditionally seen as a group of people who has faced certain key experiences during its formative years. The basic assumption behind this view is that “these

experiences have a strong and lasting impact on a generation's political orientation” (Wass 2007:648). When generations have different tendencies to vote, overall turnout at elections could potentially be strongly affected by the age composition of the groups in the electorate (Bhatti et al. 2012). As Konzelmann, Wagner et al. (2012: 252) have said “if it is not the individual aging process, but the socialization that is decisive for the ballot, people that are born around the same time are expected to have a similar probability of going to the polls”.

Essentially, different generations have experienced different historical environments. Even if they share experiences, these have occurred at different moments in their life cycles, with varying results (Nie et al. 1974). According to this approach, the experiences of the first years in politics permanently shape the orientations of that generation. Several recent studies have identified a clear generational effect in voting (Lyons and Alexander 2000, Blais et al. 2004, Franklin 2004) meaning that those who are young in a given period are exposed to common political influences, which are preserved as a cohort ages and which give rise to the phenomenon of political generations (Butler and Stokes 1969; Miller 1992). A generation is formed by certain experiences that occur during its formative years (17–25 year olds) (Delli 1986). The key point is that certain experiences have a permanent impact on the given generation throughout its lifetime (Wass 2007).

In addition, change in turnout most often comes from a new cohort of voters turning out at a rate that is different from the turnout rate among the previous cohorts when they were new. Scholars have documented “the tendency of new cohorts to retain the habit of higher or lower turnout gained in their first elections, leaving a “footprint” in the electorate that both records and transmits forward in time the formative experience of the cohort” (Franklin 2004: 60). Speaking of the United States case Miller (1992) argues that much of the decline in turnout in national

elections may be accounted for the changing generational composition of the electorate. Using generational replacement as the source of the decline in the aggregate level of turnout, the quest for an explanation of the decline is transformed into a quest for an explanation of intergenerational differences. Following previous studies he says that we must ask not how old the elector is but when it was that he was young (Butler and Stokes 1969, Miller 1992). The point of the hypothesis below is to determine whether cohort matters above and beyond the effects of age:

### ***Hypothesis 2.2***

*The effect of cohort on turnout is independent from age.*

Political participation rates vary not only by age. Voter turnout studies have extensively documented gender gaps. Historically, women had been deliberately excluded from power and political participation in democracies, and differentials in participation often persisted even with the removal of formal barriers to voting and holding office (Desposato and Norrander 2009). Early studies of voting behavior in western democracies established that gender was one of the standard demographic and social characteristics used to predict levels of electoral turnout. In late 1970s the empirical evidence confirmed that sex is related to political activity: men were more active than women (Verba et al. 1978). Scholars have attributed that gap to the religiosity level (Blais et al. 2004), generational replacement (Norris 1999), political socialization and family responsibilities (Welch 1977), and the increment of women labor force participation (Andersen 1975). More recent studies, though, have found that female have narrowed the political participation gender gap in the 1980s and 1990s, or even reversed, in many advanced industrialized countries (Christy 1987, Norris 1991, Vaus and McAllister 1989, Schlozman et al. 1995, Stuckey et al. 1998, Norris 2002).

In Latin America, female enfranchisement took place during different periods. Earlier adopters were Uruguay (1927), Ecuador (1929), and Chile (1934). As a whole, Latin American countries reflect varying rates of voter turnout for men and women (Chaney, 1979), and recent studies show women voting at higher rates than men (Carreras et al. 2013).

Female suffrage was approved in 1949 in Costa Rica and first implemented in the 1953 national elections. Removing that barrier did not produce an immediate change but originates a gradual transformation. Due to their historical exclusion of the electorate, some female voters did not immediately start voting and remained doing so even years after achieving eligibility. Under these circumstances, the oldest generation of female voters socialized their kids transmitting them weak turnout values. Despite that, gradually, younger female voters, unlike their older peers, started to vote and transfer those turnout values to the youngest generation of voters. Thus, I argue that the progressive increment of female political participation will reverse the gap between male and female. In the same way that the disenfranchisement had an enduring effect in female political participation in the past I expect to find that the expected gap reversion continues to influence female voting patterns in the future. Hence, I expect to find that:

### ***Hypothesis 2.2***

*Female voters turn out to vote at higher rates than male.*

So far, I have emphasized on the impact of sociodemographic attributes on turnout. The last theoretical argument I discuss in this chapter is the influence of one social interaction that has proved to be consequential for political participation: marital status. According to Nickerson (2008) members of the same household share similar voting behaviors on average. The behaviors

and beliefs between husbands and wives are extremely similar. Kingston and Finkel (1987) analyze whether marital status *per se* has an independent effect on an individual's political behavior and attitudes. For Glaser (1959) turnout by the husbands and wives usually is a joint action (Straits 1990, Kern 2010). A more politically interested spouse can also motivate his or her less involved partner to the polls (Stoker and Jennings 1995). Moreover, the turnout of married citizens increases faster than the turnout of unmarried citizens as people grow older (Wolfinger and Rosenstone 1980, Harder and Krosnick 2008).

Zuckerman et al. (1998) identify the household as being the center of political discussion. Actually, a significant proportion of respondents in their study reported that their first discussion partner was a family member with whom they lived, almost always their spouse or living-partner. Moreover, Zuckerman et al. (2005) found that as persons who live together exchange ideas and opinions, they state, test, reinforce, and reformulate their political preferences. Kenny (1993) investigates the claim that individual political participation is affected by the tendency of politically significant others to participate, particularly if that other is a spouse. The encouragement of a wife or husband might be the enough to get both partners to the polls (Wolfinger and Rosenstone 1980). In sum, being married may also affect turnout habits due to peer effects, if one partner exhibit a stable pattern of voting behavior this may induce the other partner to do so (Denny and Doyle 2009).

Stoker and Jennings (1995) note that once one gets married, his or her participation level in politics can change, particularly if one partner was active in politics before the marriage. Glaser (1959) also shows that the older the husband and wife, the higher is joint voting and the lower is joint nonvoting. This phenomenon suggests there is something about marriage that, again, changes the context people behave in politics, particularly, that habitual voting is conditional on marital

status (Osborn and Morehouse 2011). Specifically, habitual voting of married individuals may differ from the non-married, because as considerable research as suggested the meaning of marriage on political participation varies over the life cycle (Kingston and Finkel 1987). I examine the influence of marital status using the following testable hypothesis:

***Hypothesis 2.4***

*Turnout rates are higher among married voters.*

Overall, an impressive amount of literature has been devoted to analyze voters' turnout behavior. Among these efforts scholars have offered turnout explanations based on individuals' sociodemographic attributes. The purpose of this review was not given an exhaustive cover of the literature on the field but providing a brief summary of the findings available in four topics: age, cohort, gender and marital status, highlighting their most relevant findings in explaining turnout behavior. In the next section I describe a set of empirical baseline turnout models and their results for testing the hypotheses mentioned above.

## **2.2 DATA DESCRIPTION AND BASELINE MODELS**

In this chapter I run several statistical models replicating those available in the literature with two main goals. The first one is to examine whether the widely known results regarding individuals' attributes and their impact on political participation, offered in the field, hold when using an objective measure of turnout for the universe of eligible voters. The second one will be establishing a baseline estimation of turnout and its determinants with the purpose of contrasting these models

with more sophisticated ones in later chapters, given the multiple and evident limitations of these models.

For the baseline models of turnout I use the complete version of the panel of individuals entitled to vote in Costa Rica in five of the most recent presidential elections 1994, 1998, 2002, 2006 and 2010 (for a full description of data see Chapter 1). Data come from the official turnout database collected by the Electoral Supreme Court after each national election.

Longitudinal hierarchical analysis is employed as the main empirical method in the chapter and both models applied are logistic models. *Turnout* is the dependent variable, a dichotomous predictor coded as 1 if individuals cast a vote and 0 if they failed to go to the polls. In the logit model the log odds of turnout is modeled as a linear combination of the sociodemographic predictors. Logistic regression is one of the most commonly used tools for applied statistics and discrete data analysis.

I modeled the conditional probability of turnout as a function of gender, marital status, age, age squared, and cohort. The hierarchical structure of the model I use, with repeated voters' observations (level 1) nested in several elections (level 2) with a random coefficient for individual, allows me to take advantage of the methodological approaches to control for unobserved factors that may impact voters' turnout like education and income.

## **Model Specification**

### **Model:**

$$\Pr(\textit{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \textit{female}_{it} + \beta_3 \textit{married}_{it} + \beta_4 \textit{age}_{it} + \beta_5 \textit{age squared}_{it} + \beta_6 \textit{cohort-young}_{it} + u_i + \varepsilon_{it}$$



## 2.3 FINDINGS

Table 2.2 shows the model regressing voters' turnout on different explanatory variables. The findings are not surprising at all; they are quite consistent with what previous literature has found. Overall, according to model 1, political participation increases as voters get older. Every year increment in voters' age is associated with an increase of 1.27 units in the probability of voting. I also confirm that the effect of age on turnout is not linear: it increases until reaching a ceiling and then decreases among older voters. Furthermore, the evidence confirms hypothesis 2.3 that postulates that female turnout rates are higher than male rates. In addition, being married is positively and significantly associated with higher political participation. Finally, model 2 corroborates that members of the youngest cohort of voters turn out to vote at lower rates than members of old cohorts.

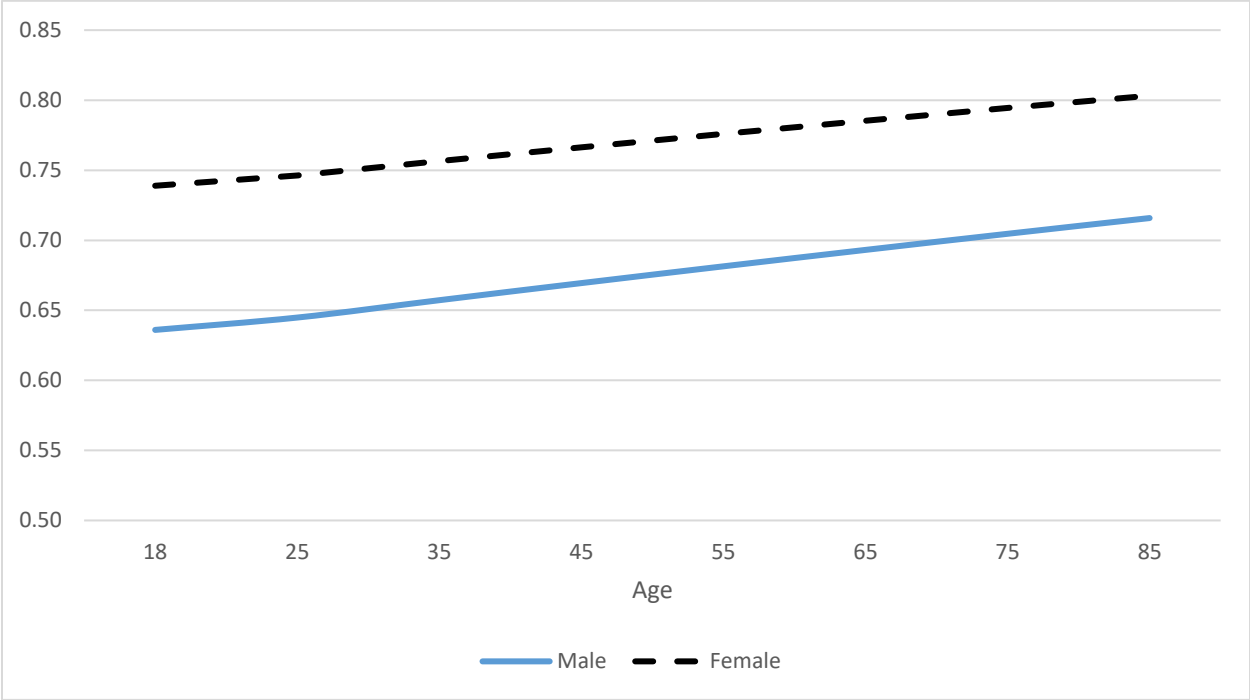
Table 2.1: Baseline Models for Explaining Voter Turnout

	Model 1 b/se	Model 2 b/se
Female	0.753* (0.003)	0.717* (0.003)
Voters' age	0.018* (0.000)	
Age^2	-0.000* (0.000)	
Married	0.715* (0.004)	0.658* (0.003)
Youngest cohort		-0.387* (0.003)
Constant	0.562* (0.007)	0.928* (0.003)
Constant	1.234* (0.002)	1.204* (0.002)
Wald Chi-squared	80321	87729
Prob > chi2	0.000	0.000
Number of cases	14.586.547	14.586.547

\* p<0.001

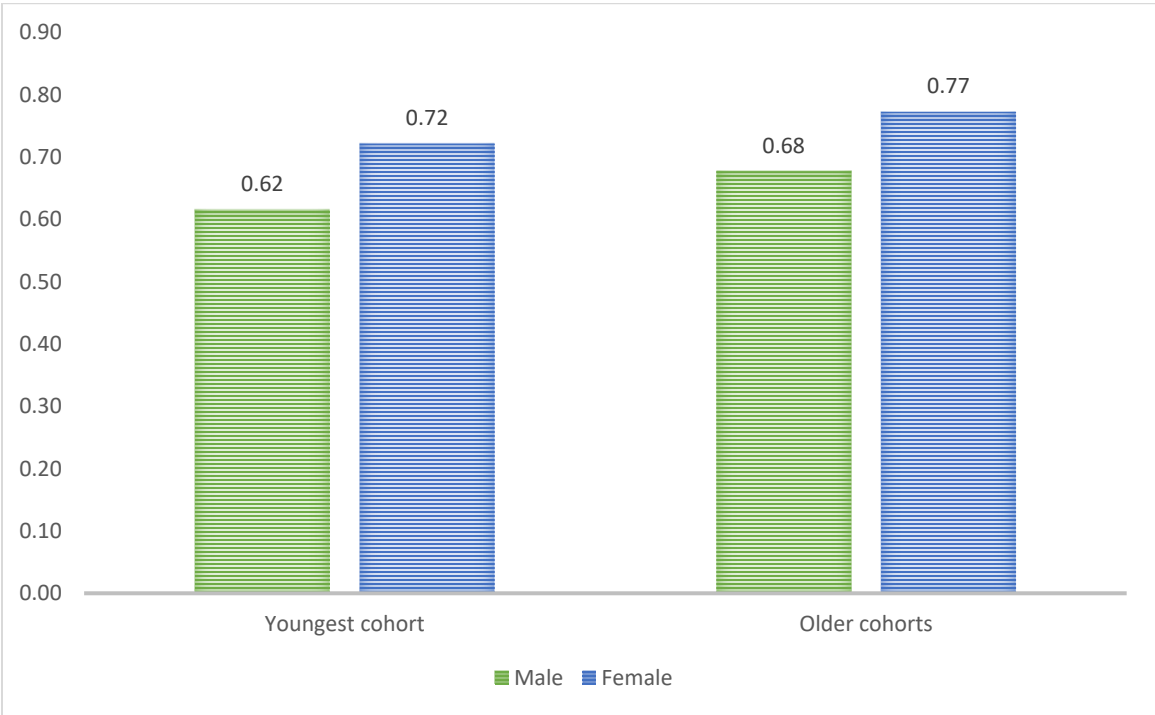
In order to make more substantive interpretation of these findings I estimated predicted probabilities for voting at different combinations of gender and age. The other variables were held at their means. According to figure 2.1, the likelihood of voting for a female voter at 18 years old is 0.74 whereas for a male with the same age is 0.64. At 35 years old female probability of voting increases to 0.76 and for male augments up to 0.66. Among 65 years old, female voters' chances to show up at the polls are 79% and male voters' chances are 69%. In later chapters, I will show that these curves are different at different times based on the role of polarization.

Figure 2.1: Predicted probabilities of voting at different combinations of age and gender



Finally, as hypothesized the probabilities of voting are smaller for the youngest generation of voters, those who become eligible in 1994 and after, vis-à-vis those older cohorts of voters. For example, the likelihood of voting for a youngest male voter is 0.62 whereas the chances of a male member of an oldest cohort of voters is 0.72. Similarly, the probability of showing up the polls for a female voter is 68% if she belongs to the youngest cohort of the electorate and 77% if she is being part of older cohorts.

Figure 2.2: Predicted probabilities of voting at different combinations of gender and cohort



## 2.4 CONCLUSIONS

It has been long hypothesized in the political behavior field that individuals' sociodemographic attributes can explain voters' turnout patterns. Therefore, experts have been theorized that turnout differs by gender and increases as individuals age and get married. The canonical view says that political participation is impacted by life-cycle changes. This chapter has a singular mission: briefly summarize the theoretical arguments on the field, provide some testable hypothesis, and discuss the findings having in mind what previous contributions have shown.

A familiarized reader may not necessarily find new evidence here. Instead, the previous pages confirm the well-known findings regarding voters' political participation: age boosts turnout rates; older cohorts of voters show up at the polls more often than younger generations; married voters exhibit higher participation rates than single ones. Also, data prove the occurrence of a reversion of the turnout gender gap in Costa Rica, like other established democracies, due to the fact that male voters fail to go to the polls more frequently than female.

The findings that show that being older, female –in the Costa Rican case- and married are all associated with higher turnout rates are not new in the specialized literature. Despite the lack of novelty these findings can help us build and establish the theoretical and empirical basis for more sophisticated and innovative analysis of the micro-foundations of voter turnout in chapters 3, 4 and 5.

Attributes like age, gender, and marital status and other sociodemographic characteristics are undeniably useful for explaining turnout rates at a given certain point in time but, that does not make them suitable for all kinds of analyses. They are not equally useful in efforts designed to explain political participation trends in a dynamic way for one simple reason: many of those individual attributes are fixed or remain relatively invariable over time. For that key reason

individual characteristics, although still relevant in static theories regarding turnout determinants, have proved to be insufficient for understanding why individuals' turnout behavior varies over time. Based on that, using several of these attributes in a transformed way, as well as the incorporation of other macro factors, I provide in later chapters, novel and better explanations for understanding voters' turnout changes dilemma.

### 3.0 IS TURNING OUT TO VOTE A HABIT?

María was born in 1926 and raised, like many voters at that time, in big families. María remembers the 1948 civil war episodes vividly. She refers to the party preference of her parents as a strong attachment: “many times people tried to persuade them to switch party preferences, even offering them some money, but nobody succeeded. The more they tried the more they failed”. She recalls that party local bosses organized them and brought them to the political rallies at the capital in buses paid by the parties. On Election Day night she gathered together with her relatives, followed the results listening to the radio and did some electoral math.

In our conversation María emphasizes that her father and other relatives always voted. Despite that, she spent many years, decades in fact, without identification card, which in practical terms means she was not part of the eligible population. At every election her closer relatives have tried to persuade and offered to bring her to the polls but she has been always reluctant to do so. When María reached the age of eligibility, woman were not allowed to vote. The first ID card she got was in 1994. María has never ever voted...

The first time Juan voted (2010) he supported the same candidate than his parents. He was not sure which one to back. He was excited to express his voice and choice even though he admitted that he was not well informed, so he asked his parents which was the best candidate. The following election (2014) Juan looked for more information about parties and candidates, he went to the debates at the university, talked to friends and classmates. Well-informed people were around him this time. He also looked for the candidates’ interviews online. In Juan’s family everybody discusses and debates without sharp divisions about politics when they eat together. Nobody in his family has decided to abstain. When some of Juan’s friends said they were not going

to vote he did his best to persuade them to do otherwise. He himself influenced some people. He said proudly that he is always going to vote.

Do habits dictate whether citizens vote? To what extent turning out to vote earlier in life increase individuals' propensity to show up at the polls in the future? Although María and Juan's stories may not represent many voters' engagement to politics they illustrate the decisive role of first turnout experiences on individuals' long term behavior. As this chapter shows, what happens or could have happened in those initial opportunities to cast a vote strongly determines what voters will do in the future. This chapter upholds the intrinsic dynamic nature of political behavior by analyzing the formation of voter turnout habits over several electoral contests that took place in Costa Rica between 1994 and 2010.

In the first section of the chapter I discuss the main theoretical frameworks regarding political behavior persistence and its implications on political participation. Section two introduces the empirical and theoretical contribution of this chapter. In the following sections I fully describe the data and the design of the statistical models applied. In the last sections I analyze what the empirical results mean in a broader perspective and discuss their repercussions.

The findings suggest that habituation happens by the third election someone was entitled to cast a vote assuming that individuals started to do so in their first election. Also, the evidence provided reveals that residential mobility do disrupt individuals' voting behavior, but its' impact is greater among habitual voters.

## 3.1 THEORETICAL FRAMEWORK

### 3.1.1 Voting as Habit

Under circumstances of substantial turnout reductions, like those experienced in two-thirds of the established democracies worldwide (see Chapter 1 for more details), the development of electoral habits may constitute a key factor for attenuating, or even, reverting such tendency in the long-term. Higher or lower turnout is not a trivial issue in democratic systems. They have both theoretical and empirical implications for the survival and consolidation of democracy. More concretely, episodes of turnout reductions hinder political representation revealing less public support for the regime, two key democratic principles. In addition, the circumstances related to lower turnout may cause an enduring effect on individuals' political behavior, alienating disenchanted voters from the political system. Especially for younger voters, this could have long-term and dramatic impacts on support for and viability of the political system.

In contrast to the two dominant voting behavior approaches that stress on the individual characteristics that make voters more likely to cast their votes (Downs 1957, Finkel 1985, Rosenstone 1993, Brady et al. 1995, Bratton 1999, Gerber et al. 2008), or those that emphasize on the institutional features that influence citizens' voting decisions (Powell 1986, Pérez-Liñán 2001, Fornos et al. 2004, Panagopoulos 2008, Steiner 2010), some scholars argue that turnout is better explained by persistence from one election to the next, which is *habitual voting*<sup>4</sup>. The logic underlying this assumption is that the reasons why voters cast their vote cannot be fully elucidated

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<sup>4</sup> One alternative theory postulates that individuals derive psychological benefits from casting a vote. Scholars argue that turnout alters certain broad political orientations known to influence voter turnout, such as feelings of civic duty. Even though it is salient to identify the differences between habituation and civic duty that goes beyond the goals of this chapter. See: Green and Shachar (2000) and Nickerson (2008).



by rational factors (Downs 1957) or because voters respond to electoral stimulus (campaign, mobilization or canvassing effects) but instead because voting becomes habitual through repetition.

Participating in the first elections in which someone is entitled to do so leave a “footprint” in individuals’ political behavior (Denny and Doyle 2009). Briefly, previous turnout decisions influence subsequent ones. More concretely voting in one election increases voters’ propensity to go to the polls in the future. A body of literature in political psychology characterizes “*habits*” as a result of repeated processes. Specifically, turnout becomes habitual through repetition and it is guided by an automatic cognitive process rather than by sophisticated decision making. Critics have questioned that frequent behavior does not necessary mean that it is already habituated. An alternative explanation suggest that two conditions must be met for the development of habits: repeated responses and stable features of the context. Therefore, repetition is a necessary but an insufficient condition for developing a strong habit. Furthermore, contextual changes can disrupt habit performance. Unlike most other behaviors turnout is certainly not performed in fixed contexts (Aldrich et al. 2011).

Looking at Costa Rica, an established democracy, as a case study I examine the conditions under what these trends occur. In doing so, this chapter contributes to our understanding of the dynamics of voter turnout. In framing voting behavior as a dynamic process rather than a static one, this chapter has two main purposes. First, I disentangle the age-turnout connection, investigating the effects of habituation in voting behavior. Second, I analyze the conditions under

which habituation takes place, using interaction effects between prior turnout, age, first time vote, and residential mobility<sup>5</sup>.

According to scholars there exists an ample consensus in the field that voting behavior is, at least in part, a gradually acquired habit. People learn the habit of voting, or not, based on the experience in the first few elections where they were eligible to vote (Franklin et al. 2004). The logic behind this assumption is that a citizens' voting history is a powerful predictor of future behavior. Brody and Sniderman (1977) have reported that past voting behavior predicts current turnout, controlling for individual-level traits and psychological involvement in politics. Although we can find different terminologies in the literature to characterize habitual voting ("consuetude", "habit strength", "inertia", "casual voting", "circumstantial voter"), there is a long standing agreement that voting behavior is habitual (Plutzer 2002: 42).

Concretely, casting a ballot in one election increases the voters' propensity to go to the polls in the future. Simply put, "if two individuals have exactly the same characteristics, but one decides to vote and the other does not, then these decisions will affect their probability of voting in future elections" (Denny and Doyle 2009: 18).<sup>6</sup>

Thus, the habituation model claims that current turnout depends on prior voting behavior. It has long been hypothesized that habituation will contribute to turnout. Although this hypothesis is well-known, there is surprisingly less empirical evidence on the connection between prior turnout, life-cycle changes and future turnout. Recent studies suggest that when people abstain from voting, their subsequent proclivity for voting declines; when they vote, they become more likely to vote again (Coppock and Green 2013).

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<sup>5</sup> Other scholars argue that one part of the age-turnout relationship is habitual; the other is related to the social basis of turnout. Even though I recognize that disentangling these two causal explanations in both theoretical and empirical terms is critical, here I chose to emphasize in the former due to data availability.

<sup>6</sup> Recently *Electoral Studies* published the results of a symposium on new approaches in age, period effects and cohort (see volume 33, 2014).

As some scholars have stated succinctly “people are creatures of habit” (Danner et al. 2008: 245). Without habits, “people would be guided by plans, consciously guide, and monitor every action” (Neal et al. 2006: 198). A well-developed theory in social psychology, with a large amount of empirical evidence, points toward a specific understanding of “habit” (Wood and Neal 2007, Aldrich et al. 2011)<sup>7</sup>. This theory considers the habit formation as the consequence of a repetitive process<sup>8</sup>. “Repetition of a behavior in a consistent context progressively activates an automatic response with which the behavior is performed when the situation is encountered” (Lally et al. 2010: 998)<sup>9</sup>. According to Meredith (2009) voting may alter psychological orientations to favor future participation.

In the behavioral tradition, habit has always been equated with behavioral frequency (Hull 1943, Hull 1951, Verplanken 2006)<sup>10</sup>. This theory “suggests that habits are sets of automatic scripts executed in response to specific circumstances that are monitored by unconscious emotional subsystems for compatibility with goals” (Aldrich et al. 2011):539. In sum, when behavior is performed repeatedly and becomes habitual, it is guided by automated cognitive processes, rather than being preceded by elaborate decision processes (Aarts et al. 1998)<sup>11</sup>. For Okada (2013) relevant memories of the participation promotes participation in the subsequent

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<sup>7</sup> These theories “provide a sophisticated theoretical grounding to understand turnout as a habit. Responses given automatically are activated quickly in memory by associated cues, often without intention or deliberation” (Aldrich et al. 2011).

<sup>8</sup> More plausibly, a behavior becomes automatic after some number of repetitions, and further repetition no longer increases automaticity. For more details see: Danner et al. (2008).

<sup>9</sup> For Danner et al. (2008: 245-246) “people are able to perform goal directed behavior without forming an explicit intention because the behavior is directly mentally accessed in the context at hand as a result of frequently and consistently having performed that behavior in the past”. In fact, Triandis (1980) hypothesized that when the same behavior is more frequently executed in the past and increases in habit strength, it is less guided by intention to perform that behavior. In this sense, habits are automatic to the extent that the behavior is no longer predicted (or guided) by intentions. The stronger the habit, the weaker the intention–behavior relationship.

<sup>10</sup> Hull’s early work (1943, 1951) suggested that the relationship between repetition and habit strength follows an asymptotic curve in which automaticity increases steadily—but by a smaller amount with each repetition—until it reaches an asymptote (plateau).

<sup>11</sup> For Aarts et al. (1998) “when the same decision has been made over and over again in the past under similar circumstances in order to attain a certain goal, one does not need to assess one’s attitudes and behavioral control and to formulate a conscious intention at the time one has to act”.

election. That said, the traditional hypothesis states that people who voted at the last election are more likely to vote in the next one<sup>12</sup>.

This framework can readily explain why one of the standard socio-demographic determinants -age- is almost always found to have a positive effect of voter turnout (see Chapter 2). It suggests people change over time with more likelihood to vote as they get older. However, the habituation story is a little bit different. As turnout become reinforcing over time older citizens have had the opportunity to cast their votes in more elections and developing habitual voting. This perspective is consistent with other turnout habits studies<sup>13</sup>. As Plutzer (2002: 43) has said, “voting is likely to bring positive reinforcement from friends, family, and co-workers.” For Dinas and Franklin (2013: 3) “habit is a resource available irrespective of demographic background as long as it is provided by past behavior”.

In a similar manner to the case with party identification<sup>14</sup> (Shachar 2003), older individuals are expected to exhibit stronger voting than young voters. This assumption is based on the fact that having previously voted increases one’s disposition towards it. This captures the idea that people’s sense of voting builds over time. Older people have had the opportunity to participate in more elections and consequently to develop a habit. Younger citizens have not yet developed a habit of voting whereas the middle aged and elderly have (Plutzer 2002, Gimpel et al. 2004). However, “it is not aging itself what increases one’s propensity to vote, but changes in the life-cycle which affect motives, opportunities and resources necessary to participate” (Czesnik et al. 2013). Therefore, the life-cycle explanation says that as young people become older they get more

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<sup>12</sup> Smith and Sylverster (2013) show that high-propensity voters (habitual ones) are more likely to convert to permanent vote-by-mail. In addition, Collins et al. (2009) develop a formal dynamic model of turnout in which voters’ behavior in one election depends only on whether they voted in the last election and whether their party won.

<sup>13</sup> Gerber and Coppock (2013) show that the strength and persistence of voting habits vary by electoral context and by voters’ attributes.

<sup>14</sup> Indeed, Richardson (1986) noted the existence of habitual voters who consistently vote for the same party.

experienced in the electoral and political process. The reason for this effect is that young people lack the resources that older people have accumulated through life (Quintelier 2007).

The conventional view in political behavior says that if individuals voted before they will be more likely to do so in the future. Critical in this assumption is the idea that first political experiences determine individuals' political engagement later. In fact, scholars claim that voting in the first three elections after enfranchisement substantially increases a person's propensity to become a habitual voter in subsequent elections (Franklin 2004, Bhatti et al. 2012). Thus, first-time voters may decide to vote (and thus might join the habitual voters), or to abstain (and thus to become more likely a habitual nonvoter) (Czesnik et al. 2013).

In this chapter I do not dispute this general claim but I refine the argument in one important way. Understanding first-time turnout, early in the life course, requires a more precise theoretical framework. I theorize that voting once makes you more likely to vote twice, but voting twice makes you even more likely to vote three times and so on. In the very first election they may cast their vote in what can be considered as "turnout beginners' ritual"<sup>15</sup>. The novel assumption in my theory is that after several turnout episodes true habituation takes and remain in place. Thus, early political experiences affect later turnout (Zuckerman 2005, Meredith 2009, Tóka 2009). This begs the question of why older people socialized during high voting turnout keep voting and younger cohorts do not develop a habit of voting. Finding explanations for this phenomenon is precisely the purpose of this chapter. I test this theory with the following hypothesis:

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<sup>15</sup> This notion has sometimes been labeled as the first-time boost (Konzelmann et al. 2012) or the first-time hype (Bhatti et al. 2012). The idea is that the psychological reward is significant the first time an individual is eligible to vote (Tóka 2009). Also, first-time voting may be more pronouncedly a social act (Zuckermann 2005).

### ***Hypothesis 3.1***

*Habituation, indicated by lagged turnout at the previous election, will increase the probability of turnout at the current election*

### ***Hypothesis 3.2***

*The effect of habit on turnout will be lower in the first set of elections after citizens start voting.*

I argue that this twofold theoretical explanation is better and more accurate of individuals' voting trends over time than just simply saying that it takes three elections to develop habitual voting, as is it has been stated by scholars. Both hypotheses suggest -but not fully developed yet- a key premise in this contribution: the idea that older people socialized during high voting turnout keep voting and younger cohorts do not develop the habit of voting.

As it has been largely postulated by previous studies the first turnout experiences leave a big "footprint" in individuals' political behavior. Some even postulate that the first seven years of someone turnout episodes are the most relevant in voters' behavior (Highton and Wolfinger 2001). My theory builds on that but goes beyond that logic when arguing that voting at  $t-1$  does not make individuals "habitual" voters, it makes them a "returning" voter (if they vote again). In contrast, the twist of my theory postulates that habit is inferred from the fact that the probability of voting will become cumulatively larger over time. Thus, habituation emerges gradually by the third election if individuals voted in their first election. This important addition to political participation theories is crucial when analyzing turnout patterns among voters, and it becomes more relevant when studying first time voters.

This theory is consistent with previous studies available. For instance, early political experiences are hypothesized to affect later turnout (Meredith 2009). Also, Górecki (2013) shows evidence supporting the idea of habit formation in the critical initial elections in a person's life. Condon and Holleque (2013) postulate that individuals who choose to participate early are more likely to participate throughout the life course. For Melton (2014), one can only detect the presence of habit by estimating two latent variables: individuals' initial and updated probabilities of voting.

Until now I have only discussed the theorized factors –first time vote and previous turnout– that trigger habitual voting. However, other life-cycle changes are well-known for disturbing, rather than boosting, habituation. In the following section I address the effects of *residential mobility*, one of the classic deactivators of individuals' turnout persistence and its implications in the Costa Rican case and its effects on turnout changes over time.

### **3.1.2 Relocation and Turnout Habits**

In contrast, other scholars define habits as cognitive associations between repeated responses and stable features of the context<sup>16</sup>. Thus habits develop by satisfactorily repeating behavior in stable contexts, in the sense that they are guided by relatively automatic processes that involve minimal thought (Wood et al. 2002). Given that the context remains stable and the response is satisfactory, these associations then acquire a degree of automaticity (Verplanken 2006). Habits are formed “when using the same behavior frequently and consistently in a similar context for the same purpose” (Danner et al. 2008: 261).

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<sup>16</sup> Others have explored the extent to what habits are driven by goals. More concretely, goals can (a) direct habits by motivating repetition that leads to habit formation and by promoting exposure to cues that trigger habits, (b) be inferred from habits, and (c) interact with habits in ways that preserve the learned habit associations (for more details see Wood and Neal 2007).

From a psychological perspective, several studies have found that contextual features have a causal role in triggering habit performance. Based on the theory of habit automaticity, “context is defined as the set of preceding actions, cues, events, and people that are associated with regular repetition of the action” (Wood et al. 2005: 542). In particular, habit performance is readily disrupted by changes in performance contexts (Aldrich et al. 2011).

Accordingly, the key factor for habit behavior is, therefore, a stable stimulus context to occur, and habit has indeed been defined as the tendency to repeat past behavior in a stable context. Alternately, “when behaviors are not well learned or when they are performed in unstable or difficult contexts, conscious decision making is likely to be necessary to initiate and carry out the behavior” (Ouellette and Wood 1998: 56).

In the field of political behavior numerous scholars have argued that voting is habitual. As scholars<sup>17</sup> have said, in the specific case of turnout, “everyone necessarily starts off with no strength of habit for turnout at all. Turnout, like any other response, becomes automated through behavioral repetition. Repetition is, however, insufficient to develop a strong habit. A habit forms from repetition of a response in the same, or very similar, context” (Aldrich et al. 2011: 536). Consistency “basically refers to the stability of the context in which the behavior has been executed in the past” (Danner et al. 2008: 261).

Thus, the fact that people are sensitive to changes in this context allows me to understand the importance of the context for habits to emerge. Under that circumstances, “the context becomes strongly and exclusively linked to the mental representation of the behavior and hence, the context is capable of eliciting the performance of the behavior directly without conscious intent” (Danner

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<sup>17</sup> In particular, they explore empirically whether turnout reflects two styles of decision making. Some people decide to turnout as it is usually understood, as the result of deliberation or conscious weighing of relevant factors. Other citizens determine whether to vote as the result of what is understood theoretically in social psychology as habituated responses, responding automatically to quite different sorts of cues (Aldrich et al. 2011)



et al. 2008: 247). In fact, acknowledging that context plays a role in the establishment of habits (Ouellette and Wood 1998, Wood et al. 2005) have proposed that any measure of habit should reflect the extent to which behavior is performed both frequently and in a stable context. When people make choices, they do so in particular environmental contexts. Stimuli in the environment have been shown to prime or activate content in memory, making related constructs more accessible and doing so even outside conscious awareness (Berger et al. 2008).

The main difference between turnout and other many behaviors is, however, that “the context is not fixed, and so we must consider not only the repetition of that behavior but also whether those repetitions are made in similar contexts” (Aldrich et al. 2011: 536). For others scholars “when usual contexts for performance change, habits cannot be cued by recurring stimuli, and performance should be disrupted. Habits survive only when aspects of the performance context did not change. This means that habits emerge when performed in particular locations, at specific times, in particular moods, and with or without certain interaction partners”. Briefly, habits are context dependent (Wood et al. 2005: 918).

This assumption implies that the alteration of the context, via different sources, is going to interrupt the habit cycle. In other words, structural changes in individuals’ life-cycle might have the capacity to disrupt the context in which turnout habits occur. However, only some changes in circumstances should yield change in habitual behavior (Wood et al. 2005). I discuss the personal context (location) in this chapter, and the political context in later chapters.

Scholars have attributed to residential mobility deleterious effects regarding political participation (Milbrath and Goel 1977). This literature has shown that those who move tend to vote less, and that the likelihood of developing any kind of political activity increases with length of residence (Magre et al. 2014). According to Highton and Wolfinger (2001: 204) “there is no

question that people of any age who change residence are less likely to vote”. Squire, Wolfinger, and Glass (1987: 45) find “that turnout in the United States would increase by nine percentage points if the effect of moving were removed”. Furthermore, Alford and Lee (1968) report data showing that mobility alone accounted for 31% of the variation in turnout in a sample of US municipalities.

Two major theories explain the mechanisms through which relocation affects turnout. Some scholars claim that residential mobility has a deleterious impact primarily because of the consequent need to re-register rather than any disruption of social ties (Highton 2000)<sup>18</sup>. Therefore, recently-moved citizens are less likely to vote due to the increment of voting and other administrative costs associated: knowing the new polling station location, the candidates and relevant issues at the local level (Dowding et al. 2012), the time required to vote and the amount spent on traveling to the polling station (Bhatti 2012). Using data from Danish local elections Bhatti (2012) found a strong negative relationship between the distance to the polling station and turnout with a clear decay for longer distances.

Alternatively, others argue that “residential mobility is associated with lower turnout due to the fact that such people may have less attachment to their new community” (Denny and Doyle 2009: 26). Thus, the newly moved lack of social connections that, as usually theorized, reduce the costs of voting and give them a strong link to their community (Dowding et al. 2012, Boulianne and Brailey 2014). Accordingly, the local community is viewed as a complex system of friendship and kinship networks and formal and informal associational ties rooted in family life and on-going socialization processes (Kasarda and Janowitz 1974). Basically, politically active neighborhoods

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<sup>18</sup> Vonnahme (2012) analyzes the effect of voter registration deadlines on turnout and how turnout depends on the social context of voters. His argument is that registration deadlines have both a direct and indirect effect on turnout. Concretely, shorter registration deadlines directly increase turnout by reducing the costs of voting, creating a second indirect effect through social networks as turnout spreads from person to person.

produce politically active citizens (Cho et al. 2006). For Verba and Nie (1972: 145) “citizens who have lived shorter in the community are, in general, less politically active”. The neighborhood environment is a key source of politically relevant resources that provides the conditions where political information can be disseminated and where residents can get involved into political activity (Gay 2011). For others, “voting is inherently associated with social geography, drawing upon and affecting the strength of the communities that provide the context for electoral participation” (Estrada-Correa and Johnson 2012). In sum, the literature suggests that moving is often part of a life-cycle<sup>19</sup> and regardless of how residential mobility operates on turnout, however, it is clear that residential stability facilitates turnout habits.

Drawing on vote history data for the adult participants in a lottery that offered participants the opportunity to move out of public housing in high-poverty neighborhoods into private apartments in low-poverty communities designed by Moving to Opportunity for Fair Housing Demonstration Program (MTO) in the United States Gay (2011: 148) shows that “participants who “won” the lottery—that is, adults whose families were randomly allocated a housing voucher for use in moving to a low-poverty neighborhood— were less likely to vote in a subsequent national election.”

Aldrich et al. (2011: 542) argue with respect to voting, that the performance context is particularly deeply disrupted when people move to a new location. “As with all context disruptions, the features of context that cued habitual voting in the old location are broken and need to be reestablished in the new location before a strong habit for turnout can be reestablished. Put another way, those who have just moved cannot be turning out due to a habitual response. Those who have not moved might be turning out due to recurring cues that activated the habitual

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<sup>19</sup> People move for a variety of reasons. Some of these reasons are imposed and others are not (Gay 2011).

response”<sup>20</sup>. As Rosenstone and Hansen (1993: 157) argue, people who move “must reestablish themselves politically”. Magre et al. (2014) state that effectively engaging socially and politically with the new community can take years. Earlier, Alford and Lee (1968) said that high levels of population mobility mean large sets of “residents who have lost their ties to social groups and political networks which have been their channels of communication of political stimuli”.

For Plutzer (2002: 44) residential mobility may temporarily disrupt habitual voters’ regular pattern. Like other disruptive factors, “residential mobility is primarily a factor affecting habitual voters”. In short, the administrative and social costs to moving may be enough to disrupt the habit of voting for the residentially mobile (Gay 2011).

In light of these theoretical assumptions, it is reasonable to examine whether residential mobility impact voting trends restraining voters’ likelihood to develop habituation. My assumption is based on the logic that non-habitual actions are not disrupted by contextual changes. This is the hypothesis I defend below. A long standing research tradition, based primarily in studies in the United States and other consolidated democracies, explains turnout rates in terms of the negative impact of residential mobility. Although, the literature provides convincing evidence showing that on average, movers tend to vote at lower rates than non-movers, there have been, surprisingly, few contributions examining relocation effects on habituation. Here, I argue that the effects of habituation would diminish in the aftermath of residential mobility. This is, essentially, the novel contribution of this chapter.

Thus, my theory as operationalized by the interaction between residential changes and habitual voting implies that only those citizens who vote often and have not moved between

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<sup>20</sup> For these authors once a voter does move, the context is necessarily sufficiently disrupted that any existing habit is no longer employable, and the voter cannot be deciding to turnout based on contextual cues that stimulate a habit. The requirement to consciously consider the process of voting necessarily returns turnout to a conscious, deliberate, and non-habitual response.

electoral contests will develop a strong habit for turnout to vote. I therefore predict that people who move will not develop turnout habits vis-à-vis non-movers. Following Aldrich et al. (2011) I argue that the best indicator of strong habits is the conjunction of repeated responses and stable performance contexts. Thus, for behaviors that can be performed in a variety of contexts, past behavior frequency by itself did not directly predict future performance, but only did so when people had performed the behaviors in stable contexts (Danner et al. 2008).

Likewise, as Wood et al. (2005) have argued, the disruption of habits with changed contexts should emerge in a two-way interaction such that voters might continue to perform habits only to the extent that circumstances do not change. If my theory holds, the likelihood that an individual will vote is not merely a behavioral manifestation of voting as habit. It might also reflect the influence of contextual changes that affect voting choice. In fact, I suggest that empirical evidence of a central role for residential mobility, in the activation of habitual voting would provide the basis for a better interpretation of the dynamics of turnout itself. I examine this assumption using this testable hypothesis:

### ***Hypothesis 3.3***

*The effect of habit (lagged turnout) on voter turnout will decline in the aftermath of residential mobility.*

### **3.1.2.1 Relocation in a broader perspective: mobility in other contexts**

Historically, migrations (internal or international ones) have been a driving force impacting human settlements, economic activities, labor markets and, the availability -and provision- of public goods. For individuals, families and households, mobility provides a mechanism to pursue aspirations and respond to opportunities (Bell and Muhidin 2009). The vast majority of these migration flows happen within countries. Scholars estimate that 12% of the global population in 2005 –about 760 million people- were still living in their home country, but outside their birth region (Bell and Charles-Edwards 2013), exceeding the 3% of people worldwide considered as international migrants (Groppo 2014).

Despite the increasing relevance of migration flows over time and across countries, cross-national comparisons of internal migration remain as an underdeveloped research field. Unlike other demographic events, such as birth and death, migration is a repetitive process involving varying distance and duration (Bell and Muhidin 2009). The shortage of reliable worldwide data on internal migrants and the lack of cross-national measures have challenged the estimation of internal migration in a comparative perspective. Three factors account for this phenomenon according to Bell and Charles-Edwards (2013). First, they argue that there are considerable disparities in the types of data collected across countries, attributed in part at least to the absence of international statistical standards for the measurement of internal migration. Second, they mention that there are several impediments to comparison of internal migration data collected from different sources. The most fundamental is whether migration is measured as a fixed transition, as an event, as the latest move, or over a lifetime. In addition to differences in the types of migration data collected by censuses, registers and surveys, cross-national comparisons of internal migration

are hindered by differences in population coverage, in the temporal comparability of statistics, in data quality, and in the spatial framework over which migration is measured—that is, the number of zones into which countries are divided.

Despite the lack of readily available data, interest in cross-national comparisons of internal migration has been widely apparent and has taken a number of forms (Bell and Muhidin 2009). Over time there have been some efforts for international comparability in measuring migration flows. In the 1970s the United Nations made a call for standardizing internal migration data. The earliest attempt to establish a global inventory derived from a United Nations survey published in 1978 (United Nations 1978), identifying 121 countries that collected internal migration data. Later, Nam et al. (1990) depicts the sources of migration data, patterns of movement, selectivity, causes and consequences of migration in 21 countries dispersed widely around the world. Similar efforts were made focusing on 28 European countries (Rees et al. 1996, Rees and Kupiszewski 1999). Other studies have emphasized on comparisons between countries (Long 1991), migration distance (Long et al. 1988), age structures (Castro and Rogers 1981), and other demographic characteristics (Long 1992). More recently, the 1999 United Nations World Monitoring Report (2000) drew directly on country-level documents to compare internal migration propensities and trends across 15 countries in Asia, Africa and Latin America. Also, Bell (2005) prepared a new inventory based around 191 member states of the United Nations. In addition, CEPAL published (2008) another set of cross-national comparisons of internal migration for the 23 countries in Latin America and the Caribbean, updating data assembled previously by Vignoli (2004). There are also specialized studies that compare particular aspects of internal migration, such as counter-urbanization (Champion 1989), return migration (Newbold and Bell 2001) and the leaving home process among young adults (Holdsworth 2000).

Surveys and censuses<sup>21</sup> data have been two common approaches to estimate how many people relocate across countries and over time. Scholars generally define migrants in two ways: a) choosing geographic units to define potential origin and destination locations or b) establishing the time period in which individuals must move between origins and destinations (Molloy et al. 2011). Although there is a broad consensus on how to define migrants, estimations of migration differ upon source, calculation methods and years.

In most large public use datasets, migration can typically be observed over an individual's lifetime or over a recent period of time, usually asking individuals if they relocated in the last year or during the last five years<sup>22</sup>. For instance, asking 236,865 adults in 139 countries (representing 97 percent of the world's adults) between 2011 and 2012 whether they had moved from another city or area within their countries, Gallup estimated that 8% of adults have moved within their countries in the past five years (Esipova et al. 2013). The drawback of this method is that often, only the end points of these time periods are observed. Therefore individuals who have moved many times, in between, will be indistinguishable from individuals who have moved only once (Molloy et al. 2011: 5).

Drawing on censuses data, scholars have also explored different methodological strategies to calculate how many people "live in their home country, but outside their birth region". Fully worldwide comparisons on internal migration are relatively recent and have been difficult to accomplish due to the data limitations mentioned before. Most migration studies relate to data through as earliest as 1990s at best. Despite that, in the last fifteen years there have been several efforts to compile widespread data (United Nations Development Program efforts or the IMAGE

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<sup>21</sup> Population registers and administrative collections are also prominent sources of data in Europe.

<sup>22</sup> One year and five year intervals are most common other transition intervals are also widely used. Five-year interval data are especially prominent in Latin America and Oceania, while latest move data are common in Africa and Asia.



Project) and develop new ways to measure migration flows in a comparative perspective<sup>23</sup>. By most measures, the dominant impression from data is a trend of declining across the globe when comparing migration flows measured sequentially across the 1990, 2000 and 2010 rounds of censuses available. In sum, stable or declining intensities were observed across much of the world including Latin America and the Caribbean, and in Australia, Canada and the United States (Bell and Charles-Edwards 2013). In the Latin American case, urban-urban migration has increased steadily since 1980s (International Organization Office for Migration 2008).

Although most often people who move are attracted by better income opportunities, there are other reasons why people relocate. The literature on the motives for internal migration (Lall et al. 2006) mentions insufficient public services, such as health and education, or conflicts as other significant forces. However, the decision of who migrates may be influenced by migration type (Groppo 2014). Internal migration studies have provided irrefutable evidence showing that relocation has redistributed a sizable proportion of the national population across major regions. It is well established that the propensity to move is selective of young adults, falls with age but rises with education and among highly skilled individuals. Also, the age profile of migration is remarkably consistent at different levels of spatial scale within individual countries.

Domestic migration has implications in politics. Robinson and Noriega (2010) examined voter migration as a source of political realignments and the rise of the Democratic Party in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. Also, research across various models of local government shows that at an aggregate level municipalities with high rates of recent population growth show lower levels of turnout than those with lower or even

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<sup>23</sup> Scholars employ different measures of migration which are functionally related: the *Crude Migration Intensity*, *Migration Effectiveness Index* and *Aggregate Net Migration Rate* (see Bell and Charles-Edward 2013 for methodological details).

negative growth (Kasperson 1969, Magre et al. 2014). Estrada-Correa and Johnson (2012) found that areas that experienced higher levels of foreclosure had lower levels of voter turnout. They conclude that individuals who live in communities disrupted by high rates of foreclosure are less likely to vote than individuals who live in more stable communities.

### **3.1.2.2 Residential Mobility in Costa Rica**

Unlike other countries, Costa Ricans do not relocate as much as people do in other societies for two reasons, one geographical and the other cultural. First, the country is considerably smaller (51,000 km<sup>2</sup>) than other nations. Thus, the typical reasons why people move, like getting married, a new job or college enrollment, do not necessarily force them to abandon their neighborhood and look for a completely new one. Distances are not as determinant as they are in big countries. Hence, for some individuals the cost of moving is higher and they prefer to commute relative longer distances for going to school or job and going back home later at the end of the day. Second, even after moving into a new community voters can choose to maintain their old electoral residence regardless of where they are living now. Actually, movers do not always update their address just for electoral reasons. Many of them prefer to be registered in the old electoral district for preserving the cultural tradition of extended families of going all together to the polls. On Election Day, family members (grandparents, uncles, aunts, mothers, fathers and their offspring, cousins, etc.) meet in their electoral district, go to their polling station as a group, and cast their vote for their preferred candidate or party. This tradition creates incentives for not changing their electoral residence irrespectively of how many kilometers they have to travel.

The combination of these two aspects may lead someone to simply underestimate the influence of residential mobility on turnout. In fact, it seems that under the conditions mentioned before, residential changes effects would be marginal or even innocuous in explaining voting behavior. However, I theorize that residential instability still has a deleterious effects on habitual voting. I anticipated that, when the context changed non-habitual voters will be less impacted but habitual voters' trends will be disrupted. Concretely, relocation increases the cost of voting because it implies individuals need to invest more time and get more knowledge about things like the location of the new polling station, look for and get involved in new social networks and get sense of local politics.

Using census data available Barquero and Molina (2012) estimate that 10% of the Costa Rican population moved between 2006 and 2011. Another study available calculated that 8% of the people relocated between 1968 and 1973 and 5.3% did so between 1995 and 2000 (Gómez and Madrigal [no date]). Both estimations are based on two census questions<sup>24</sup> available since 1973 at the province level: a) where do you live? and, b) where did you live five years ago? (see Table 3.2). As we can see the percentage of internal immigrants varies depending upon time period and its average is around 8%, but not that much higher recently. The implication of this is that these relocation trends themselves cannot fully explain the decline in voting over time.

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<sup>24</sup> This procedure is not able to capture relocations that occur in between census of population. It only compares where individuals live and where they used to live five years before the census is conducted. If individuals live in different provinces than those where they used to live, they are labelled as "immigrants".

Table 3.1: Internal Immigrants (%) in Costa Rica over time using census data

<b>Period</b>	<b>Internal Immigrants (%)</b>
1968 - 1973	8.1
1973 - 1984	not available
1995 - 2000	5.3
2006 - 2011	10

Source: Gómez and Madrigal (no date) for the last three periods and Barquero and Molina (2012) for the last period.

Additionally, both contributions describe the changes in the immigrants' flows over time and their implications. The authors developed the argument that Costa Rica followed the same tendency observed in other Latin American countries and provide undoubtedly evidence of a progressive decline in rural-urban migration flows and simultaneously, the increment of urban-urban trends, which eventually have less of an impact on voting tendencies. They mention the growth of metropolitan areas and changes in the development style as the two main reasons why we see the new trends. Therefore, the current immigration flows are driven by residential relocation preferences rather than job searching reasons (Barquero and Molina 2012).

Gómez and Madrigal ([no date]) show that during 1892 and 1927 internal immigrants moved from the Central Valley adjacent areas (called "Resto del Valle Central") to Guanacaste, Puntarenas and Limón, the peripheral provinces. These trends were connected to the development of economic activities such as banana and coffee plantations, livestock and milk production. In the next three decades (1927-1950) the movements occur, again, from the Central Valley adjacent areas to the South and North regions. During this period of time banana plantations moved from the Caribbean to the South Pacific region and, there was an extension of the agricultural frontier. Also, the San Jose metropolitan area still attracted many internal immigrants. Between 1950 and 1973 immigration followed the pattern already described: individuals migrated mainly to the North and South regions coming from the Central Valley adjacent areas.

Census data reveal a turn in internal immigration in 1973 and afterwards due to its gradually weakening accompanied by a change of directions (Gómez and Madrigal [no date]). The Central Valley adjacent areas (now called “intermediate cities”) became hot-spots for attracting more migrants rather than their traditional role of losing population. These trends contributed to the growing of Heredia, Cartago and in a smaller extent Alajuela (the other Central Valley provinces) and, consequently immigrants start leaving peripheral provinces.

In sum, the comparison of rates reveals less dynamism on internal immigration flows over time attributed mainly to a significant change of their directions: less prevalent from rural to urban and a more active urban-urban movements, mainly from the urban centers to the peripheral urban areas. The transformations we have seen in the economic activities, evolving from an agricultural based to a services oriented economy, complemented with changed individuals’ residential preferences have driven this phenomenon. Later in this chapter I discuss the implications of these trends in political participation.

According to voters’ panel data for Costa Rica 1994-2010, the percentage of voters who relocate between elections has decreased over time. On average, 15% of the eligible voters has moved to new districts in the last five presidential elections. For estimating the percentage of voters who relocate I compare the districts, using the district identification number, where they were register to vote at *time t* (1994 for instance) and at *time t+1* (1998). All those individuals who appeared registered in a different district at time *t+1* were considered relocated voters.

The percentage of voters who relocate is slightly higher than the rate estimated using the census data. There can be many reasons why. One reason can be that census data excluded foreign individuals who immigrated to the country whereas the voters’ turnout panel data include those foreign residents who nationalized and become eligible voters via legal mechanisms. Other reason

why is because the propensity to immigrate increases at specific points in time during life-cycle and it is determined by age, especially during adulthood. The panel I use in this chapter, by nature, captures a significant proportion of individuals with high, or above average, propensity to immigrate.

Table 3.2: Voters who moved between elections in Costa Rica

<b>Moved</b>	<b>Election</b>				<b>Total</b>
	<b>1998</b>	<b>2002</b>	<b>2006</b>	<b>2010</b>	
No	2,015,030	2,161,923	2,462,237	2,694,817	9,334,007
%	83.25	83.14	86.82	86.91	85.18
Yes	405,371	438,513	373,944	406,002	1,623,830
%	16.75	16.86	13.18	13.09	14.82
Total	2,420,401	2,600,436	2,836,181	3,100,819	10,957,837

The socio-demographic characteristics of voting population internal migrants in Costa Rica are consistent with data available worldwide, they are predominantly men and young individuals. Among those who immigrate there are more male than female: 16% of men voters moved between elections whereas 14% of women voters did the same. Also, among those voters that did not move between electoral contests 51% are women and 49% are men. In contrast, considering only those voters who relocate (moved=1) between a pair of elections, 53% were men and 47% women. The average age of movers is 40 years old and 43 for non-movers. Lastly, of those who remain in the same location, 89% voted all the time they were eligible to vote (varying from 1 to 5 elections) and 81% never have voted between 1994 and 2010.

### 3.2 DATA DESCRIPTION AND STATISTICAL MODELS

To assess how voting in the first election someone is eligible to do so affect voters' turnout in the future and its contribution to the formation of habituation there are three key predictors. First, I analyze *Turnout* both as a dependent variable and independent predictor using lagged values (t-1). Second, I examine if voters relocate and its impact on political participation. Finally, I study to what extent the development of habituation is driven by what voters did when they were eligible to vote for the first time. In measuring *first turnout* I estimate the number of years since an individual cast his first vote ever. This predictor is used in the estimation of habitual voting models (see below for model specification) for the subpopulation of voters entering to the electorate in 1994, 1998, 2002 and 2006.

For doing so I use two different political participation datasets (for a full description of data see Chapter 1). The first one is the complete version of the panel of individuals entitled to vote in Costa Rica in five of the most recent presidential elections 1994, 1998, 2002, 2006 and 2010. The second one is a reduced version of the former panel and it includes only individuals who started voting in 1994 and after –those born between 1973 and 1987. In other words, both datasets share the exact same variables but differ in terms of the number of observations. In fact, the second dataset is a subset of the first one. Data come from the official turnout database collected by the Electoral Supreme Court after each national election.

I then conduct longitudinal analysis using a lagged dependent (dichotomous) variable model. This model assumes that  $Y$  at time  $t$  is a function of  $Y_{t-1}$  along with the other  $X_s$  for two reasons. First, I argue that the distributed lag effects of  $X$  that are captured in an  $Y_{t-1}$  effect and second, for partial control for omitted changing variables. This method is a very common way of modeling temporal dependence in longitudinal analyses. It has been called *State Dependence*

*Model* since the current value of Y depends on its prior state, and future states of Y depend on current ones. I run two different models: *Additive*, and *Interactive*. The former includes single effects predictors. The latter one contains the single effect predictors combined with two interactions ( $Turnout_{i-1} * moved$  and  $Turnout_{i-1} * first\ turnout$ ) for examining whether individuals who participate in the first elections they were entitled to do so and do not relocate will develop habits earlier than those who did not show up in the polls.

### **Models Specification**

#### **Additive model:**

$$\Pr(turnout_{it}=1 | X_{it}) = \beta_1 + \beta_2 turnout_{it-1} + \beta_3 female_{it} + \beta_4 age_{it} + \beta_5 age\ squared_{it} + \beta_6 moved_{it} + u_i + \varepsilon_{it}$$

#### **Interactive model:**

$$\Pr(turnout_{it}=1 | X_{it}) = \beta_1 + \beta_2 turnout_{it-1} + \beta_3 female_{it} + \beta_4 age_{it} + \beta_5 age\ squared_{it} + \beta_6 moved_{it} + \beta_7 turnout_{it-1} * age_{it} + \beta_8 turnout_{it-1} * moved_{it} + u_i + \varepsilon_{it}$$



### 3.3 MULTIVARIATE ANALYSIS AND FINDINGS

Table 3.4 reports the results of regressing turnout on different sets of variables. Model 1 is the additive version of the analysis that includes the main effects predictors: prior turnout, first turnout and residential mobility. In contrast, Model 2 is the interactive one. It includes two interactions for examining under what circumstances first turnout and residential mobility mediate the effects of prior turnout on political participation.

Table 3.3: Habitual Voting and Relocation Models

	Additive b/se	Interactive b/se
Turnout Lag	1.222* (0.002)	1.111* (0.006)
Female	0.311* (0.002)	0.307* (0.002)
Voters' age	0.064* (0.000)	0.058* (0.000)
Age^2	-0.001* (0.000)	-0.001* (0.000)
Moved	-0.055* (0.003)	0.330* (0.004)
<i>Interactions</i>		
Turnout Lag x Age		0.006* (0.000)
Turnout Lag x Moved		-0.704* (0.005)
Constant	-1.367* (0.008)	-1.265* (0.009)
Insig2u Constant	0.396* (0.003)	0.337* (0.004)
Wald Chi-squared	356483	379876
Prob > chi2	0.000	0.000
Number of groups	3.114.665	3.114.665
Number of cases	10.872.888	10.872.888

\* p<0.001

A visual inspection of the results provides evidence to corroborate the initial expectations. First, in the additive model, prior turnout<sup>25</sup> and age are positively related to turnout. Also, women are more likely to vote than men. Using the first model (the additive one) as a baseline we can describe the findings. More specifically, the coefficient for the lag of turnout is 1.222, which means that there is a 1.22 increase in the log-odds of voting in the future among those voters who showed up at the polls in the previous election.

Also, I expect an increment of 0.311 in the log-odds of the dependent variable for female vis-à-vis male voters. Furthermore, for every year in voters' age one can expect a 0.06 increase in the log-odds of voting. In addition, the direction of voters' age squared confirms the widespread notion that the relationship between turnout and age is curvilinear (U-inversed shape) showing that political participation increases with age until an inflection point that turns the relationship into negative. Finally, relocation decreases the log-odds of voting in -0.055. Thus, residential mobility is negatively associated with turnout, suggesting that, contrary to the conventional wisdom, relocation can upset the inertia of non-voting<sup>26</sup>. The findings of the interactions that appear in Model 2 are discussed later in this chapter in terms of their substantive meaning.

After seen these results, one can argue that the effects shown in Table 3.4 are artifacts of the previous turnout measure I use in this chapter. Accordingly, this possibility raises a serious methodological concern: the lagged value of turnout, one of the key predictors in this analysis, might capture all sorts of unobserved factors that are constant over time. These critics raise valid points regarding the substantive interpretation of these results. The use of a sub-population of voters in the following section will allow me to examine this in detail and most importantly, will

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<sup>25</sup> The analysis in this chapter considered only the conditions under which habitual voting takes place in national elections. This does not exclude the possibility that voters exhibit the same behavioral pattern at different electoral levels. This is relevant in the Costa Rican case due to the fact that municipal elections are not concurrent with the presidential and legislative electoral contests.

<sup>26</sup> This finding provides some evidence to explore to what extent non-voters can be said to have been in a state of "repetitive" behavior. However, this issue is beyond the goal of this paper.

allow me to test whether the emergence of habitual voting occur in the third election if individuals started voting in the first election they were eligible to do so, the novel contribution of this chapter.

The method I explore here is analyzing only those individuals that were eligible to vote for first time in 1994 (the first time point in the dataset) and after<sup>27</sup>. The use of this subpopulation, as a robustness test, allows me to study first, the behavior of individuals that have never voted before and second, disentangle two effects traditionally seen as the same thing: the effect of prior turnout and how habits originate in new voters. In brief, in modeling habituation in a population that entered to electoral politics at the same time my expectation is to estimate with precision the age in which casting a vote in a previous election triggers the development of habitual voting in the future.

Habitual voting, as postulated by scholars, occurs when some conditions are met. This chapter suggest one way in which habits originate in new voters: the probability of voting gets cumulative larger over time if individuals voted earlier in life. For testing this I use a new predictor called *First turnout*. This is a continuous variable that measures the number of years since an individual cast a vote for first time. Thus, if someone voted for first time in 1994 *First turnout* is: 2006-1994 = 12 years. *First turnout* values are 4, 8 or 12 years. Early first time vote is the key element here given the fact that it can trigger future voting and progressively activate the habitual component of individuals' political behavior. If my theoretical assumption is right, the interaction  $turnout_{(t-1)} * First\ turnout$  should be positively and significantly related to voter turnout. Thus, individuals' probability to vote will be larger and larger over time. In addition to that, I also test the assumption that prior turnout does not lead to habituation if individuals relocate using the interaction  $turnout_{t-1} * residential\ mobility$ .

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<sup>27</sup> For the purpose of this analysis I considered only voters that were able to vote for the first time in the following elections: 1994, 1998, 2002 and 2006. Thus, individuals who were eligible to vote for first time in 2010 were excluded.

## Models Specification

### Additive model:

$$\Pr(\text{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{age squared}_{it} + \beta_6 \text{moved}_{it} + \beta_7 \text{first turnout}_{it} + u_i + \varepsilon_{it}$$

### Interactive model:

$$\Pr(\text{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{age squared}_{it} + \beta_6 \text{moved}_{it} + \beta_7 \text{first turnout}_{it} + \beta_8 \text{turnout}_{it-1} * \text{moved}_{it} + \beta_9 \text{turnout}_{it-1} * \text{first turnout}_{it} + u_i + \varepsilon_{it}$$

Table 3.4: Habitual Voting and Relocation Models with first-time voters in 1994 and after

	Additive b/se	Interactive b/se
Turnout Lag	0.636* (0.006)	0.296* (0.010)
Voters' Age	0.096* (0.007)	0.121* (0.007)
Age^2	-0.005* (0.000)	-0.006* (0.000)
Moved	-0.142* (0.006)	0.286* (0.009)
Female	0.455* (0.006)	0.439* (0.006)
First turnout	0.494* (0.001)	0.426* (0.001)
<b>Interactions</b>		
Turnout Lag x First turnout		0.085* (0.001)
Turnout Lag x Moved		-0.750* (0.012)
Constant	-1.194* (0.104)	-1.376* (0.103)
-----		
Insig2u Constant	0.894* (0.007)	0.760* (0.008)
-----		
Wald Chi-squared	289571	304806
Prob > chi2	0.000	0.000
Number of groups	740.372	740.372
Number of cases	2.244.998	2.244.998
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* p<0.001		

As we can see in Table 3.5, the effect of  $\text{turnout}_{(t-1)}$  on turnout is positive and statistically significant<sup>28</sup>. This seems to support my original causal story, however in this section I discuss three caveats for interpreting these numbers correctly. First, this coefficient has no real meaning and it is not possible to interpret it due to the fact that it appears in the models interacted with other independent predictors. Second, the two key predictors, *First turnout* and the interaction  $\text{turnout}_{(t-1)} * \text{First turnout}$  are positive and significantly associated with turnout, it suggests the number of years in the gap since the person has voted in the previous election, the higher the likelihood of

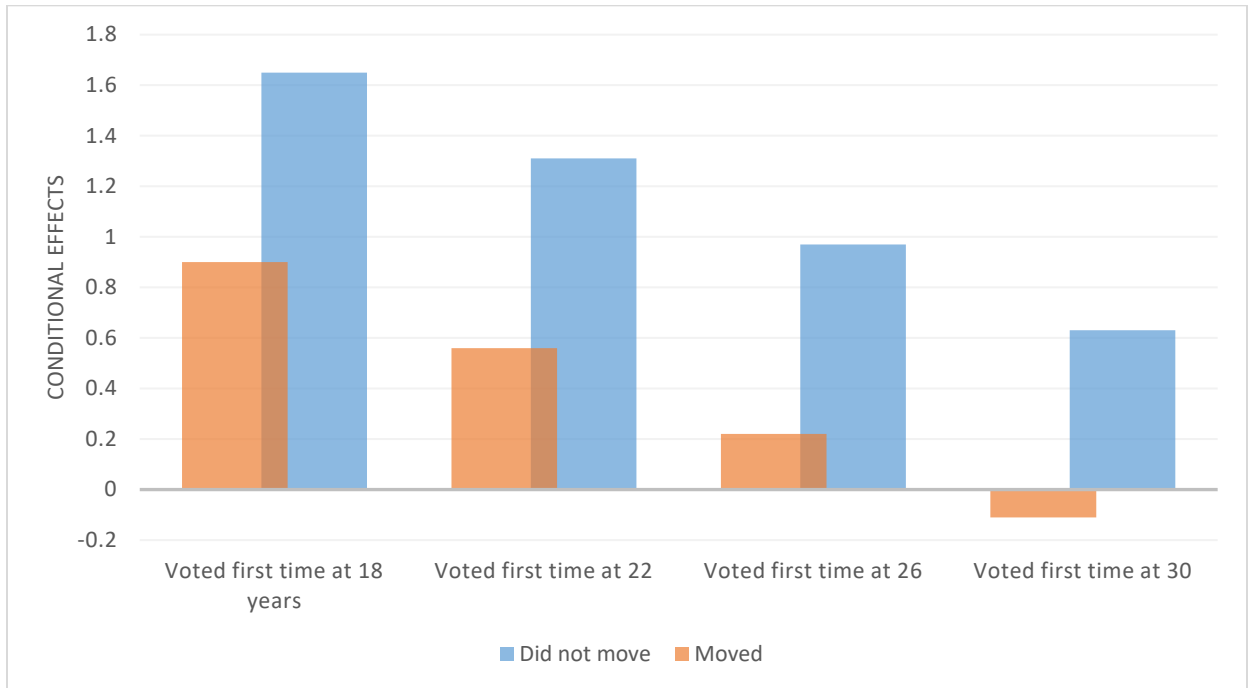
<sup>28</sup> The other predictors exhibit the same direction and similar magnitudes if we contrast them with models in Table 3.4

turnout in the future. Third, the coefficient is always positive but growing, indicating that there is some true habituation: voting once makes you more likely to vote twice, but voting twice makes you even more likely to vote three times and so on.

For interpreting the substantive effects and significance of the covariates in my models including these trends I just mentioned, I conducted two analyses. First, I estimate the conditional effects of covariates on turnout conditioned by previous voting, the interaction between turnout lag and residential mobility, and turnout lag and individuals' first turnout. Interestingly, if an average individual *did not move* between elections the conditional coefficients of turnout  $t-1$  are always positive and larger if they started voting at 18 years old (1.65) but smaller if they started voting when they were 30 years old (0.63). This can be interpreted as the effect of previous voting on turnout mediated by voters' first turnout. In contrast, in the case of an average individual *who moved* between elections, the conditional effects of voting at  $t-1$  are positive but smaller if they voted for the first time at 26 years old and younger, but turns into negative if they cast a vote for the first time at 30 years old.

Figure 3.1 provides compelling evidence supporting the idea that all coefficients (with the exception of one that is very small and probably irrelevant in terms of substantive effects) show that if someone voted last time they are more likely to vote next time. This effect is greater for those who voted in the first opportunity to do so and gets smaller if they show up at the polls for the first time later in their turnout exposures. This assumption is based on the idea that people's sense of voting builds over time (Bhatti et al. 2012, Alfaro-Redondo 2014).

Figure 3.1: Conditional effects coefficients of Turnout (t-1) at different values of First Turnout and Relocation

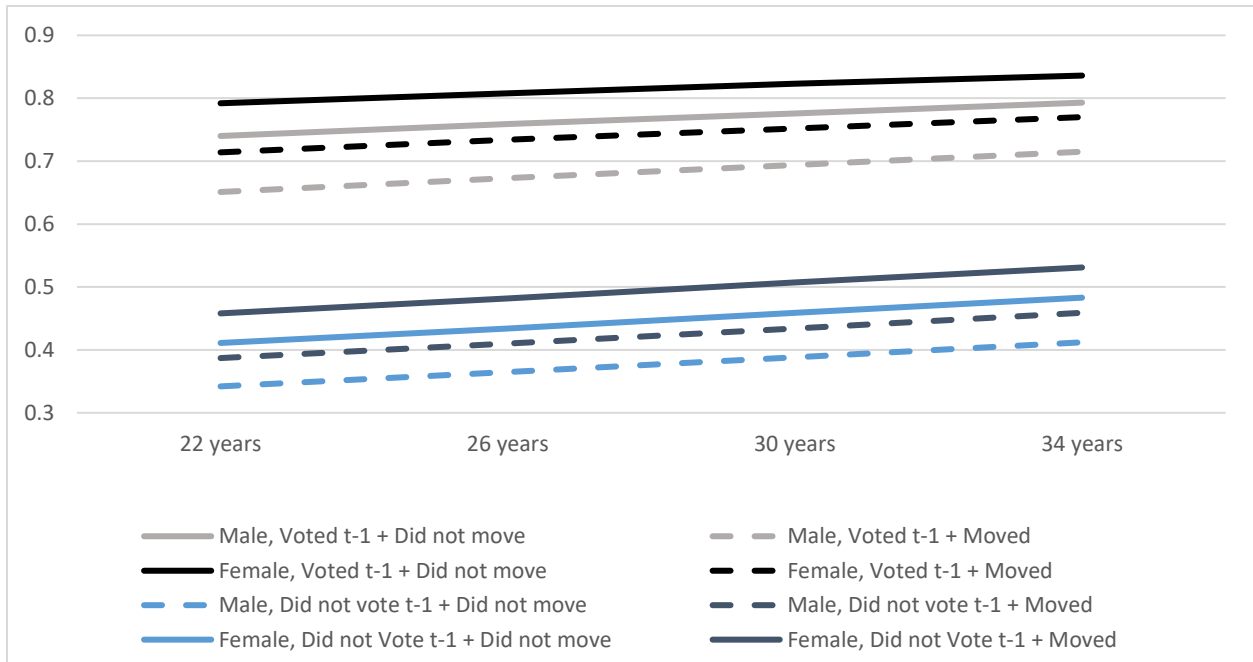


The second procedure I did for the substantive interpretation of the results of this chapter was the estimation of predicted probabilities for  $Y=1$ . The main variables for the simulation are female, age, turnout<sub>(t-1)</sub> and relocation. I estimate the probabilities using eight different combinations for voters at four different ages 22, 26, 30 and 34 years old:

1. Male + Voted<sub>(t-1)</sub> + Did not move
2. Male + Voted<sub>(t-1)</sub> + Moved
3. Female + Voted<sub>(t-1)</sub> + Did not move
4. Female + Voted<sub>(t-1)</sub> + Moved
5. Male + Did not vote<sub>(t-1)</sub> + Did not move
6. Male + Did not vote<sub>(t-1)</sub> + Moved
7. Female + Did not vote<sub>(t-1)</sub> + Did not move
8. Female + Did not vote<sub>(t-1)</sub> + Moved

All other variables were held at their means. The results suggest that the predicted probabilities of female and male individuals who voted in the prior election and did not move are higher than those who voted as well but relocate. Concretely, if we examine two male voters at 26 years old both voted at time t-1, the likelihood of voting for the one who did not move is equal to 0.76 and decrease to 0.67 if moved. Among two female with the same profile (26 years old) the predicted probabilities of turnout gap follows the same trend (0.81 if they did not move and 0.73 if they did). The predicted probabilities for those who did not show up at the polls are, as expected, much lower. The main difference is that the likelihood of voting in the future for both female and male voters is higher if they relocate.

Figure 3.2: Predicted probabilities for turnout mediated by first turnout and relocation





For interpreting the substantive effects and practice significance of the covariates in these models, in addition to the results described above, I estimate predicted probabilities that  $Y=1$  based on the interactive model holding key variables at different values for relevant voters' profiles. As I mentioned in the methodological section of this document, the use of voters' attributes for the interpretation of the results has a key purpose: they allow me to put the findings of every chapter, and in this case in particular the estimation of the predicted probabilities of future turnout, in terms of real voters and their contexts.

In the previous chapter I started with the calculation of the probabilities of voting employing very simple demographic attributes (gender and age), which can be considered voters' attributes baseline. In every chapter I add those pertinent features to this baseline, which means I will build a more sophisticated voters' profile through the all document. At the end of the day, in the last chapters, those profiles will reflect real voters' attributes in a broad array of aspects. In this section, the estimation and interpretation of the predicted probabilities of turnout include, besides the variation of gender and age, characteristics like residential mobility, previous voting behavior and first turnout.

As it is clear in Table 3.7 female voters are more likely to vote than men across ages and other political behavior characteristics. As expected, individuals who voted in the past show a higher likelihood of voting in the future. More importantly, among those individuals who voted at  $t-1$  and did not relocate are more prone to show up at the polls in the future. Specifically, if we examine two female voters (26 years old), one voted the other one did not, the predicted probability of voting in the next election is 35 percentage points lower for the one who failed to go to the polls.

Similarly, if we look at two female voters both at 30 years old both voted in the previous election, the predicted probability of voting in the next one is 23 percentage points higher if they

started voting when they were 18 years old versus one that started voting when they were 26 years old (“late first-time-voters”).

In sum, the evidence corroborates that the effects of habitual voting on future turnout varies depending upon two things: previous vote and how soon (or late) they started voting. Also, data not only confirm the disruptive effects of residential mobility but also provide support for the theoretical assumption that suggests that relocation affect voters differently. As stated by previous literature relocation has the capacity to disrupt the context in which turnout habits occur. These results corroborate that even people who voted in the past but moved are less likely to participate in the future than those who showed up at the polls and did not move.

Table 3.5: Predicted probabilities for future turnout at different voters' profiles

Voters' attributes / Age	Male			Female		
	22	26	30	22	26	30
Voted t-1	0.73	0.75	0.77	0.78	0.80	0.81
Voted t-1 + Did not move	0.73	0.75	0.77	0.78	0.80	0.82
Voted t-1 + Moved	0.71	0.73	0.75	0.76	0.78	0.80
<hr/>						
Voted t-1 + Did not move + Voted first time at 18	0.85	0.90	0.91	0.88	0.92	0.93
Voted t-1 + Did not move + Voted first time at 22	<i>illogical</i>	0.76	0.84	<i>illogical</i>	0.81	0.87
Voted t-1 + Did not move + Voted first time at 26	<i>illogical</i>	<i>illogical</i>	0.64	<i>illogical</i>	<i>illogical</i>	0.70
<hr/>						
Voted t-1 + Moved + Voted first time at 18	0.84	0.89	0.90	0.87	0.92	0.92
Voted t-1 + Moved + Voted first time at 22	<i>illogical</i>	0.75	0.83	<i>illogical</i>	0.80	0.87
Voted t-1 + Moved + Voted first time at 26	<i>illogical</i>	<i>illogical</i>	0.63	<i>illogical</i>	<i>illogical</i>	0.69
<hr/>						
Did not vote t-1	0.35	0.38	0.40	0.42	0.45	0.47
Did not vote t-1 + Did not move	<i>illogical</i>	0.38	0.40	0.43	0.45	0.48
Did not vote t-1 + Moved	<i>illogical</i>	0.35	0.38	0.40	0.42	0.45
<hr/>						
Did not vote t-1 + Did not move + Voted first time at 18	<i>illogical</i>	0.64	0.63	0.87	0.71	0.69
Did not vote t-1 + Did not move + Voted first time at 22	<i>illogical</i>	<i>illogical</i>	0.51	<i>illogical</i>	0.79	0.58
Did not vote t-1 + Did not move + Voted first time at 26	<i>illogical</i>	<i>illogical</i>	0.62	<i>illogical</i>	<i>illogical</i>	0.68
<hr/>						
Did not vote t-1 + Moved + Voted first time at 18	<i>illogical</i>	0.63	0.62	<i>illogical</i>	0.69	0.68
Did not vote t-1 + Moved + Voted first time at 22	<i>illogical</i>	<i>illogical</i>	0.49	<i>illogical</i>	<i>illogical</i>	0.56
Did not vote t-1 + Moved + Voted first time at 26	<i>illogical</i>	<i>illogical</i>	0.60	<i>illogical</i>	<i>illogical</i>	0.67

### 3.4 CONCLUSIONS

This chapter provides evidence about the triggers and disruptors of habitual voting. The conventional view suggest that all voters will develop voting habits as a function of time, which means that if someone voted in the previous election, his probability to participate in the second or third electoral contests must be higher. Consequently, the literature claims that first turnout experiences leave a “footprint” on individuals’ political behavior in the long run, but there is little evidence regarding the factors driving voters’ behavior during that decisive period. Many of the answers available suggest that voting first choices lead individuals irretrievably in two directions: habituation or alienation. Likewise, there is evidence showing that life-cycle changes impact voters homogenously, ignoring the possibility that those factors influence different voters in dissimilar magnitudes or paces.

Two were the main theoretical and empirical purposes of this chapter. First, showing that the probability of voting in the future gets bigger gradually if someone started voting at an early age and voted in the previous election. Second, testing the assumption that relocation effects impact voters differently. In the former assumption, I demonstrate that habituation takes place gradually if individuals started voting earlier in their life and gets reinforced with previous vote.

In the latter assumption, related to relocation as one of the main inhibitors of the development of habitual voting, I found that, even under favorable conditions –i.e. small countries where distances in general are not as determinant- prior turnout does not necessarily lead to habituation if individuals relocate. In sum, one of the reasons why some voters develop habituation and others do not is, in part, because residential mobility disrupts individuals’ previous networks constraining them to build new ones in their new location with higher information costs.

In terms of the real-world implications of these findings I argue that the formation, development, and consolidation of habitual voting could be a crucial factor in re-activating political participation in those established democracies that have experienced a significant turnout decline. Even in contexts of high citizens' involvement in politics, electoral habits could help to sustain and increase such tendency. Furthermore, if new generations of voters do not show up at the polls in the same way that their parents or grandparents did in the past, or even if they just delay their first vote longer than the standard time, they will enter politics at older ages, feeling alienated from political world or less capable of influencing public decisions. The worst case scenario will be one in which this pattern could extend individuals' apathy toward politics during life time.

If we want to understand the implications of turnout decline in democratic contexts, we first need to comprehend the conditions under which habitual voting takes place. Future research should examine whether the findings highlighted here hold in similar contexts. The theory and methods in this chapter are pertinent for scholars interested in studying the dynamics of turnout in at least two issues. This study contributes to political psychology approaches that have conceptualized habits as repetitive actions and suggest that they can be disrupted by changes in the contexts in which those actions are usually performed. Also, this chapter shed light on the studies that examine the effects of relocation on political participation.

Finally, this chapter has shown the existence of a relationship between initial voting exposures, life-cycle changes, and future turnout, but it has not presented evidence regarding the role of parents and couples in shaping voters' decisions as postulated by political socialization theories. That is the goal of the next two chapters.

#### **4.0 LIKE PARENTS LIKE CHILDREN: PARENTAL INFLUENCE ON TURNOUT**

Are voters more likely to cast their vote because their parents did so? Is there evidence that parental effects on voters' turnout change over time? Who is more influential within the family regarding political participation? The following six personal stories reveal the decisive role of family networks on individuals' political behavior.

Carmen's father socialized her by showing that turn out to vote is important. Her father always voted, her mother never did so and her older sister has never voted. Despite growing up with her mother, she ended up replicating her father's political pathway. Currently, Carmen is socializing her daughter about the importance of voting.

Raúl's grandfather was governor of the province and had a close relationship with J.F. Orlich and Daniel Oduber (two former presidents). His grandmother was a very active party militant. His household used to be the party operations headquarter on election day. Other close relatives were teachers and active in local organizations. Raúl was the school and high-school president and got involved in politics first as a "guía electoral" (young people who are in charge of guiding voters to the polls outside polling stations) climbing later in the local leadership ladder. In the 1994 electoral campaign he was in charge of mobilizing the most populated district. Raúl ran his own campaign for deputy 8 years later and succeeded.

Vanessa's father was really involved in the National Liberation Party (PLN). He was indoctrinated in "La Lucha" a symbolic small town where the party was founded. The PLN let him down and he became communist. When her father switched parties closer relatives called him a political traitor. Vanessa and her brother decided to join the Communist Youth and adopt a very

proactive role. Her mother was apathetic instead. In her neighborhood people lived politics intensely.

Juana's grandfather was the party leader in the community. In her grandparents' house they prepared everything for election day for a long time. They talk to people, organize meetings, and assemble party flags and propaganda. She grew up looking at "mariachi" supporters (PUSC followers) gathering around for electoral purposes. When her grandfather died they got away from that electoral tradition. Now she goes to the polls and votes, that's it. However, in her mind "not voting is like committing a crime..."

Ramón's mother was a loyal "liberacionista" (PLN follower); she had never voted for other party in her life. His aunt (mother's sister twin) supported the opposition party. They were rivals and serious adversaries in politics. Ramón used to spend vacation with his aunt, so he was exposed to both kinds of party militancy and according to him his mother and his aunt were irrational party supporters. His mom used to go to the rallies with flags and they used to live closer to the transportation center of the PLN. Early on election day many voters arrived there and were assigned to buses for traveling to different parts of the country. He remembers party flags on every roof and parties influencing every election even those of the students' association at the University of Costa Rica or the Lawyers National Association. Raúl told me a personal anecdote: "Once one of the candidates visited our neighborhood and my son was happy playing with a party's flag somebody gave to him. My mom was very upset because she supported the opposition party. My mom got sick when the party lost the election". Back in time, he said, "people used to fight defending their candidates..., you don't see that anymore. Nowadays politicians convince and mobilize few voters".

Elisa's grandmother always told her how much she liked what she hears about politics, how much she would like to have the opportunity to vote but she could not do it. Her mother was able to vote and she told her experience at the polls. By the time she was seven or eight years old her mom brought her to the rallies in San Jose in crowded buses where people sing, yell and carry party flags. As Elisa said, kids her age got involved in politics very early as "guías electorales", after that they enrolled in the party youth. This was the way she started. She used to go with his mom to the polls several times and wait for her outside the poll.

She remembers her grandmother and mother getting ready for going to the polls with the only idea in mind to impede the opposition to win the election. They voted and remained outside the school, then they left and returned there closer to 6pm to listen to the reports. In our neighborhood people prepare a "coffin" with the flag and colors of the loser and carried it all around the town during that night. Election day was a very happy and joyful day in her life. Elisa's family had a very powerful influence in her life... "they transmitted her civic values and I felt voting as a big responsibility". She has occupied different positions: municipal council member, local party leader... She has never thought about failing to the polls and she has always voted for the same party. She cannot support other party than the PLN. Her son in law is very active in politics and he is running for mayor...

All these stories reflect, in a dissimilar way, the determinant role of parental influence on their offspring political behavior. This chapter considers the mechanisms by which voters adopt, or fail to adopt, their parents' voting habits. Put another way, I expect that greater levels of parental political participation will serve as a predictor of higher turnout levels among their offspring. For more than fifty years, theoretical accounts of offspring' behavior have emphasized that family is a pivotal social agent in shaping individuals' political behavior. Therefore, that family networks play



a central role in explaining individuals' voting behavior is certainly not new. Nonetheless, it is important to specify how and why parents' influence matters as a cause of turnout, and also to consider its evolution in the long-term.

Specifically, this chapter argues that among those voters who enter at the electorate at the same time, one can see the greatest parental effects at the beginning of turnout exposures. That impact, however, gradually decreases some elections later. In doing so, in this document I consider the extent to which voters' turnout might have been predictable given their parents voting behavior in the same elections. The next chapter is an extension of this argument but studying the role of the spouses on political participation.

The analysis shows that politically active parents make voters more likely to vote. Nonetheless, the intensity of parents' influence varies over time: greater in the first election studied but smaller several elections later. Moreover, mothers, not fathers, are the most influential socialization agent within the family. Women higher turnout rates put those who are mothers in a more favorable situation for influencing their offspring. Lastly, when I separate the models by voters' gender mothers' behavior impacts daughters and sons greater than fathers do.

The traditional view of political socialization processes relies, heavily, on the idea that parents transmit directly to their offspring most of their political views or beliefs (Hyman 1959, Davies 1965, Niemi and Sobieszek 1977). Intergenerational transmission models dominated scholars' political socialization approaches until mid-1980s (Jennings et al. 2009). This literature argues that children tend to mirror their parents on social and political values. Revisionists have pointed several methodological limitations (Dennis 1968, Jennings and Niemi 1968) and misunderstandings regarding the "correspondence" between the behaviors of two related generations (Connell 1972, Merelman 1980, Niemi 1995). Despite methodological concerns,

empirical studies have shown that the impact of parental influence on the development of children political values seems plausible (Dalhouse and Frideres 1996, Sapiro 2004).

If the direct transmission models are accurate one should conclude that those individuals who were born in a highly politicized family, these theories argue, may cast their votes at similar rates than their parents do. For more than three decades, between 1958 and 1994, political participation rates in Costa Rica remained virtually invariable at a very high level: more than 80% of the electorate used to cast their votes on Election Day. Based on that long pattern theories will easily predict that individuals socialized during that period of time have learned and later reproduced their parents' levels of political activism almost mechanically. The theory suggesting that the family environment positively influences young adult turnout could be tested in the Costa Rican case, a country where the young usually live a very long period with their family.

The chapters' main research questions are the following. First, is there evidence that voters' turnout decisions are driven by what their parents did? If so, are offspring of habitual voters more likely to vote than offspring of non-habitual ones? Second, are mothers more decisive political socialization agents than fathers? and finally, do parents' turnout effects on individuals' voting behavior decrease over time?

There has been a renewed interest in the field of political behavior on the effects of personal networks on political participation. In one of the classic piece scholars argue that "personal influence can bring to the polls votes that would otherwise not be cast or would be cast for the opposing party" (Lazarsfeld et al. 1968: 157). Basically, it is well-known that the immediate social circumstances of people's lives influence what they believe and do about politics (Zuckerman 2005: 3). In sum, the social context is an important determinant of the extent to which individuals participate in politics (Huckfeldt 1979).

After turning away from the social logic of politics for a while, scholars of politics reiterate the importance of the social context for the analysis of political preferences, choices, and behavior (Zuckerman 2005). Briefly, scholars argue that voting choices are a product of both personal attitudes and social calculus (Beck et al., 2002: 57). More concretely, different studies have demonstrated that turnout is highly correlated among friends, family members, and co-workers even when controlling for socioeconomic status (Kenny 1993, Fowler 2005). In fact, Fowler (2005: 272) developed a model of turnout that suggests a single person's decision to vote can affect the turnout decision of several other people. He calls this effect a "turnout cascade".

Politics is a social activity embedded within structured patterns of social interaction. Thus, political behavior may be understood in terms of individuals tied together by, and located within, networks, groups, and other social formations that largely determine their opportunities for the exchange of meaningful political information (Huckfeldt and Sprague 1987). As stated by Huckfeldt et al. (1993: 365) "every citizen lies at the center of a social experience produced by a series of intersecting, overlapping, layered environments that has potentially important consequences for politics because each serves to modify and deflect the opportunities and constraints that circumscribe social interactions that serves as a vehicle for the transmission of political information and guidance". For Zuckerman (2005), when persons make decisions, they take into account the cues, knowledge, values, and expectations of their spouse, parents, children, friends, work-mates, and others around them –those who matter in their lives.

Scholars argue that voters are affected by the individuals with whom they share time and political discussions (Cho et al. 2006). For Mutz (2002: 839) a participatory social environment produces still more participation, and the mechanism assumed to account for this effect is the more

people interact with one another within a social context, the more norms of participation will be transmitted, and the more people will be recruited into political activity.

In this chapter I pay attention to the way individuals in interpersonal networks behave and how their behavior may influence others. For doing so, my data fully captured family networks' voting behavior. Thus, I do not have to worry about individuals misrepresenting and reporting inaccurate turnout rates or social desirability bias effects. Thus, I examine the objective measures of political participation for the "triad" (mother, father and offspring) within family networks.

Here I reaffirm the importance of social context for the analysis of individuals' political behavior by examining the lasting effects of formative early experiences on adult behavior. Basically, I theorize that family members heavily influence individuals' political participation prospects. Although I anticipate that younger members in a family mimic what the older ones do, that influence changes as time advances. At the beginning of voters' turnout experiences I expect to find greater parental impact that, nonetheless, begin to decline significantly and steadily over time no matter which parent we are talking about. Besides, I complement this dynamic approach by stating that mothers are more crucial agents in the political socialization process than fathers.

The analysis is conducted in five sections including this introduction. In the second one I discuss the theoretical framework for exploring the effects of parents' turnout behavior individuals' voting patterns. Section three provides the complete description of data and the statistical models employed. Then, in section four I test the hypotheses using multivariate analysis. Finally, in section five I address the practical and theoretical implications of my findings.

## 4.1 THEORETICAL FRAMEWORK

### 4.1.1 Parental Effects

Even though recent studies have suggested that voters' inherit, rather than learn, turnout trends via genetic transmission from parent to child (Fowler et al. 2008, Fowler and Dawes 2008), a large tradition of studies demonstrate that individuals' turnout trends are strongly related with the voting behavior of their social environment (Campbell et al. 1960, Lazarsfeld et al. 1968, Zuckerman 2005). For researchers, "participatory activities are not solitary acts of atomized individuals acting in a social vacuum, and cannot, therefore, be fully explained through studying the effects of voters' demographic and socioeconomic attributes, or their attitudes, beliefs, values and norms" (Schmitt-Beck and Mackenrodt 2010: 392). Additionally, Zuckerman (2005) argues that voting decisions are made not in isolation, but by individuals in the social context of the household. In short, many studies have documented a powerful association among individuals and the members of the social networks they belong to, regarding their political participation rates (Beck and Jennings 1982, Cutts and Fieldhouse 2009, Fieldhouse and Cutts 2012).

Previous research has shown that "people who live together, not only vote together, but also change their votes together" (Johnston et al. 2005). This effect, others claim, may be most pronounced among members of the electorate living with a family group such as spouses, offspring, or parents (Fieldhouse and Cutts 2012). For scholars, "contextual voting theories hold that people follow similar patterns of political behavior when they live in close proximity, interact, share day-to-day experiences, and belong to the same social networks" (Fieldhouse and Cutts 2012: 856). Voting turnout, thus, tends to be a joint household activity, with the members either voting or staying home as a unit (Glaser, 1959). Others argue that "awareness and participation

did not begin only, or immediately, as one attained adulthood” (Niemi and Hepburn 1995). Thus, identifying how political values are learned and revised through the life cycle has been one of the major concerns of political behavior (Dalton 1980).

In the late 1950 Hyman (1959) first introduced the concept of *political socialization* as a powerful process shaping individuals’ political behavior. Since that, research on socialization has been primarily concerned with the learning of basic political values, how they are transferred between generations, and why such values may have enduring importance through the child’s life span (Weissberg 1974, Inglehart 1977). A key notion in this literature is the “primary principle”<sup>29</sup>, a concept that encompasses three controversial assumptions<sup>30</sup> regarding the long term implications of this process. Searing et al. (1976) summarize these assumptions in the following way: “first, political orientations are learned during childhood; second, childhood learning further shapes any subsequent modifications of them. Finally, fundamental political orientations tend to endure through life”. In sum, the main goal of political socialization research is to investigate the development of attitudes that shape adult political behavior (Searing et al. 1976).

The central premise of political socialization<sup>31</sup> research is that pre-adult formation affects adult political attitudes and behavior (Beck and Jennings 1982). For Niemi and Hepburn (1995) individuals’ political behavior, or at least the attitudes underlying such behavior, appeared to begin prior to formal adulthood. According to them, in the search for the antecedents of political behavior, it seemed obvious that one had to begin the search in adolescence or even in early childhood. Crucial in this literature is the theory suggesting that for understanding voters’ turnout

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<sup>29</sup> Others discuss the “structuring principle”, which means that basic orientations acquired during childhood structure the later learning of specific issue beliefs (Searing, Schwartz et al. 1973)

<sup>30</sup> For more details see Niemi and Hepburn (1995).

<sup>31</sup> Cognitive developmental advocates heavily criticized political socializations studies for not recognizing that individuals play an active role shaping the course of their political learning, sometimes to the point of rejecting what is being taught (for more details see: Conover 1991).

patterns we need to examine whether their parents voted in the past (Bhatti and Hansen 2012)<sup>32</sup>. For Cesarini et al. (2014) one of the most robust empirical facts in the political science literature is that children resemble their parents along a number of political behaviors and attitudes. Shortly, parents play a prominent role in explaining young people's political behavior (Nieuwbeerta and Wittebrood 1995, Flanagan et al. 1998, Flanagan and Sherrod 1998, Verba et al. 2005, Jennings et al. 2009, Coffé and Voorpostel 2010, Voorpostel and Coffé 2014).

During their socialization period of time children have few alternative sources of learning besides their parents (Dawson and Prewitt 1968, Beck 1977, Dalton 1980). Moreover, as Davies suggests (1965), the child's almost complete dependence on the parents for basic needs provides little opportunity for resistance to parental pressures. Furthermore, "the child is said to mirror his parents on a wide variety of social and political values" (Tedin 1974: 1579). This influence suggests that "the family has a pervasive effect on an individual's post-childhood thoughts and actions" (Dalton 1980: 421).

A vast amount of evidence has proved a strong association between parent and offspring political values (Jennings and Niemi 1968, Jennings and Niemi 1975, Jennings et al. 2009, Cesarini et al. 2014). As it has been stated, "when the offspring have embraced their parents' political predispositions, this legacy is evident throughout their life trajectories" (Dinas 2014: 399). The pioneer studies of political behavior in American politics attributed significant political influence to the family (Berelson et al. 1954, Campbell et al. 1960). This notion dominated the early socialization literature (Greenstein 1965, Hess and Torney-Purta 1967, Dennis and Easton 1969,

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<sup>32</sup> For Settle, Bond et al. (2011) the drawback of the socialization literature is ignoring the potential role of adolescents' social networks. For them, based on our understanding of the importance of social network influences on adults' political behavior, it seems plausible that the attitudes within adolescent social networks could also have an effect.

Sances 2013)<sup>33</sup>. For instance, Glaser (1959) shows that the most influential canvassers are the rest of the people in the voter's family. The most direct assessment of the family's socialization influence comes from a study conducted by Jennings and Niemi (1968, 1974). By separately interviewing a national sample of high school seniors and their parents, these researchers were able to assess directly parent-child agreement and determine the extent of intergenerational value transfer. Their findings were supported by a series of other parent-child pair comparisons later (Tedin 1974, Niemi et al. 1978, Jennings et al. 1979). Overall, these contributions reveal that there is a high degree of transmission of political behavior between parents and their adult children (Jennings et al. 2009, Fieldhouse and Cutts 2012, Bhatti et al. 2014).

Scholars have identified both direct and indirect pathways throughout parents transfer political values to their children (Cesarini et al. 2014). The latter happens as parents transmit social characteristics to their offspring. The direct pathway, the typical one, operates via imitation and education, and it has been labelled as the *social learning* way of transmission (Hess and Torney-Purta 1967, Sances 2013). The social learning holds “that young people learn from their parents about the world, how they fit into it, and how they should behave in it” (Voorpostel and Coffé 2014):3 see also: (Jennings and Niemi 1968, Dalton 1980, Plutzer 2002, Verba et al. 2005, Jennings et al. 2009). Put another way, parents introduce the child into the world of politics transmitting their own preferences, beliefs, and opinions. In short, the *social learning* pathway postulates that “early acquisition of parental characteristics shapes the subsequent nature of adult political development” (Dinas 2014: 400).

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<sup>33</sup> In the early contributions there was a debate regarding the determinants of political socialization. Levin (1961) and Clark (1973) pointed to family structure as the central factors; others (Connell 1972) thought that schools and mass media had supplanted the family and relegated it to a marginal role in political socialization.



In the initial literature some scholars argue that orientations have been acquired by the time children leave the eighth grade, and that little change occurs thereafter (Searing et al. 1973). More specifically, Davies (1965) suggests that political socialization begins at about the age of three and is basically completed by the age of thirteen.

Sandell and Plutzer (2005: 137) argue that direct transmission occurs through explicit discussion of politics and public affairs enhanced by the presence of adult household members (see also: Straits 1991). Empirical evidence available suggests that parental discussions of social and political issues foster marginalized youths' participation in social action and political participation (Diemer and Li 2011, Diemer 2012). Consequently, parents provide political socialization by discussing social and political events with their children (Pacheco 2008).

Moreover, parent political activity may affect children's attitudes about politics and consequently their participation. For instance, in his study Dinas (2014) examines how parental politicization can leave a long shadow on offspring's voting records. Parents set examples with their own behavior that are very likely to be replicated by their offspring when they have the opportunity. In doing so parents are sending strong signals that being active in politics is a valued thing (Bengtson et al. 2002, Voorpostel and Coffé 2014). Hess and Torney-Purta (1967) suggest that young people identify themselves with politically active parents who serve as positive role models. In line with this argument, others posit that parents transfer their turnout habits to the younger generation, as "they constitute the young people's primary role models" (Bhatti and Hansen 2012: 385), a theoretical assumption supported by the results of Plutzer (2002) who found that the largest effect among a range of parental variables on first-time voter turnout is parental turnout.

In other words, another possible source of parent political influence is parent political involvement itself. Through the mechanism of imitation, the offspring of activists may adopt an activist stance themselves (Beck and Jennings 1982). Through various manifestations of observational learning, parents transmit their political views onto their children (Dinas 2014). Basically, “engaged parents tend to raise engaged children” (Andolina et al. 2003: 279). Studying the effects of parental separation on voters’ behavior Voorpostel and Coffé (2014) demonstrate that young adults with separated parents are less likely to have a parental “role model” when it comes to public engagement, mainly because separated parents do not engage in public life as much as married parents.

In short, parents transmit norms of political involvement to their children (Jennings and Niemi 1981, Plutzer 2002, Jennings et al. 2009). According to this logic, a sense of civic duty is inculcated in children early in life (Loewen and Dawes 2012). Others have shown that parental political participation is a powerful predictor of offspring participation and especially in the first eligible election (Plutzer 2002). According, “parents socialize their children to be citizens and political actors” (Diemer 2012)<sup>34</sup>. In a similar vein, Verba et al. (2005: 95) showed an indirect way through higher parental education increases the likelihood of later offspring political participation not only by providing a richer political environment at home but also by enhancing the educational attainments of their offspring which are, in turn, directly related to participation.

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<sup>34</sup> Early socialization research suggested a substantial parent-offspring correspondence in partisanship (Dalton 1980). The Jennings and Niemi studies also reported a high degree of partisan consistency between parents and children (1968, 1974).

Furthermore, parental effects on voters' turnout "may have a more immediate influence on their offspring by being their primary social influence due to shared housing" (Bhatti and Hansen 2012). Under the same household voters are exposed to different kind of effects regarding each other's decision to vote. Some of this effects take place in the immediate context of an election (short-run). For example, when family members confront themselves with respect to going to the polls or not. In addition to the short-run effects, daily discussions and exchanges regarding politicians' decisions and political issues, one can talk about a long-term "cycle of influence" that impact individuals' political interest and their disposition to vote in the future. Briefly, "as individuals live together they may become increasingly similar" (Bhatti and Hansen 2013)<sup>35</sup>.

Others argue that, in contrast, individuals rely on shortcuts from household and family members for processing the large amounts, and sometimes very sophisticated, information originated in the electoral campaign (Klofstad 2007). Hence, "when deciding whether to vote or not, citizens will be more influenced by the arguments and behavior from their friends and family than by information from impersonal campaigns" (Bhatti et al. 2014). Another important source of influence is a cultural one. Accordingly, usually individuals vote together in the same polling stations than other household and family members (Fieldhouse and Cutts 2012). Thus, "living as a young adult in the parental home may matter simply because voting is often a social act in which families go to the polls together" (Tuorto 2014: 196). This circumstance may persuade individuals to behave in such a way that let them to avoid being confronted with their relatives. Therefore, if other household members vote it may be difficult for them to stay at home. Many studies also suggest that close relationships, especially those between spouses and between parents and children, shape the production of political opinions (Buton et al. 2012).

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<sup>35</sup> Recently, several empirical studies have found large household effects mainly based on cross-sectional data (Fieldhouse and Cutts 2009, Fieldhouse and Cutts 2012, Bhatti and Hansen 2012).

Irrespectively of the reasons why, the certain thing is that when parents do not show up at the polls the chance of younger voters to develop habituation, which means that individuals who vote in the past are more likely to cast their vote in the future, should be diminished. As stated somewhere else, “this should ultimately reduce youth voter turnout” (Sandell and Plutzer 2005).

In this chapter, I argue that younger members of the electorate are the most susceptible to the influence of other household relatives, especially those living with their parents. According to Dinas (2014), family socialization leaves a long-standing shadow on offspring’s political outlook. This assumption is consistent with previous studies that suggest that, if the household is an important context for voters in general, it is likely to be especially important for first-time voters who are still learning their political and civic values and norms from their parents (Niemi and Hepburn 1995, Gimpel et al. 2003). Tuorto (2014) points to the fact that a young person voting for the first time has no previous political experience to rely on. Children’s partisanship adoption is often referred as a crystal clear example of parental influence. Scholars have shown that parents shape the development of their children’s partisan identities well before they reach voting age (Wolak 2009). Children, they argue, acquire from their parents political labels that guide them in finding their way inside a complicated political world about which they have incomplete and inaccurate information (Ventura 2001). In the same way that children inherit party identification, one can argue that parents transfer voting behavior patterns to their offspring, an assumption that can be tested looking at individuals’ first turnout exposures. As Fieldhouse and Cutts (2012) have said, at the age of 18 many first-time voters still live with their parents and they also showed that the decision of young first-time electors to vote is highly dependent on the participation of others in their family.

Although the strongest influence on turnout behavior seems to occur within the family setting, there are reasons to believe that parental effects do not remain constant over time (Vollebergh et al. 2001). Some theorists emphasize on the stability of parental effects implying that substantial intergenerational similarity exists across the life course. Others highlight flexibility and change in parent-child relations at different stages of the life course (Glass et al. 1986). The relevant question becomes: what happens as an adolescent moves from childhood to becoming a political adult? As suggested before, when children grow into adult citizens, their orientations obviously develop and change (Searing et al. 1976). For Glass et al. (1986), parents and children behavior similitudes decrease in later adulthood as the intensity of parent-child contact diminishes.

Erikson (1993) points out that children in late adolescence may share few of the adult statuses that their parents hold and may be facing the developmental tasks of independence and differentiation from parents. The adoption of adult roles are “likely to replace direct parental influence in the modification of social attitudes” (Glass et al. 1986). Discussing individuals’ political orientations persistence over the life span, Sears and Levy (2003: 78-79) elaborate on four distinctive models of the political life cycle. The first one, the *persistence* model, emphasizes that pre-adult persist through life. The second one, called the *impressionable years* model, stipulates that attitudes are particularly susceptible to influence in the late adolescence and early adulthood but tend to persist thereafter. The third one, denominated *lifelong openness*, suggests that individuals remain open to influence throughout later life. The final model, labelled as *life cycle* model, is driven by the idea that people are attracted to certain attitudes at specific life stages. As a whole, the implicit assumption in these models is that political orientations are exposed to shaping forces at different points of time. For Jennings (2007: 38-39) “parent-child correspondence

is at its zenith before the child leaves home, drops substantially as the child moves through young adulthood, and levels off subsequently”.

In that regard, two salient questions remain unanswered: how enduring are parental influences and are there differences in parental impact among male and female voters?. This chapter aims to provide answers to both puzzles regarding individuals’ turnout persistence. At the beginning of turnout experiences, right after achieving eligibility, one can see the biggest influence of parents on offspring’ voting behavior. Progressively, parental effects start to decline while being gradually replaced by the impact of other socialization agents like friends, spouses or co-workers that substitute parents as part of the individuals’ life-cycle transitions. These changes imply the reconfiguration and recomposition of the social networks of influence and can be consequential for turnout.

For example, “when young adults leave home, the influence of their parents’ strong voting habits decreases while the weaker voting patterns among their peers have a greater impact” (Bhatti and Hansen 2012). This means that, “when a young adult leaves the nest, the influence of the parents declines in favor of other social networks, which generally, for the present youngest generations, vote less than the their parents. The “cross-pressure” effects are more likely to produce low turnout or inconstant political behavior orientation” (Tuorto 2014: 194).

In addition to restructuring the social ties in early adulthood, as shown in the previous chapter, the activation of voters’ habituation occurs after the third election someone is eligible to vote. A real life situation can be useful for understanding the circumstances under which young voters take their electoral fate in their own hands. The gradual detachment of parents influence and the adoption of their own voting patterns resembles the way in which children learn how to ride a bike. In their first attempts they need basic instructions and guidance from their parents.

After practicing several times, children feel well prepared for doing it by themselves leaving behind their parents' assistance. Dinas (2014) states that parents' influence diminishes as the offspring accumulate experience with politics.

There is no doubt that parents shape their kids' behavior through direct and indirect mechanisms facing virtually no competitors during a long and crucial period of time. Given that irrefutable fact, one can anticipate that parents strongly influence voters' behavior. During political socialization the intensity of parental influence does not remain constant. It varies across time. I argue that, if we examine a segment of the electorate that enter politics at the same time I expect to find that, at the very beginning of turnout experiences that influence is greater and decreases as time evolves. This intuitive theoretical assumption is grounded on the usually close relationship between parents and offspring. In terms of this study this means that when we observe a voter in the first election he is eligible to vote, parents' influence must be higher than when we see the same voter four elections later. Hence, gradually, parents' impact declines and offspring's voting behavior do not resemble those of their parents. Thus, I theorize that:

***Hypothesis 4.1***

*Having parents who show up to the polls will make individuals more likely to vote*

***Hypothesis 4.2***

*The effect of parents' turnout on individuals' probability of voting declines over time.*

Even though the argument above reaffirms the determinant role of political socialization on individuals' future behavior it does not say anything about the contribution of each parent in modeling children's political behavior. Less is known about mother and father individual impact. In other words, are there differentiated roles and influences among Costa Rican parents in political socialization? What happens in circumstances under which father and mother differ in terms of electoral habituation?

Looking at the partisan preferences transmission Jennings and Langton (1969)<sup>36</sup> suggest that the father plays the dominant political role. Revisionists have cast doubt about this claim. For instance, studying the intergenerational similarity on several religious and political orientation and behaviors, Acock and Bengtson (1978):528-529 showed that "if one parent is to be used to represent family influence in socialization of child's orientations, in most cases it should be the mother". Although the father becomes the prototypical authority figure (Lane 1959, Davies 1965), and that men are usually more interested and more involved in politics than their wives (Kubota and Ward 1970), scholars have attributed this result to the fact that the mother typically has a higher frequency of interaction with off-spring (Acock and Bengtson 1978, Neundorf et al. 2013).

In the realm of partisan choices Zuckerman et al. (2007) argue that "fathers influence their wives, but usually not their children". Also, the mother has remained as the main source for satisfying children's basic needs. In short, I test whether the lack of evidence of the "father dominance" argument (Maccoby et al. 1954, Rabinowitz 1969) holds for the Costa Rican case. That being said, I hypothesize that mother's turnout effects will be higher among both male and female first-time voters vis-à-vis father's effects. Therefore, if parents are transferring political

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<sup>36</sup> Other studies reported no statistical evidence that the parent of one sex has a greater influence on the child's partisan identification than does the parent of the other sex (Kritzer 1984).



orientations to their children, as postulated by the socialization theories, I expect to find that, within Costa Rican households, mothers shape voters' future turnout trends regardless of their gender. I examine this theoretical assumption using the following testable hypothesis:

***Hypothesis 4.3***

*Mothers' turnout influence on individuals' voting behavior is greater for both daughters and sons than fathers' effects.*

## **4.2 CHILDREN EARLY EXPERIENCES WITH POLITICS**

Before analyzing the parent-child turnout trends in detail, in this section of the chapter I describe two aspects directly related to the findings I will show and discuss later. The first issue are the opportunities kids and teenagers have, during their pre-adult stage, to experience with politics in both school and party campaigns. The second thing are parents' turnout trends during 1994-2010, a section in which I emphasize in the number of electoral contests they were registered to vote, and more importantly, how many times they show up at the polls or fail to do so.

### **4.2.1 Growing up in Democracy**

Costa Rica has the longest history of democracy in the Latin American region due to its long tradition of free and fair electoral contests. After four decades of reporting high levels (80% of the electorate) of political participation -for international standards-, turnout started to decline in the late 1990s. In the last national election 69% of the voting population cast their vote. The sharp change in turnout rates raised some red flags among scholars, electoral authorities, political parties and journalists. In response, one of the natural reactions was to examine carefully how children and teenagers, as future members of the electorate, interact with the political regime and their attachment with key democratic values.

Traditionally, Costa Rican children and teenagers have three main opportunities to get involved in politics and experience firsthand what political participation means in practical terms, something that certainly impact their voting behavior in the near future. In the case of kids between 3 and 12 years old, many private and public organizations organize “children elections” in different locations around the country or foreign places on Election Day. In these elections, these

organizations simulate as much as possible the real environment in which national electoral contests are usually held. This means that individuals need to identify the nearest kids' polling station (open from 9am to 4pm), get in line wearing their colorful party or candidate t-shirts, wait for their turn, show an identification, get the ballot paper and choose their preferred candidate. The most popular location for voting is the Children's Museum. The results of the "kids' elections" are known after the Electoral Supreme Tribunal reveal the first national outcomes. Interestingly, the results of these elections closely resemble the national ones. So, the kids "got it right".

The second experience happens several weeks before the election when political parties recruit teenagers to be part of the "party machinery" in every district on Election Day. These teenagers play a key role that day. They are in charge of guiding voters when arriving to polling station centers located mainly in schools or high-schools. As part of the tradition that day, they wear colorful t-shirts, caps and other propaganda designed for identifying themselves as party or candidates' supporters. They wait for voters outside the polling locations, approach voters and offer help to find them in the list of eligible voters and accompany them to the right polling station, especially on those places with many voting places available.

The last hands-on experience children and teenagers have with politics takes place in their classrooms in the formal education process. As part of the civic education curriculum all primary schools or high-schools hold elections for choosing three different kind of "students' governments" (7 seats allocated in every one) in which all enrolled students are eligible to vote: *classroom representatives* (the most important seat is the president one), *representatives' assembly* (a deliberative body integrated for all classroom presidents and leaded by an executive directory), and the *executive committee*. All seats in these bodies are allocated alternating male and female positions. Also, there is a *Students Electoral Tribunal* in charge of administering the elections

including counting the votes and swearing the new authorities. Parties and candidates need to register and present a government platform (complemented with the party statute and the signatures of 10% of the students). The Education Ministry defines a national week for the school elections and the rules applicable. Overall, these opportunities contribute to the politicization of future voters providing real-life experiences with politics aimed to reinforce democratic values and the importance of political participation for the survival of democracy. The most important limitation of this final experience is that children and teenagers who are enrolled in the formal education system are excluded.

#### **4.2.2 Are parents of new voters habitual voters as well?**

The main theoretical claim of this chapter is that new voters are heavily influenced by what their parents did in previous elections. Previous studies have shown that parents' and offspring' voting behavior are so much alike, especially during the first turnout exposures. Drawing on a unique panel of new voters I analyzed in depth, in the last sections of this chapter, whether this political socialization assumption holds in the Costa Rican case. But for doing so, we first need to examine if voters' parents have cast their vote in the past and how often they did that. Knowing that is relevant for the purpose of this chapter because, in case the data show that parents voted many times before, one can expect greater influence in their offspring' political behavior. In contrast, if parents exhibit irregular turnout patterns someone can speculate that kids and adolescents will reproduce these “bouncing” trends in the future.

Table 4.1 reveals that 44% of mothers, 37% of fathers and 45% of all individuals analyzed voted in all the elections they were able to do so. Put simply, they cast their votes in 4 out of 4 or 5 out of 5 electoral contests. In addition, if we consider those mothers and fathers who have missed

one election that percentage increments to two-thirds of the mothers (66%), 59% of fathers and 58% of voters. In the low-end of the scale, only 4% of mothers, 5% of fathers and 11% of individuals have never voted in any election in the period I analyzed.

Table 4.1: Number of times mothers, fathers and individuals voted. 1994-2010.

<b>Voted how many times</b>	<b>Mother</b>		<b>Father</b>		<b>Individuals</b>	
	<b>Frequency</b>	<b>%</b>	<b>Frequency</b>	<b>%</b>	<b>Frequency</b>	<b>%</b>
None	146,890	4.19	140,005	5.33	2,093,981	11.39
1 out of 5 elections	194,980	5.56	211,280	8.04	756,504	4.11
1 out of 4	18,100	0.52	11,110	0.42	244,328	1.33
1 out of 3	2,120	0.06	1,240	0.05	310,863	1.69
2 out of 5	305,725	8.71	297,900	11.33	1,080,363	5.88
2 out of 4 or 1 out of 2	22,405	0.64	11,530	0.44	869,146	4.73
3 out of 5	474,355	13.52	404,875	15.4	1,555,549	8.46
2 out of 3	1,785	0.05	980	0.04	420,650	2.29
3 out of 4	29,465	0.84	10,665	0.41	418,755	2.28
4 out of 5	773,055	22.03	570,200	21.69	2,427,633	13.20
All 5 elections	1,540,865	43.9	969,270	36.87	8,208,618	44.65

To recapitulate, a significant majority of parents have cast their vote in the past. A significant portion of them can be considered habitual voters according to the terminology I used in the previous chapter. These are the political behavior circumstances under which new voters were socialized. Knowing that, the next step is to analyze whether kids adopt, or fail to replicate their parents' voting trends. That is precisely the goal of the next sections.

### 4.3 DATA DESCRIPTION AND STATISTICAL MODELS

The analysis of parental influence on individuals' voting behavior is possible by using two different turnout datasets (for a full description of data see Chapter 1). The first one is the complete version of the panel of individuals entitled to vote in Costa Rica in five of the most recent presidential elections 1994, 1998, 2002, 2006 and 2010 and their parents (triad of two different generation of voters). It is the inclusion of parents that makes this data set so valuable for the study of political socialization. The second one is the subpopulation of new voters in 1994 and after and their parents as well. Both datasets share the exact same variables but differ in the number of observations. I also run separate models for male and female voters. One of the advantages of the data I use is the possibility of partitioning the information in multiple ways without being worried for the reduction of the number of observations. In this chapter I fully exploit that opportunity in a wise way which allows me to capture parental effects on offspring' turnout trends over time.

Estimating the causal relationship between consecutive voting decisions has proven to be intrinsically difficult for social scientists. Longitudinal studies and surveys, the two most common methodological approaches, rely almost entirely on self-reported measures of turnout that misreport or inflate voting rates. In spite of the undeniable theoretical and methodological contributions of both methodological approaches, they suffer what Hill and Hurley (1984) called “non-voters in voters clothing”, an important problem causing the inflation of turnout estimates raising valid concerns in the field. Consider for example the pioneer study by Jennings and Niemi (1968) in which data come from a national representative sample of American high-school seniors and their parents. Others use turnout information coming from different sources like governments' records (Bhatti and Hansen 2012); local government registers from 44 of the 98 municipalities in Denmark (Bhatti and Hansen 2013); voter's signatures from a French polling station (Buton et al.

2012); adoption records in Sweden (Cesarini et al. 2014); a sample of 2,044 individuals drawn from a population of 840,000 members of a Los Angeles area health care plan (Glass et al. 1986) or electoral returns from British General Election (Fieldhouse and Cutts 2012). The availability of validated electoral behavior data has been the most important challenge to these contributions. So, an individual-level panel data that includes the actual voting behavior for the universe of voters will overcome these limitations providing causal insight for explaining the dynamics of turnout.

For both –parents and offspring- turnout data are the actual voting behavior, which means I can estimate the effects using information related to what both really did, not what they, or someone else, reported they supposedly did. My data are better and perfectly suited for analyzing the dynamics of voters’ trends in the long-term because I have information for the universe of voters and their relatives (parents for the purpose of this chapter), as well as how they all have behaved in contemporaneous national elections –for choosing president, national representatives to the National Assembly and representatives in 81 local governments including mayors- in sixteen years.

For the purpose of analyzing parent-children turnout patterns I combined information from two different datasets available. First, I merged voters and their parents using their national identity number, a universal nine-digit unique number used for identification purposes. The *Civil National Register* assigns the identification number (hereafter known as id number) to everyone based on the province where they were born. As soon as individuals turn 18 years old, the legal age threshold for voting, they automatically appear in the national list of eligible voters and the Civil Register issues an identification card free of charge. This identification card includes personal and socio-demographic information (like a photograph, signature, date of birth, and place of residence and a bar code that stores other information like parents’ name), and it is also the only official document

recognized as proof of identity. It is mandatory for the State to provide citizens with an identity card to exercise suffrage valid for ten years (article 95 of the Constitution).

Using the *National Register*, a universal *Birth Registry* dataset that contains information on 5,400,129 individuals that includes parents' names and gender, their identification number, date of offspring birth, place (hospital), and more importantly name, gender, ID number and nationality of the offspring, I was able to merge individuals with their parents for a significant number cases (see table 4.1). Later I joined this dataset with the other one that included voters' political behavior. At the end I built a dataset with voters' and parents' turnout. The key information for merging parents and voters is the universal citizen id number. If we consider a voting population of around 2 million of voters per election, the number of parent-children connections in my network data is appropriate to infer parental effects.

Table 4.2: Voters and Parents identified in the network data

<b>Category</b>	<b>Cases</b>
Voters and Mothers identified in the dataset	974.332
Voters and Fathers identified in the dataset	772.829

Although all individuals appear registered under at least one parent's name (either the mother or the father) the lack of their id number impedes in some cases the complete identification of who the parents were besides their name. Many and diverse reasons account for this situation. In this section I fully describe the main reasons why.

First, the national implementation of the ID number started in the mid-1950s and it was fully in place several decades later. In practical terms, this means that despite individuals knew



their ID number, they did not identify themselves with it and public institutions did not enforce its use until the 1980s.

Second, although, nowadays individuals are immediately registered after being born in hospitals, the situation was quite different before. Concretely, older voters who were born in their houses in the first half of the XX century -or in a different place than a hospital, a common situation in the past-, were registered by their parents or relatives through local authorities. For some of them I know who their parents were but just by name not by ID number.

In some cases, I only have the information related to one of their parents –mother or father but not for the two of them. In the case of fathers’ missing information, it was common for many children to be registered only under mothers’ name because the biological fathers refused to recognize them. The “Responsible Paternity Act”, approved in 2001, introduced stricter rules like paternity tests designed to recognize and register children who were born outside marriage or other informal relationships. We will see the effect of this legislation among those first-time voters in 2020 and 2022 (Bolaños and Montenegro 2007).

Also, if the father does not recognize a child he has six months to do so, otherwise the child will appear under the mother's last name<sup>37</sup>. If the father is missing, the mother may be the only parent around to influence the vote.

In other cases, missing parental information can be attributed to the registration administrative procedure. Accordingly, the person who registered the children -father, mother or a relative, omitted to include the information or include just partial information of the spouse or couple.

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<sup>37</sup> The conventional Costa Rican names are: *first name + middle name (sometimes more than one) + fathers’ first last name + mothers’ first last name.*

A personal example better illustrates this situation. I have three younger siblings. I appear registered under my mother's name, her ID number and my father's name. My two youngest siblings were registered under my father's name, his id and my mother's name. My oldest sibling appears related only with my mother and father names but under no id numbers. One can imagine many similar circumstances like this in the dataset. In my case I know who they are, otherwise it would be challenging to build the entire family network considering the missing information.

Another reason why mother or father information is missing can be that one of them, or both, are not Costa Rican citizens. Therefore, although I know their names, their identification number in the dataset is their passport or resident status number. Related to that, if one or both parents fulfill the requirements for becoming citizen, the legislation establishes that a naturalized Costa Rican citizen may not appear in the list of voters until twelve months after obtaining the certificate of naturalization (article 94 of the Constitution). Again, this factor may, partially, account for the lack of information.

Finally, before the internet and online documents era, the registration form was completed by the parents (or someone else) by hand. So, the process was more vulnerable to mistakes and there were no expedite mechanisms to control and complete the partial information given by the informant.

If, for any reason, individuals' id number information is not available the only way to identify parents and kids' triads will be through parents' names. However, this will be not only time consuming and expensive, but it will also be problematic because many people in Costa Rica, as in many other places, share their exact full name but differ in their id number. I can illustrate the difficulty of this with the following example. For instance, using my parental grandmothers' name, Maria Rodríguez-Zarate, a very common name in the country (especially the combination

of the first name and first last name), there are 4 other persons (one died in 1997) with the exact name in the civil registry on-line searching (available at [www.tse.go.cr](http://www.tse.go.cr)). Also, if we search for her name in another webpage that compiles the list of names for all Costa Ricans born between 1900 and 2014 (<http://www.ameliarueda.com/especiales/nombres/>), the day my grandmother was born, other 11 persons were named *Maria*, 176 in October (her month of birth), and 2,280 in the same year. Her name and first-last name combination (ranked #1 in Costa Rica) appears 7,249 times in the last 114 years.

Voting behavior data for voters and their parents come from the official turnout database collected by the Electoral Supreme Tribunal (Tribunal Supremo de Elecciones) after each national election. Like in the previous chapter, longitudinal analysis is the main empirical method. *Turnout* is analyzed both as a dependent variable and independent predictor using lagged values. In this chapter I use a lagged dependent (dichotomous) variable model. The empirical analysis involves four sets of models: *Additive*, *Interactive*, and *only Male* and *only Female*.

For capturing the effects of parents in their offspring I use four dummies: *only mom voted* (coded as 1 if only mother was identified in the dataset and voted and 0 otherwise), *only dad voted* (coded as 1 if only father was identified in the dataset and voted and 0 otherwise), *both parents voted* (coded as 1 if both parents were identified in the dataset and voted and 0 otherwise) and *no known parent identified* (coded as 1 if both parents were not identified in the dataset and 0 otherwise). This last one is the baseline category in this chapter. Parents' turnout is coded in the same way across all the elections. Finally, it is important to consider that, despite the fact that there is no reason to suppose that the influence flows only from parents to offspring (Zuckerman et al. 2007) this chapter pays particular attention to voting behavior among younger members of the electorate, a subgroup of the eligible population that enters to politics experiencing a stronger

parental influence than the impact they exert on their parents. The reciprocal effect has been posited to occur as children get older (Zuckerman et al. 2007). Thus, I choose to theorize that at the first turnout exposures parents affect offspring's voting behavior but children do not impact parents' behavior.

For capturing the dynamics of parental influences I use a variable called *Time since eligible* which refers to a continuous predictor that measures the number of years since an individual was eligible for the first time. Values vary between 0 and 12 years. The elections covered in the analysis are 1994-2010. The models are as follow:

## Models Specification

### *Additive model*

$$\Pr(\text{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{moved}_{it} + \beta_6 \text{time since eligible}_{it} + \beta_7 \text{only mother votes}_{it} + \beta_8 \text{only father votes}_{it} + \beta_9 \text{both parents vote}_{it} + \beta_{10} \text{no-known parents}_{it} + u_i + \varepsilon_{it}$$

### *Interactive model:*

$$\Pr(\text{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{moved}_{it} + \beta_6 \text{time since voted}_{it} + \beta_7 \text{only mother votes}_{it} + \beta_8 \text{only father votes}_{it} + \beta_9 \text{both parents vote}_{it} + \beta_{10} \text{no-known parents}_{it} + \beta_{11} \text{time since eligible}_{it} * \text{only mother votes}_{it} + \beta_{12} \text{time since eligible}_{it} * \text{only father votes}_{it} + \beta_{13} \text{time since eligible}_{it} * \text{both parents vote}_{it} + u_i + \varepsilon_{it}$$

#### 4.4 MULTIVARIATE ANALYSIS AND RELEVANT FINDINGS

In the first set of models I present in this section I estimate the effects of parents on individuals' voting behavior for all voters in the electoral panel through two mechanisms. First, for doing so, using the date of birth and age of each voter I calculate when they were eligible to vote for the first time. For example, if someone was born in 1945 I know that she was eligible to cast a vote in 1966 and afterwards. This simple method allows me to determine how many years have passed since an individual entered the electorate. Second, drawing on the parents' voting behavior available in the panel dataset I estimate their effects for the universe of voters. The downside of this procedure is that the panel does not include the voting behavior of all parents for every voter. For overcoming this limitation, later in this section of the chapter I run similar models only for voters who enter politics at the same time.

Table 4.3 shows the results of regressing voters' turnout on different sets of variables. Model 1 includes all voters in my dataset and the parental effects predictors: *only mother voted*, *only father voted*, *both voted* and *no known parents identified*. In contrast, Model 2 is the interactive one. It includes three interactions for examining whether parents influence offspring voting behavior and determining if those effects change over time.

When testing the evolution of parents' behavior on voters' turnout, the critical predictors of interest are the interactions between *time since eligible*, which is the time since being eligible for the first time in the elections analyzed, and parents' behavior (*only mother voted*, *only father voted*, and *both parents voted*). Tables 4.3 include these three additional predictors. If my theoretical assumption is correct, these key predictors must be negatively and significantly related to voters' turnout, demonstrating that mother and father effects on voters' turnout decrease from election to election.

Table 4.3: Parental Effects on Voters' Turnout Models

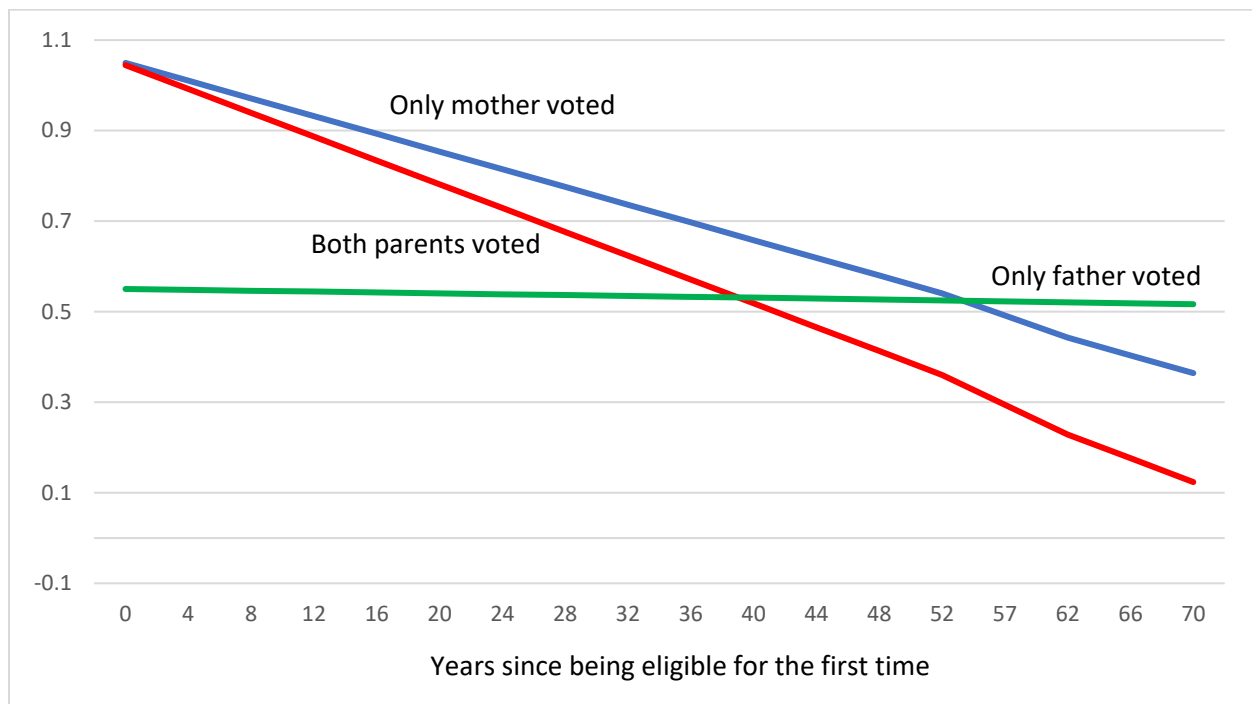
	Additive b/se	Interactive b/se	Male b/se	Female b/se
Turnout lag	1.239* (0.002)	1.238* (0.002)	1.218* (0.003)	1.256* (0.004)
Moved	-0.045* (0.003)	-0.044* (0.003)	-0.060* (0.003)	-0.028* (0.004)
Female	0.311* (0.002)	0.311* (0.002)		
Voters' age	0.074* (0.000)	0.074* (0.000)	0.053* (0.001)	0.093* (0.001)
Age squared	-0.001* (0.000)	-0.001* (0.000)	-0.000* (0.000)	-0.001* (0.000)
Only mother voted	0.930* (0.006)	1.071* (0.010)	0.949* (0.014)	1.205* (0.015)
Only father voted	0.541* (0.006)	0.576* (0.011)	0.548* (0.015)	0.602* (0.016)
Both parents voted	0.970* (0.017)	1.057* (0.027)	0.918* (0.037)	1.204* (0.039)
Time since eligible (TSE)	-0.010* (0.000)	-0.010* (0.000)	-0.004* (0.000)	-0.016* (0.000)
<b>Interactions</b>				
TSE X only mother voted		-0.011* (0.001)	-0.010* (0.001)	-0.012* (0.001)
TSE X only father voted		-0.002* (0.001)	-0.002 (0.001)	0.003* (0.001)
TSE X both parents voted		-0.014* (0.004)	-0.005 (0.005)	0.023* (0.005)
Constant	-2.048* (0.009)	-2.070* (0.009)	-1.721* (0.013)	-2.073* (0.013)
Insig2u	0.372* (0.003)	0.374* (0.003)	0.378* (0.005)	0.362* (0.005)
Sigma u	1.205* (0.002)	1.205* (0.002)	1.208* (0.003)	1.198* (0.003)
Rho	0.306* (0.001)	0.306* (0.001)	0.307* (0.001)	0.304* (0.001)
Wald Chi-squared	396387	396714	190812	180617
Prob > chi2	0.000	0.000	0.000	0.000
Number of cases	10.872.871	10.872.871	5.402.791	5.470.080

\* p<0.001

At a first glance, the results above show that having parents who cast a vote make voters more likely to do the same. If both –father and mother- showed up at the polls that effect is not greater than mother. Moreover, an individual in the category of “unknown parents” tends to vote at higher rates than those individuals with *at least one parent known but no one voting* (baseline category). The other independent predictors are in the expected direction. These findings confirm that mother and father (in the additive model) positively impact individuals’ voting behavior and reveal a downward trend (according to the interactive model) in the evolution of parents’ influence over time. For younger voters, parental effects are multiplicative not just additive.

Interestingly, the interaction between time and fathers’ turnout is not significant meaning that the effect of father does not change over one election. As we can see in the graph 4.2 parental influence decreases as time since being eligible increases. The effect of *Both parents voted* drops at a much rapid pace, gets smaller over time but its effect remains significant until voters reach 100 years old. In the case of mothers’ influence, that effect diminishes as well but it is significant regardless of the time since first eligibility. What this is telling us is that socialization has enduring effects on voters’ political behavior.

Figure 4.1: Conditional coefficients for voters' turnout based on parents' voting behavior and time since being eligible for the first time



In addition to the Additive and Interactive estimations, in models 3 and 4 I separate the data for male and female with the purpose of examining whether mothers are more influential than fathers on offspring voting behavior. Furthermore, when I run the models separate for male and female, the regression table below indicates that mothers' behavior impacts daughters and sons greater than fathers do, supporting my third hypothesis.

For the ease and the substantive interpretation of the results of this chapter I estimate predicted probabilities for voter turnout. In the same way I have done it in previous chapters, here I estimated predicted probabilities for voters' turnout based on the interactive model holding key variables at different values for relevant voters' profiles. The goal of this procedure is to facilitate the interpretation of the substantive effects and practice significance of the covariates in the models. Basically, I want to put the findings of this chapter, i.e. the estimation of the predicted

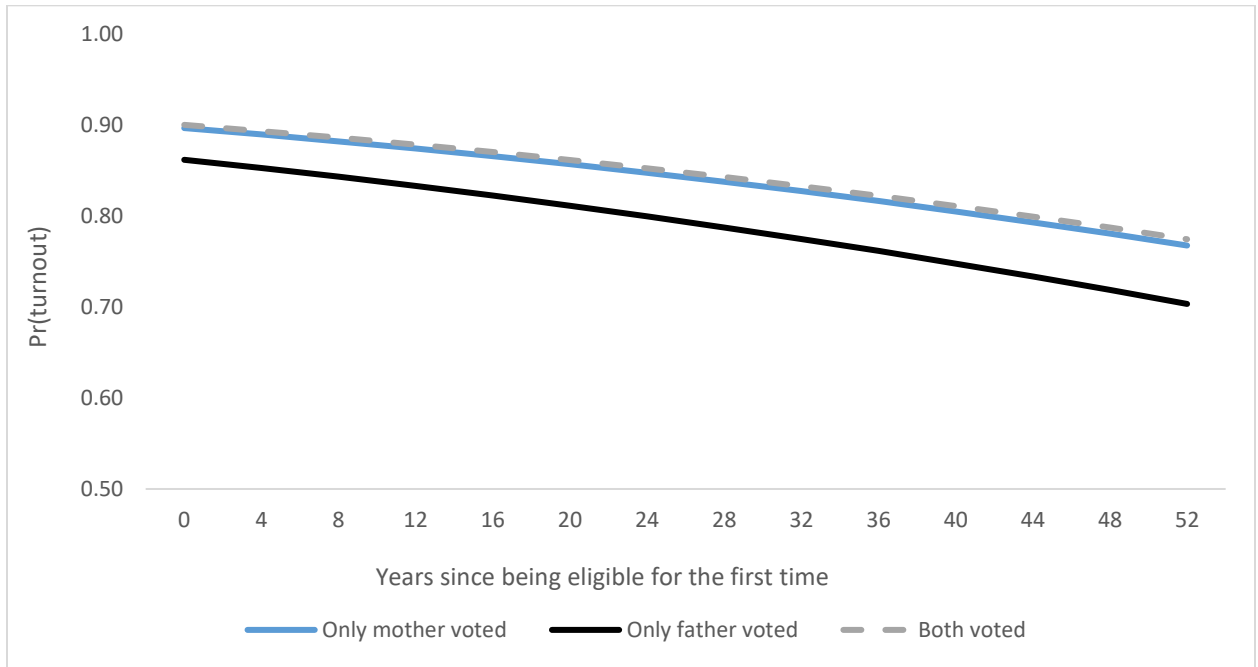


probabilities of voters' turnout mediated by parental influences, in terms of real voters and their family network contexts. In this section, the estimation and interpretation of the predicted probabilities of turnout include, besides the classical variation of gender and age, characteristics like mothers and fathers' voting behavior and the time since voting for the first time.

As it becomes evident in Figure 4.2 there are some differences in individuals' probability of voting depending upon what their parents did. As a whole, the probabilities of voting follow a declining trend over time. The more years have passed since achieving eligibility the lower the likelihood of voting no matter what individuals' parents turn out to vote. Particularly, if we look at a voter whose mother showed up at the polls the same year they became eligible his probability to vote is equal to 0.90. His likelihood to vote decreases to 0.81 forty-years after since being eligible for the first time if his mother voted as well.

Overall, the evidence provided confirms that parents' crucial role in the political socialization process is undeniable. Nonetheless, parents influence declines as time goes by: it is greater at the beginning of turnout experiences and smaller over time. This pattern coincides temporally with and it is consistent with the story of the activation of habitual voting I proposed in the previous chapter. Thus, when parental effects get smaller and smaller is precisely the time when previous voting triggers the activation of habituation. In practical terms, this means that the parents' effects I analyze in this chapter and the development of habitual voting I studied in the previous chapter complement and reinforce each other. So, this can explain why we see habitual voting takes place after some electoral contests. Moreover, data corroborate that having a politically active parents make an important difference regarding voters' turnout patterns.

Figure 4.2: Predicted probabilities for voters' turnout based on parents' voting



Although these results are quite consistent with my theoretical expectations and they certainly expand our knowledge about how political socialization forces shape individuals' voting behavior, under circumstances of the presence of missing information that does not allow me to link many voters and parents, the possibility that the set of dummy variables I use in the models may not be mutually exclusive raises important concerns. If the doubts prove to be true, this may call into question the validity of these findings. In contrast, if the concerns turn to be inaccurate this will provide evidence supporting what I have theorized in this chapter.

For addressing these concerns, I partition the dataset of the universe of voters I use in all chapters to examine whether the findings I have shown hold when considering only those cases in which both mother and father were successfully identified. The number of cases in this subset is considerably smaller in comparison with the cases in the subsets in which only mother or only father were identified. The results are summarized in table 4.4 below.

The visual inspection of the table clearly suggests that these findings are very alike, in both magnitude and direction, to those included in table 4.3. Therefore, I can confidently say that the finding that suggests that political socialization effects decrease over time hold even when we only look at cases in which I was able to fully identified voters and both parents. Put other way, my findings passed an additional robustness test.

Table 4.4: Parental Effects on Voters' Turnout Models if both Mother and Father were successfully identified

	Additive b/se	Interactive b/se
Turnout Lag	1.702* (0.020)	1.668* (0.020)
Moved	-0.210* (0.027)	-0.208* (0.028)
Female	0.608* (0.019)	0.609* (0.020)
Voters' age	-0.033* (0.015)	0.013 (0.015)
Age squared	0.001* (0.000)	0.000* (0.000)
Only mother voted	1.453* (0.031)	1.856* (0.044)
Only father voted	0.705* (0.033)	0.930* (0.050)
Both parents voted	1.985* (0.027)	2.495* (0.041)
Time since eligible (TSE)	-0.046* (0.004)	-0.002 (0.005)
<b>Interactions</b>		
TSE X only mother voted		-0.052* (0.005)
TSE X only father voted		-0.028* (0.006)
TSE X both parents voted		-0.073* (0.005)
Constant	-1.567* (0.238)	-2.515* (0.246)
Insig2u	0.007 (0.009)	0.051* (0.009)
Wald Chi-squared	17166	17333
Prob > chi2	0.000	0.000
Number of cases	81.299	81.299

\* p<0.001

## 4.5 CONCLUSIONS

Among all worldwide cases of turnout reductions Costa Rica is a country in which lower turnout presents an intriguing puzzle. For more than three decades, between 1958 and 1994, political participation rates remained, virtually invariable, at a very high level: more than 80% of the electorate used to cast their votes on election day. Therefore, one would easily predict that individuals socialized during that period of time must have learned and later reproduced their parents' levels of high political activism almost mechanically. However, turnout patterns in the country in the last five national elections do not fit very well in that story, as rates have fallen around 65%. That being said, one can wonder what can the transmission of voting behavior between parents and offspring tell us about turnout changes in an established democracy? In the present chapter I studied the impact of parents' behavior on the manner offspring turn out to vote. As expected, the analysis shows that voters who have politically active parents are more likely to show up at the polls. Furthermore, the evidence confirms that the intensity of parental influence varies over time. Using the time since being eligible for the first time I demonstrate that parental effects are greater when voters are at the initial stages of turnout experiences and diminish as new opportunities to vote arrives.

Turnout has undergone a sharp reduction in Costa Rica in the last two decades and the trends we have seen may have major implications in the future. We know that turnout rates have fallen across all ages. And we also know that, as evidenced here, parents strongly shape their offspring political behavior. The combination of these two things may bring bad news for the most stable democracy in Latin America. Under these conditions, a significant portion of the older members of the electorate are currently socializing and transmitting their lower rates to their offspring who, as the intergenerational chain continues, will transmit the lower turnout rates they

learnt and adopted to a third generation and so on. In other words, some parents are not stimulating offspring turnout in the long-run, indeed, they are lowering the political participation bar and pushing even further down their children' and, eventually, grand-children' turnout rates. The results of this chapter can elucidate and provide more complete explanations of the factors associated with these major changes in individuals' voting behavior and the dynamics of parents' political behavior and the evolution of this influence over time.

The circumstances related to lower turnout may cause an enduring effect on individuals' political behavior, alienating disenchanted voters from the political system. Especially for younger voters, this could have long term and dramatic impacts on support for and viability of the political system in the long term. The worst case scenario would be one in which this pattern could extend individuals' apathy toward politics during lifetime, causing low turnout to freeze for decades. Therefore, if we want to understand the implications of turnout decline in established democracies, we first need to comprehend the conditions under which these changes take place and determine the impact this may cause in future generations of voters.

In addition to showing that parents effects on offspring' voting behavior changes as time evolves, the evidence presented in this chapter reveals that mothers are more influential socialization agents than fathers in the Costa Rican context. This is a very interesting finding in a comparative perspective, particularly if we consider that in many democracies around the globe women turn out to voter at lower levels than men. The fact that women vote at higher rates vis-à-vis men put mothers in a more advantageous position for shaping offspring behavior. This is exactly what I found. Having said that, I also found that mothers' behavior impacts daughters and sons greater than fathers. Thus, mothers are the dominant socialization agents. The strong biological connection between mothers and offspring combined with the highest frequency of

interactions with their kids through life puts them in a leading position vis-à-vis fathers to shape individuals' political behavior particularly at the beginning of turnout exposures. Zuckerman, Dasovic et al. (2007):138 summarize the decisive role of mothers by saying that “women stand at the political center of the social relationships that are households and families. They always influence the electoral choices of their children and husbands; husbands always affect their wives' ballots, and children are more likely to influence their mothers than their fathers”. In practical terms, this means that if we want to impact voters' turnout in the future we first need to look at how mothers are behaving at the polls.

In sum, holding everything else constant, having politically active parents matters. These findings suggest that what parents do (or what they do not do) is consequential in offspring behavior later on. Overall, if we observe voters' turnout patterns in five of the most recent national elections in Costa Rica, what we see is that the magnitude of parents' effect is greater earlier but smaller four elections later. This basically means that voters' turnout trends will be strongly influenced by their parents' voting behavior up to a certain point in which new forces may replace and overcome parents' effects. In later elections individuals' turnout patterns will no longer resemble those of their parents but perhaps somebody else voting patterns. Given the fact that parents are not the only source of voting behavior influence, one major aspect of peer effects in this dissertation theory remain untested: its account of spouses' influence on voters' turnout behavior, which is precisely the goal of the next chapter.

## **5.0 TWO BECOME ONE...: SPOUSES' INFLUENCE ON VOTERS' TURNOUT**

How much influence can be attributed to spouses in individuals' turnout behavior? Are spouses influencing each other to become more politically involved? In a context in which less people are turning out to vote over time the influence of spouses can be crucial to mobilize voters despite fewer are getting married. The personal stories of Ana and Lucía can help us to illustrate the relevance of spouses' influence on individuals' voting patterns. Ana grew up in “La Lucha”, the iconic place for the National Liberation Party (PLN). Pepe Figueres, the most prominent leader of the party in history, died at that time. She attended the funeral with the rest of her classmates in high-school. Her mom was a strong PLN supporter. She has always thought that before going to the polls it is important to evaluate the candidates. She has questioned her mom about supporting the same party no matter what. Her mom votes for the PLN for tradition. They have had problems because of that. Ana did not vote the first time she could do so. The second election she was eligible she cast a vote because her husband persuaded her. She went with his husband's family to the polls. She has always voted with his husband. He motivates her. She would not go to the polls alone. She has thought about not going to vote anymore but she does not want to waste her vote...

The first years after getting married Lucía voted for the PLN influenced by the pressure of her siblings and parents. They were active militants of the PLN. Her husband family were all “mariachis” (Social Christian Party supporters). Over time she changed her party identification influenced by her husband and started voting for the PUSC. Her sister got really angry for that. Her husband's relatives work for the government and the legislature. At the beginning Lucia and her husband had their own political preference but as time goes by her husband persuaded her to support the PUSC. She remembers that on election day she had to dress her kids with the PUSC

colors and they accompany their father to the polls while she stayed at home because she still supported the PLN. Years after they went to the polls together. She has never thought to abstain. She is not a PLN supporter since that...

The effect of spouses on individuals' political decisions have caught the attention of scholars and experts since the mid-1950s. Earlier contributions started comparing and correlating turnout rates among married and single people across elections in the United States. Contributions arrived to the same conclusion: married people were more likely to vote than others (Milbrath and Goel 1977):115-16. These first efforts coincided temporally with similar ones that addressed parental influences on voters' turnout decisions. However, in sharp contrast to the latter, there exists little scholarly agreement in the literature about why spouses impact voters' dispositions to show up at the polls.

The focus of this literature has historically transited, gradually, from examining whether wives affect husbands or vice versa to emphasizing in the reasons why, and the circumstances under which, spouses behave similarly. Specifically, there are two competing approaches for explaining the similarities in spouses' turnout behavior. The first approach theorizes that spouses' resemblance is a function of time. Correspondingly, individuals get married and this marks the beginning of a long chain (interrupted sometimes by divorce or widowhood) of interdependence and mutual influence. It has been prevalent in this approach the identification of who influences who and what explains that. For instance, some have shown that husbands have an edge versus wives, whereas others have demonstrated that wives' impact is greater than husbands'. Another trend is the analysis of spouses' mutual influence beyond the United States case.

The second one denominated as the "mate choice" approach, promoted mainly by biological and psychological studies, establishes that what it matters is not how the spouses



influence evolves over time but their departure point. The logic behind this framework is the idea that when looking for a life partner individuals choose those who share similar political orientations and preferences. A significant number of contributions has proven that spouses' political similarity is driving by mate selection.

Overall, what the previous paragraphs tell us is that there is no consensus in the literature about political similarity between spouses and its implications on voter turnout. Some have attributed that situation to the mutual influence among them. The key assumption in this line of reasoning is that spouses' resemblance grows over time. In sharp contrast to this approach, some critics have cast doubt on those findings by arguing that mate choice, rather than mutual influence, is the main factor driving spouses similarity. The revisionists suggested that the initial correspondence among husbands and wives leaves no more room for other forces. Hence, it is not that couples become more politically similar over time but they were and have been alike since the very beginning.

In addition to the lack of theoretical consensus, there is disagreement regarding the methodological solution of the endogenous component of the relationship between partners' turnout behavior. These two aspects –the theoretical and the methodological issues, are crucial for the purpose of this chapter. The advocates of both theories -spousal mutual influence and mate selection, postulate rival causal mechanisms for explaining voters' turnout decisions on election day. Therefore, the dispute among scholars regarding which theory better explains partners' influence on turnout trends is far from being resolved. Overall, the argument about reciprocal influence suggests convergence over time –a key factor throughout all chapters of this contribution, while the argument about selection does not. Thus, I theorize that, after controlling for endogeneity, partners' influence on voters' turnout are a matter of time.

Regardless of which theory, either individually or combined, provide stronger explanations for the question of spousal influence, they certainly have something in common. These theories can be considered as two different sources of the endogeneity scholars argue that exists when estimating spouses' influence on individuals' turnout patterns. In the case of the spouses' interdependence framework, it sounds reasonable to determine the occurrence of reciprocal effects among spouses. Whereas in the case of mate selection, one can attribute the presence of endogeneity to omitted variables that simultaneously affect both spouses such as interest in politics or party identification in the models' specification. Irrespectively of the source(s) of the endogeneity the bottom line is that I cannot ignore its presence and more importantly, its implications.

In addition to test the reciprocal effects theory this chapters also contributes to the methodological discussion regarding the endogeneity problem and the alternatives for solving it. Here, I assess one of those alternatives and discuss the main findings. I address the following research questions in this chapter. First, is there evidence that spouses influence voters' turnout decisions? If the answer is yes, I inquire how can we rule out the possibility that the results are artifacts of biased estimates? Thirdly, how can we solve the endogeneity problem in voters-spouse relationship regarding political participation? and finally, are spouses' turnout still affecting individuals' voting behavior after controlling for the endogeneity bias?

Socio-demographic data available by the Census Bureau in Costa Rica show a decline in the marriage rate during the last six decades. In 1951 the marriage rate per 1000 people was 7.50 when the population was 897,630. Sixty-three years later, in 2014, that rate dropped to 5.43 for a population of 4,773,129. Thus, even though the number of marriages has increased from 6,000 in the 1950s to 25,900 in 2014, nowadays less people are getting married in comparison with one or

two generations ago. Also, when we analyze the turnout rates for married and non-married voters, the official information available confirms the findings of other studies conducted in different settings that says that married people turn out to vote at higher rates than singles, divorced or widowed. The information mentioned reports a downward trend in all civil status categories. In the case of married people, the average turnout rate during the four previous elections to the inflection point (1998) was 84% of the entire electorate. The rate for the four elections after the first decline was 73.5%, ten percentage points lower. The combination of these two tendencies can have deleterious effects on future political participation trends. Despite the fact there are no valid reasons to speculate that spouses' influence on voters' political behavior will change from positive to negative in the near future, if fewer people are getting married and they are voting at lower rates the influence of the spouses may be still positive but smaller enough to pull out more voters from the polls.

This chapter is divided in four sections. In the first one I summarize two theories proposed by scholars for explaining spouses' effects on individuals' voting behavior. The second one fully describes the data and the models I estimate. The next section is dedicated to analyze the results and discuss the substantive interpretation of the findings. In the fifth and last section, I elaborate on the implications of the findings and their broad meaning for the literature on political behavior.

### 5.1.1 Literature review

In one of their contributions Jennings and Stoker (2001) asked how much spousal influence we see and the simple answer they gave is: a lot! As stated by scholars, the similarity between people who live together is inescapable and has been noted throughout history (Nickerson 2008). Several decades earlier other scholars pointed that husbands and wives rarely differ politically (Miller 1970). Husbands and wives are characterized to a large extent by similarity of political orientations (Niemi et al. 1977). The similarity between husbands and wives is not exclusive to the realm of politics. Others have argued that spouses resemble each other on traits ranging from physical characteristics, life situations, mental and social traits (Alford et al. 2011).

In the late 1950s and mid-1960s political scientists started to examine the effects of marital status on political participation (Glaser 1959, Milbrath 1965) around the time others were studying parental impact on individuals' voting behavior. Since then, empirical political scientists are giving increasing attention to voters' embeddedness in particular social and political contexts (Magalhaes 2007). The importance attributed to contextual factors in that literature has been fundamental for understanding who influences and mediate voters' turnout decisions and it is also relevant for the purpose of this chapter if we want to analyze the implications of the fact that "turnout by the husband and wife usually is a joint action" (Glaser 1959: 563).

Previous studies have shown that married people are relatively more likely to participate in the political system (Olsen 1972, Welch 1977, Weisberg 1987). Married couples tend to vote or abstain together (Straits 1990, Stoker and Jennings 1995). Kenny (1993) notes that individual political participation is affected by the tendency of politically significant others to participate, particularly if that other is a spouse. Stoker and Jennings (1995) note that once one gets married, his or her participation level in politics can change, particularly if one partner was active in politics

before the marriage. This suggests that there is something about marriage that changes the context in which people behave in politics (Osborn and Morehouse 2011).

Drawing on a broad sample of countries in comparative perspective Lipset (1963: 184) concluded that “married people constitute a ‘higher turnout’ group and single people a ‘lower turnout’ group”. As a whole, the evidence available reveals that married people turn out at higher rates than non-married individuals (Wolfinger and Rosenstone 1980, Weisberg 1987, Strate et al. 1989, Miller and Shanks 1996, Timpone 1998, Plutzer 2002, Plutzer and Wiefek 2006). Others have noticed that the married have somewhat higher turnout rates than singles, but the latter are more inclined toward participation beyond the act of voting (Kingston and Finkel 1987). Wolfinger and Wolfinger (2008) found that married individuals had the highest turnout of any family type. Furthermore, it has been demonstrated that the turnout of married citizens increases faster than the turnout of unmarried citizens as people grow older (Wolfinger and Rosenstone 1980, Stoker and Jennings 1995). Correspondingly, longitudinal studies have found that agreement among married couples increases over time (Jennings and Stoker 2001, Zuckerman et al. 2005).

Even though politics is not necessarily in the top of partners’ conversations list, when people do so the most frequent mentioned discussion partners are the spouses. Certainly, spouses tend to be the major discussion partner for matters in general (Marsden 1987) and for politics in particular (Beck 1991). As a matter of fact, Huckfeldt and Sprague (1995) consider spouses to be three times as influential as other relationships. Zuckerman et al. (2007: 75) conclude “that the frequency of political discussion with a spouse increases voter turnout”. In line with this argument, the household offers unique advantages in terms of facilitating partners discussion and convergence in political views: daily interaction, high level of discussion and persuasion, familiarity, respect, trust among partners (Nickerson 2008).

According to scholars, marriage causes two things regarding political participation. First, it creates new opportunities for husbands and wives to learn from and influence each other. Second, it also creates a relationship of interdependence between husbands and wives that last throughout marriage's duration (Stoker and Jennings 1995). In Stoker and Jennings terms (1995) “marriage is not just a key point of transition in the young adult's personal life-history but a key point of political transition as well”. For Plutzer and Wiefek (2006) marital status is interpreted as a marker of life transitions that can determine citizen’s acquisition of “civic competence”.

If turnout is a joint action as stated by Glaser (1959) turnout decisions by two people who brings their own participatory trends means that whether participation levels increase or decline depends upon the new partner's level of political engagement (Stoker and Jennings 1995). Thus, perhaps “politically motivated people inspire less motivated spouses to vote” (Harder and Krosnick 2008: 535). Similarly, a more politically interested spouse can also spur his or her less involved partner to the polls (Kern 2010). In Schimmack and Lucas (2010) words, “spousal similarity is theoretically important because spouses share many environmental factors, but are not genetically related”. Thus, spousal similarity can reveal environmental influences on turnout.

Having said that, one key question arises: Why do couples behave similarly at the polls? Initial explorations suggest that “people who live together, vote together” (Cutts and Fieldhouse 2009). Early studies emphasized the role of the household as the quintessential place for the acquisition and reproduction of voting patterns (Berelson et al. 1954, Glaser 1959, Jennings and Niemi 1968). Different theories have suggested multiple explanations of why spouses influence their partners’ voting behavior. For instance, some have attributed the differences in turnout between married people and others in terms of isolation from personal and national networks. For them unmarried people “usually live alone and thus without the presence of somebody who might

persuade or remind them to vote, as well as discuss political affairs in general” (Alt et al. 1977). For others, it is possible that the similarity in political behaviors between two-voter households is due to innumerable shared experiences rather than interpersonal influence (Nickerson 2008).

For some experts, the correlation between attitudes and actions among couples may be the result of careful selection rather than interpersonal influence. Thus, spouses tend toward like-mindedness because of the selection processes that bring them together in the first place (Jennings and Stoker 2001). These studies suggest that the political similarity of spouses derives in part from initial mate choice rather than persuasion and accommodation over the life of the relationship. Scholars suggest that this similarity exists prior to marriage (Feng and Baker 1994, Watson et al. 2004), and length of marriage apparently has little effect on spousal similarity (Caspi and Herbener 1993, Mascie-Taylor 1989, Zietsch et al. 2011). As stated by Jennings and Stoker (2001: 4), “assortative mating based on factors related to politics will inevitably produce some initial congruence and pave the way for further growth”. Put another way, more consistent voters may be more likely to marry, and the similarly voting spouses may have been politically similar prior to their wedding (Alford et al. 2011). If this is the case, the practical implication is that the high level of initial similarity does not leave much room for assimilation to take place (Alford et al. 2011). This theory has a serious limitation in terms of the purpose of this study. This theory adopts a static perspective about political behavior ignoring the possibility of changes over time in individuals’ voting behavior, a key idea throughout the whole contribution. This drawback undermines its applicability here.

On the contrary, for others the effects of marriage on turnout can be occasioned through the mechanism of mutual influence. Interpersonal influence occurs when associates reciprocally reinforce each other’s electoral participation (Bélanger and Eagles 2007, Fosco et al. 2011).

Specifically, having someone to vote with increases the likelihood of voting (Cutts and Fieldhouse 2009). Research revealed that voters are more influenced by their spouse than by any other person (Harrop et al. 1991). For Stoker and Jennings (1995: 425) “spousal influence arises as marriage alters the learning environment of the individuals.

The daily interactions of husbands and wives activates a learning process that reduces their differences when it comes to the beliefs and predispositions that sustain or undercut political participation”. According to Kingston and Finkel (1987) the higher turnout rates of married people may reflect interpersonal influences within the family that may motivate otherwise apathetic citizen to go to the polls. In short, the similarity between spouses is largely driven by interpersonal influence (Cutts and Fieldhouse 2009). The encouragement of a wife or husband might be the push necessary to get both partners to the polls (Bélanger and Eagles 2007). In conclusion, if one partner exhibit a stable pattern of voting behavior this may induce the other partner to do so (Denny and Doyle 2009). I examine the mutual influence assumption using this testable hypothesis:

### ***Hypothesis 5.1***

*Voting spouses exert reciprocal influence, increasing voter turnout over time.*

In this chapter I analyze the relationship between husbands and wives regarding turnout decisions and its repercussions in recent presidential elections in Costa Rica. Without doubt the analysis of individuals’ joint effects on any study of political participation always raises flags and skepticism. The possibility of generating biased estimates is a serious and a valid concern among experts in the field. In other words, the “cure can be worse than the illness” in case we do not



address the endogeneity problem appropriately. Here, I examine spouse's influence on turnout assuming that in the data generating process there are two different sources of endogeneity.

The first one, endorsed in this chapter, is the bias introduced when the direction of the causal influence is not identifiable. Spouses experience contextual forces almost always together and are exposed to stimulus in a manner that is very difficult to disentangle one from another. Even though, there have been attempts to do so (Dirk De Graaf and Heath 1992), non-recursive effects certainly introduces noise and complexity. If spouses influence voters as it has been widely stated, that influence, one can argue, may grow over time. Thus, the analysis of this first source of endogeneity is linked to the approach that relies on the assumption that the direction of the causal inference is not clearly identifiable.

The second source is the endogeneity due to omitted variables. In this case, it can be possible that unobserved factors are the driver forces in husbands and wives similarities in voting behavior. Therefore, rather than attributing the resemblance between spouses to aspects like congruence and assimilation, one can argue that individuals behave alike at the polls because, for example, those with high interest in politics may be getting married to partners who share similar or greater interest in politics. We can extend this logic to other common trigger of political participation models: individuals' partisan preferences. Put another way, it is not that husband (or wife) votes for the reason that he supports a party or candidate because his spouse persuade him to do so through the length of the marriage or because he gets some cues from her (in spite of the fact that these things can and have already occurred), but because when they met they already have those partisan preferences and bring them on to the marriage. Although, it does not make sense to say that people choose their partners solely in terms of political preferences, politics can be one,

among many other and certainly not the most important one, of the qualities individuals' use to select mates.

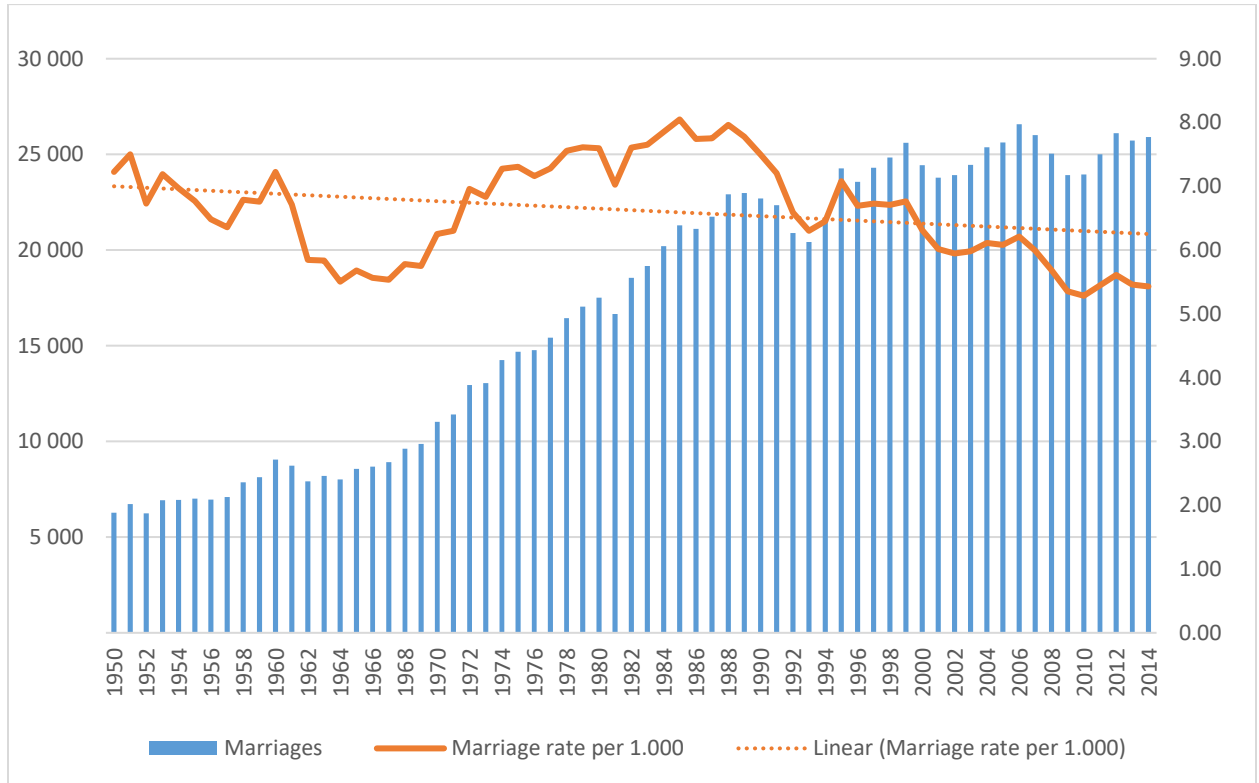
Unfortunately, I cannot observe spouses' party identification or interest in politics in the dataset I use. That is why I consider both aspects as unobservable sources of endogeneity. As it is obvious now, this analysis is connected to the mate choice approach for explaining spouses' influence on voters' turnout decisions.

I pay particular attention to three main things in this chapter. First I want to show that the effect of spouses on voters' turnout behavior is endogenous and therefore needs some correction. This is not new for empirical political scientists. Scholars have argued this before. The main point here is that the spouse's decision to turn out to vote cannot be simply assumed to be exogenous to individuals' turnout choice. The second thing I pursue here is to implement a methodological procedure, of several available, to solve the endogeneity problem. Finally, the last goal of this chapter will be showing that, even after controlling for endogeneity, spouses still do positively influence voters' turnout behavior. I apply control function analysis to model the relationship between husbands and wives for explaining individuals' political behavior.

In the first part of this section I offer some descriptive statistics regarding spouse's impact on individuals' voting behavior. These trends illustrate marriage rates in Costa Rica in the last six decades, the aggregate turnout rates by marital status in the last two decades and the number of times married voters have cast their votes at the individual level. The first thing I address is the trend of marriage rates between 1950 and 2014 (the last year available). The graph 5.1 reveals the increasing pattern of the absolute number of marriages until mid-1990s and its stabilization afterwards. However, when we see the marriage rate per 1.000 people the impression we get is one

that evidences a decline in this rate since mid-1980s. The marriage rate decreased from 8.05 per every 1.000 people in 1985 to 5.43 in 2014.

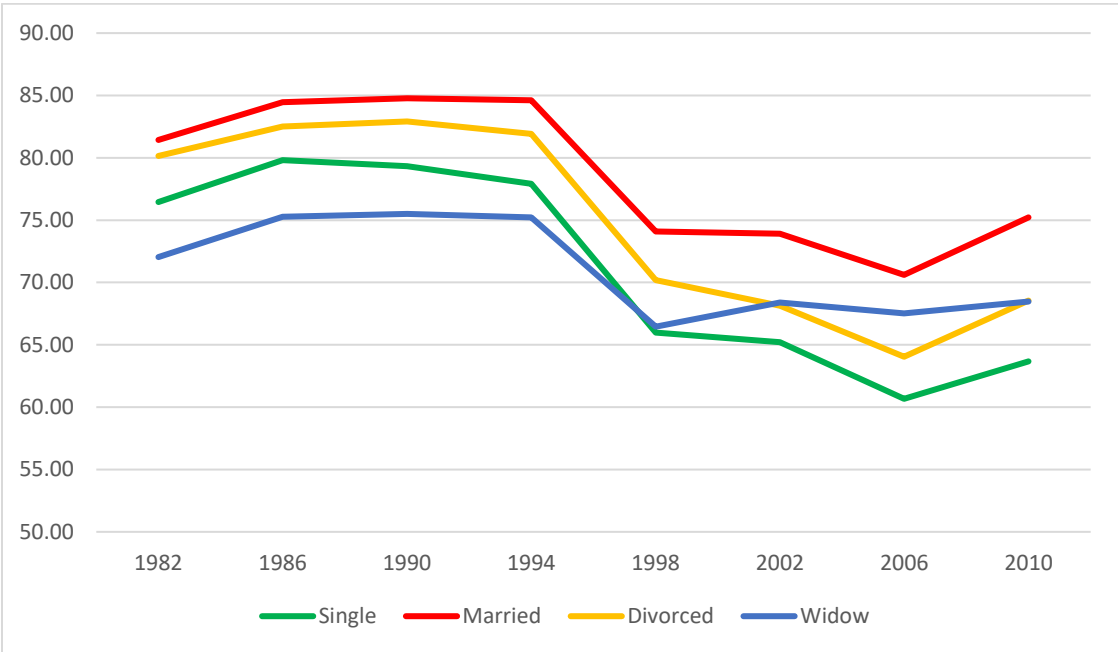
Figure 5.1: Absolute number of marriages and its rate per 1.000 people in Costa Rica. 1950-2014



When we look at the aggregate turnout rates for marital status for the entire electorate, it is clear that married people have an edge in terms of political participation. Data confirms that married people turnout rates are above than any other civil status. In all groups turnout rates have declined ten percentage points on average in twenty-eight years. In 2010 single voters were the group with the lowest turnout across all categories. Interestingly, divorced and widowed groups show up at the polls at a similar rate. Again, the change in turnout that occurred mainly in 1998

was not driven exclusively by one single group or few of them, on the contrary, it affects all groups across the board. The highest reduction occurred among the single voters (Figure 5.2).

Figure 5.2: Turnout rates by marital status groups. 1982-2010



## 5.2 DATA DESCRIPTION AND MODEL SPECIFICATION

In this section I elaborate on the data description and models specification for analyzing spousal influences on voters' turnout decisions. The unique characteristics of the panel of voters I use allow me to examine the universe of spouses on the electorate including those who were married before, got divorced and got married again with a different partner in the covered period of time.

Studying spouse's influence on voters' turnout was possible by merging the universe of voters entitled to vote in all the elections covering the 1994-2010 period of time with the *National Registry Marital Status* dataset. The *National Registry* in Costa Rica centralizes the processes of collecting, processing, cleaning and updating citizens' marital status for the entire population. Accordingly, it is mandatory for all married, divorced, and widowhood people to register there their condition in order to validate their situation. This means that this dataset is exhaustive in terms of reporting civil status. By August 2014 this dataset compiles information on 1.630.484 Costa Ricans' civil status. The *Marital Status* dataset mentioned includes the full name of the spouses, their national identification number, date of the event, place, their parents' names, civil status of both partners, type of relationship (marriage, divorce, widowhood, judicial separation, judicial reconciliation and marriage annulation), and type of marriage (civil or catholic). The crucial information for merging spouses and voters is the universal citizen id number.

Individuals can have more than one spouse in their lifetime. The same applies to divorces. The dataset capture all the cases in which individuals transitioned from one civil status to another. For example when individuals get divorced after being married or vice versa or when divorced individuals get married again. Thus, spouses can appear related to different voters if they have had more than one partner in their life.

Given the fact that endogeneity can inhibit the use of regression for making causal inferences about the effects of X on Y, there are diagnostics and corrections available. More concretely, in this chapter I estimate the models using control function analysis. In the rest of the chapter I discuss in full detail the origin of endogeneity in the voter-spouse relationship, the approach I use for dealing with it, and whether the results hold after addressing the problem. The “biased estimates” models are as follows:

## **Model Specification**

### ***Biased estimates Model 1***

$$\begin{aligned} \Pr(\textit{turnout}_{it}=1 | X_{it}) = & \beta_1 + \beta_2 \textit{turnout}_{it-1} + \beta_3 \textit{female}_{it} + \beta_4 \textit{age}_{it} + \beta_5 \textit{moved}_{it} + \beta_6 \textit{time since voted } t_{it} \\ & + \beta_7 \textit{only mother votes}_{it} + \beta_8 \textit{only father votes}_{it} + \beta_9 \textit{both parents vote}_{it} + \beta_{10} \textit{no-known parents}_{it} \\ & + \beta_{11} \textit{wife's turnout} + \beta_{12} \textit{husband's turnout} + \beta_{13} \textit{turnout}_{it-1} * \textit{age}_{it} + \beta_{14} \textit{turnout}_{it-1} * \textit{moved}_{it} + \\ & \beta_{15} \textit{time since eligible}_{it} * \textit{only mother votes}_{it} + \beta_{16} \textit{time since eligible}_{it} * \textit{only father votes}_{it} + \beta_{17} \textit{time} \\ & \textit{since eligible}_{it} * \textit{both parents vote}_{it} + u_i + \varepsilon_{it} \end{aligned}$$

### ***Biased estimates Model 2***

$$\begin{aligned} \Pr(\textit{turnout}_{it}=1 | X_{it}) = & \beta_1 + \beta_2 \textit{turnout}_{it-1} + \beta_3 \textit{female}_{it} + \beta_4 \textit{age}_{it} + \beta_5 \textit{moved}_{it} + \beta_6 \textit{time since voted } t_{it} \\ & + \beta_7 \textit{only mother votes}_{it} + \beta_8 \textit{only father votes}_{it} + \beta_9 \textit{both parents vote}_{it} + \beta_{10} \textit{no-known parents}_{it} \\ & + \beta_{11} \textit{spouse turnout} + \beta_{12} \textit{turnout}_{it-1} * \textit{age}_{it} + \beta_{13} \textit{turnout}_{it-1} * \textit{moved}_{it} + \beta_{14} \textit{time since eligible}_{it} * \textit{only} \\ & \textit{mother votes}_{it} + \beta_{15} \textit{time since eligible}_{it} * \textit{only father votes}_{it} + \beta_{16} \textit{time since eligible}_{it} * \textit{both parents} \\ & \textit{vote}_{it} + u_i + \varepsilon_{it} \end{aligned}$$

### 5.3 KEY FINDINGS

Here I am going to show a spousal influence turnout model with biased estimates. Second, I provide some corrections of the model I mentioned above and show how the initial results hold after we account for the endogenous problem. Finally, I discuss the results of the revised version of the estimates controlling for endogeneity.

Table 5.2 shows the model regressing voters' turnout on different explanatory variables, some of them discussed in previous chapters. There are two important findings in this table. First, both wife and husband's participation are positively and significantly associated with voters' turnout. This means that voters whose spouse turn out to vote are more likely to vote. The second important finding is that the coefficients of wife and husband are very similar one to each other. Therefore, one can argue that rather than analyzing spouses' effects separately, a model with a single predictor for spouse's influence will be more parsimonious than a model with the two effects. Based on what I found in the table below, in later models I use a combined predictor (wife or husband turnout) for better capturing spouse's effects (see second column in table 5.2).

Table 5.1: Model with biased estimates

	Biased 1 b/se	Biased 2 b/se
Turnout lag	0.972* (0.006)	0.972* (0.006)
Female	0.355* (0.003)	0.354* (0.003)
Voters' age	0.042* (0.000)	0.042* (0.000)
Age^2	-0.000* (0.000)	-0.000* (0.000)
Moved	0.326* (0.004)	0.326* (0.004)
Married	-0.049* (0.003)	-0.048* (0.003)
Youngest cohort	0.178* (0.004)	0.178* (0.004)
Time since being eligible (TSE)	-0.005* (0.000)	-0.005* (0.000)
Only mother voted	1.132* (0.010)	1.132* (0.010)
Only father voted	0.620* (0.011)	0.620* (0.011)
Both parents voted	1.217* (0.027)	1.217* (0.027)
No-known parents	0.500* (0.004)	0.500* (0.004)
Wife's turnout	1.251* (0.003)	
Husband's turnout	1.247* (0.003)	
<b>Spouse voted</b>		<b>1.249* (0.002)</b>
<i>Interactions</i>		
Turnout lag x Age	0.009* (0.000)	0.009* (0.000)
Turnout lag x Moved	-0.706* (0.005)	-0.706* (0.005)
TSE x Only mother voted	-0.019* (0.001)	-0.019* (0.001)
TSE x Only father voted	-0.006* (0.001)	-0.006* (0.001)
TSE x Both parents voted	-0.026* (0.004)	-0.026* (0.004)
Constant	-1.976* (0.013)	-1.976* (0.013)
Constant	0.308* (0.004)	0.308* (0.004)
Wald Chi-squared	862942	862898
Prob > chi2	0.000	0.000
Number of cases	10.872.871	10.872.871

\* p<0.001



Even though this finding is consistent with the literature that shows that spouses play an important role in shaping voters' political behavior, the models' specification I use is clearly problematic. The reason is simple: the models in Table 5.2 ignore the presence of endogeneity leading to biased estimates. One of the key assumptions in regression analysis is the independence of  $X$  and  $\varepsilon$  (the error term). The violation of this assumption indicates *endogeneity* in the model and it is extremely common in empirical political science research. Endogeneity can occur when  $Y$  causes  $X$ , commonly named "reverse causality", in addition to  $X$  causing  $Y$ . More concretely, one can easily identify in this chapter that there are reciprocal effects from *spouse's turnout* to *voters' turnout*, and those effects are taking place around the time period of observation.

Furthermore, another common source of endogeneity is the omission of important explanatory variables in the models. A vast amount of literature suggests that spouses behave similarly not because they mutually influence each other over time but because when they search for their partners they choose those who share similar values and preferences. This is usually called mate selection (Alford et al. 2011). In terms of this chapter, mate choice implies that individuals who score high in interest in politics would look for someone who has similar interests and therefore exhibit analogous turnout behavior.

The same happens with party affiliation. If spouses share the same party affiliation they would have higher incentives to show up at the polls. Unfortunately, I cannot measure in the dataset latent variables like interest in politics or party identification, they are in the endogeneity terminology *unobservables*. The omission of this factors, say party affiliation, may be related to *spouse's turnout* and therefore *spouse's voting behavior* and the error term would be related. Under this circumstances, the estimation of  $\beta$  will be biased and inconsistent. It will include the correlated

effects of spouse's turnout on individuals' voting behavior through its relationships to interest in politics and party affiliation, overestimating its true effect.

Irrespectively of the origins of the estimates bias between husbands and wives regarding turnout trends we need a way for dealing with endogenous explanatory variables. In this chapter I implement a *control function model*. Endogeneity leads to error term being related to X producing biased and inconsistent estimates. So, X is a function of  $\varepsilon$ . But, the equation predicting Y assumes that X and  $\varepsilon$  are unrelated. Under circumstances of endogeneity one cannot use standard techniques. Instead, we must have a Z that only relates to Y indirectly through X. This is normally referred as the "exogeneity" condition. Thus, Z is unrelated to  $\varepsilon$  not just because it is exogenous; it is an exogenous variable that I selected on purpose knowing that it is unrelated to Y. The other exogenous variables in the model would be related to  $\varepsilon$  if one excluded them from the model, because we know they cause Y. But, in this case the spouse's age (Z) causes an individual's turnout (Y) only through the spouse's likelihood to vote (X). The model identification also requires that there must be at least as many excluded instruments as there are endogenous independent variables in the main model.

A good instrument must satisfy two conditions. First, Z does not cause Y except through X, Z is unrelated to the  $\varepsilon$ . The second condition is that Z should be a good predictor of X. The logic of instrumental variables analysis is as follows. Given a variable X that has endogeneity problems in an equation with some dependent variable Y, we find some *exogenous* variable Z that produces change in Y through one mechanism only *the mediating effect of X*. Because Z is exogenous and has no direct effect on Y, then any changes in Y that may result from changes in Z *must be attributable to X*, and must also be unrelated to the problematic endogenous part of the X-Y relationship. So, the instrumental variable gives us *exogenously-induced* changes in X.

Concretely, the instrumental variable produces consistent coefficient estimates of the effect of the endogenous independent variable on the dependent variable.

Given the fact that I examine the endogeneity present in the relationship between voters and spouses, a good alternative is the *control function approach*. Under circumstances of endogeneity the coefficient estimates are biased, and any attempt to infer a causal relationship between spouses' turnout and voters' turnout will be invalid. The logic of this approach is to incorporate "extra regressors in order to break the correlation between the endogenous explanatory variables and unobservables affecting Y" (Wooldridge 2010: 126). This method is particularly useful in nonlinear models with endogenous explanatory variable.

The approach includes instrumental variables in the model specification in the first stage to capture all the endogeneity regarding the reciprocal effects and unobserved factors that are not entirely independent of the endogenous variable. The estimation problem arises when regressing the endogenous predictor on the instrument and other exogenous variables because the error term in this model is not independent of the endogenous predictor as postulated by many of the standard estimation techniques. The purpose of the control function correction is to create a variable, i.e. the residuals of the first stage, which will make that endogeneity to disappear. Therefore, the residuals became another explanatory variable in the equation and it is denominated as a *control function estimator*. After doing so, the remaining variation in the endogenous variable will be independent of the error term and the standard estimation approaches will again be consistent. The important thing is that the error term in the second stage is uncorrelated with the exogenous, endogenous predictors and the residuals.

Having said that, the key assumption in this chapter is that *spouse's age* is correlated with *spouse's turnout* but uncorrelated with the dependent variable, *voters' turnout*, other than through

its correlation with *spouse's turnout*. Therefore, *spouse's age* is an appropriate instrument to correct the endogeneity bias. The model is estimated in two steps (two-stage control-function (2SCF)). First, the endogenous variable, *spouse voted*, is regressed using logistic regression on other explanatory variables and the instrument: *spouse's age*. Second, after this the deviance residuals are estimated and subsequently used to calculate the control function. The inclusion of the residuals controls for the endogeneity of spouse's voted in the main model of interest (Wooldridge 2010). The model specification is the following:

## ***Models specification***

### ***First stage***

$\Pr(\text{spouse turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{moved}_{it} + \beta_6 \text{time since eligible}_{it} + \beta_7 \text{only mother votes}_{it} + \beta_8 \text{only father votes}_{it} + \beta_9 \text{both parents vote}_{it} + \beta_{10} \text{no-known parents}_{it} + \beta_{11} \text{spouse age}_{it} + \beta_{12} \text{turnout}_{it-1} * \text{age}_{it} + \beta_{13} \text{turnout}_{it-1} * \text{moved}_{it} + \beta_{14} \text{time since eligible}_{it} * \text{only mother votes}_{it} + \beta_{15} \text{time since eligible}_{it} * \text{only father votes}_{it} + \beta_{16} \text{time since eligible}_{it} * \text{both parents vote}_{it} + \varepsilon_{it}$

### ***Second stage Model 1:***

$\Pr(\text{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{moved}_{it} + \beta_6 \text{time since voted}_{it} + \beta_7 \text{only mother votes}_{it} + \beta_8 \text{only father votes}_{it} + \beta_9 \text{both parents vote}_{it} + \beta_{10} \text{no-known parents}_{it} + \beta_{11} \text{spouse turnout} + \beta_{12} \text{turnout}_{it-1} * \text{age}_{it} + \beta_{13} \text{turnout}_{it-1} * \text{moved}_{it} + \beta_{14} \text{time since eligible}_{it} * \text{only mother votes}_{it} + \beta_{15} \text{time since eligible}_{it} * \text{only father votes}_{it} + \beta_{16} \text{time since eligible}_{it} * \text{both parents vote}_{it} + \varepsilon_{it}$

### ***Second stage Model 2:***

$\Pr(\text{turnout}_{it}=1 | X_{it}) = \beta_1 + \beta_2 \text{turnout}_{it-1} + \beta_3 \text{female}_{it} + \beta_4 \text{age}_{it} + \beta_5 \text{moved}_{it} + \beta_6 \text{time since voted}_{it} + \beta_7 \text{only mother votes}_{it} + \beta_8 \text{only father votes}_{it} + \beta_9 \text{both parents vote}_{it} + \beta_{10} \text{no-known parents}_{it} + \beta_{11} \text{spouse turnout} + \beta_{12} \text{turnout}_{it-1} * \text{age}_{it} + \beta_{13} \text{turnout}_{it-1} * \text{moved}_{it} + \beta_{14} \text{time since eligible}_{it} * \text{only mother votes}_{it} + \beta_{15} \text{time since eligible}_{it} * \text{only father votes}_{it} + \beta_{16} \text{time since eligible}_{it} * \text{both parents vote}_{it} + \varepsilon_{it} + \hat{u}_i$

Table 5.2 offers the results of the first stage of the control function analysis. In this model, *spouse voted*, is regressed using logistic regression on voters' explanatory variables and the instrument: *spouse's age*. Two were the purposes of this model. First, evaluating if the instrument is a good predictor of X in this initial stage. The second goal of this model was the estimation of the residuals that will be included in the second stage model.

Table 5.2: First Stage Model

	First stage b/se
Turnout lag	0.577* (0.006)
Female	-0.391* (0.003)
Voters' Age	-0.050* (0.000)
Age^2	-0.000* (0.000)
Moved	0.081* (0.004)
Spouse's Age	0.109* (0.000)
Married	0.587* (0.003)
Youngest cohort	-0.083* (0.003)
Time since eligible (TSE)	-0.007* (0.000)
Only mother voted	0.051* (0.009)
Only father voted	-0.083* (0.010)
Both parents voted	-0.210* (0.024)
No-known parents	0.282* (0.003)
<b>Interactions</b>	
Turnout lag x Age	0.006* (0.000)
Turnout lag x Moved	-0.138* (0.005)
TSE x Only mother voted	0.017* (0.001)
TSE x Only father voted	0.013* (0.001)
TSE x Both parents voted	0.023* (0.003)
Constant	-1.488* (0.012)
Prob > chi2	0.000
Number of cases	10.880.746

\* p<0.001

The model above clearly suggests that the use of instrumental variables and control function analysis is a good alternative to estimate the effects under the presence of endogenous relationships like those between voters' turnout patterns and spouses' political participation. Again, if we do not handle the endogeneity problem well this will result in the underestimation of the effects. The results of the second stage of the control function model appear in Table 5.3. In the first column of the table are the coefficients of the model of the effects of *spouse' turnout* on *voters' behavior* without including the deviance residuals for solving the endogeneity issue. This is the baseline model in this chapter. In the second column appears the model used for addressing the endogeneity problem. If the approach I use for that is appropriate there must be a difference between the coefficients of spouse's turnout in columns 1 and 2.



Table 5.3: Second stage Models

	Endogeneous b/se	Exogeneous b/se
Turnout Lag	0.972* (0.006)	0.869* (0.006)
Female	0.354* (0.003)	0.431* (0.003)
Voters' Age	0.042* (0.000)	0.042* (0.000)
Age^2	-0.000* (0.000)	-0.000* (0.000)
Moved	0.326* (0.004)	0.355* (0.004)
Married	-0.048* (0.003)	0.051* (0.003)
Youngest cohort	0.178* (0.004)	0.139* (0.004)
Time since eligible (TSE)	-0.005* (0.000)	-0.003* (0.000)
Only mother voted	1.132* (0.010)	0.998* (0.010)
Only father voted	0.620* (0.011)	0.614* (0.011)
Both parents voted	1.217* (0.027)	1.207* (0.027)
No-known parents	0.500* (0.004)	0.443* (0.004)
<b>Spouse voted</b>	<b>1.249* (0.002)</b>	<b>1.339* (0.002)</b>
<b>Interactions</b>		
Turnout Lag x Age	0.009* (0.000)	0.010* (0.000)
Turnout Lag x Moved	-0.706* (0.005)	-0.682* (0.005)
TSE x Only mother voted	-0.019* (0.001)	-0.011* (0.001)
TSE x Only father voted	-0.006* (0.001)	-0.005* (0.001)
TSE x Both parents voted	-0.026* (0.004)	-0.023* (0.004)
<b>Residual</b>		<b>-0.021* (0.000)</b>
Constant	-1.976* (0.013)	-2.103* (0.013)
Constant	0.308* (0.004)	0.305* (0.004)
Wald Chi-squared	862898	879884
Prob > chi2	0.000	0.000
Number of cases	10.872.871	10.872.871

\* p<0.001

The table above shows that when I control for endogeneity the coefficient of spouses' turnout is bigger than the coefficient of the biased estimates model. This implies that a failure to address the endogeneity in voters' turnout models would lead researchers to underestimate the effect. Briefly, spouses do influence voters' turnout behavior in a positive way, i.e. having a politically active spouse make voters more likely to vote vis-à-vis having one that fails to show up at the polls, however the endogeneity bias artificially inflates that effect. In this case the direction of the effect does change but its magnitude does significantly. These findings suggest that the use of instrumental variables and control function analysis provides a good solution to the endogeneity problem. Overall, these findings provide robust evidence that after controlling for endogeneity bias, caused either by reciprocal effects or omitted variables, spouses' political behavior still positively influence voters' turnout.

The substantive significance of these findings can be better interpreted by estimating the predicted probabilities of voting for individuals based on what spouses did. Table 5.4 summarizes these probabilities at different voters' age and gender. The main finding is the gap in the likelihood of turnout between voters who are *married and the spouse voted* and those who are *married but the spouse failed to do so* or those who *are not married*. Concretely, among 25 years old voters there is a gap of 23 percentage points in the probabilities between those being married with a politically active spouse and being married with a more apathy spouse. Among 65 years old individuals, that difference is equal to 11 percentage points.

Table 5.4: Predicted probabilities of voters' turnout based on spouses' political behavior

Voters' age	18	20	25	35	45	55	65	75	85
Married but spouse did not vote	0.45	0.46	0.50	0.57	0.63	0.71	0.79	0.81	0.85
Married and spouse voted	0.69	0.71	0.73	0.79	0.84	0.87	0.90	0.92	0.94

## 5.4 CONCLUSIONS

It has been largely established by different theories in a broad array of disciplines that spouses not only become and look alike but they also behave alike. Also, it is almost a universal fact that married people vote at higher rates than single ones. The widespread notion in the literature on spouses' transmission of political values and behaviors postulates that husbands and wives' political behavior, although dissimilar at the beginning, converge and become one until another life event breaks that pattern and a new one emerges.

Scholars have postulated competing theories for explaining whether spouses' turnout trends impact their partners' voting behavior, however disagreement about the factors driving that relationship remains. For instance, some suggest that spousal influence is a matter of time. These theories rely on a common story: individuals know someone, they became friends, fell in love, then they get married and end up looking and behaving very similar one to each other the rest of their lives. In the political realm, some of them could have possibly failed to show up at the polls before getting married. However, there is something about sharing their life with someone else, especially if that person has high predispositions to go to the polls, which has the potential to change the way they behave in politics. Concretely, the partner that used to be less likely to vote gets influenced by another more active, diminishing the propensity for abstaining and increasing the chances to cast a vote.

Although this life-story of how spouses affect their partners' voting behavior makes sense and might explain many voters' personal experiences, others scholars have criticized these theories for ignoring the point that *mate choice*, rather than the theorized influence over time, is the key factor for explaining why married people turn out to vote at higher rates than single ones. Accordingly, when selecting partners habitual voters choose frequent voters as spouses. Thus,

political participation seems to be an implicit factor in mates' attributes. In fact, several studies have provided empirical support for these theories.

The mate choice theory has a serious drawback: it implies a stable perspective and ignores the possibility of spouses' voting turnout changes. Throughout all previous chapters I have looked at the transformation of individuals' voting behavior as time evolves. That being said, in this chapter I endorsed the mutual influence theories regarding husband and wife turnout influence. Even though this theory aims to capture the dynamic component of turnout, it has a singular condition: an endogenous relationship between spouses' voting behavior and voters' turnout.

In this chapter I demonstrated empirically that spouses and voters' political participation are endogenous. Hence, the main challenge was to identify a methodological way to address the endogeneity problem. This analysis reveals two important findings. First, it shows that the higher the spouses' turnout rates the greater the levels of voters' turnout. Second and most importantly, this finding holds after controlling for the endogeneity. In sum, the popular adage that says "two become one" fits very well to electoral politics. If I had not accounted for the potential endogeneity in this relationship the estimation of the biased effect could have been smaller than the size of the unbiased one.

In addition to the main finding just mentioned, this chapter confirms the undisputed fact that married people vote at higher rates than non-married ones despite the turnout reduction documented in previous chapters. Moreover, a significant number of spouses show up at the polls in all the elections they have been eligible to do so. In spite of that, however, current married voters are voting at lower rates than they used to in the past, following the same trend of the entire electorate. This does not necessarily mean that married people are going to stop voting in the near future. They still have the incentives to participate in politics that others might not have.

Nonetheless, like in the parents' case analyzed in the previous chapter, the political behavior patterns they are going to transmit to their partners, or the ones they are going to copy from them, are ones of turn out to vote at lower rates than twenty years ago. In case this trend continues that trajectory described, it may push the tendency of married couples even further down in the turnout scale than the one we see nowadays.

In terms of the normative implications of these findings, I argue that even though one can imagine some campaigns for persuading older voters to vote and some public policies can be implemented, the certain thing is that they will hardly change the situation we are seen today among them. Older voters will remain behaving the way they do regardless of any change or electoral reform including drastic changes like considering the introduction of compulsory voting. Under the current circumstances of turnout reductions, the best strategy will be investing the resources and energies mobilizing the younger generations of voters, including those who are close to achieve eligibility or the ones who will join the electorate in the future. The main reason why is a practical one: younger voters' behaviors are not habituated yet, therefore there is some room for shaping them with bigger chances of expecting better returns. So, when their time to be spouses and parents arrives, turnout will be in the list of political values they will transmit to newer generations.

## **6.0 TURNOUT IN POLARIZED DELIBERATION SETTINGS**

In Oscar's family it was very common to talk about politics. His parents used to mention the rivalry between "calderonistas and liberacionistas" (PUSC and PLN follower) often. His father was a fervent "liberacionista". When the PLN lost an election his father did not eat or got out for about two weeks because his opponents will bother him. He was a passionate "party fanatic". As Oscar says "when you see that kind of behavior as a kid you first think that this is a family tradition you must follow and repeat". His father used to prepare illegal alcohol, brought all "liberacionistas" to vote and gave them enough food and liquor. On election day night they listened to the results via radio, his father asked him to do the electoral math all night and when the PLN electoral returns did not look very promissory he got desperate. His father was part of the party local bases and if they won he got a job as a local police officer despite he did not know how to use the gun he carried. At the university Oscar was getting better knowledge about politics despite he still was somewhat influenced by the traditionalism. He admitted that it was hard to get away from it.

In 1978 Oscar wanted to vote against the PLN but his father and his uncle orchestrated a plot and changed Oscar's polling station to a further place without his consent. Thus, he could not vote for the candidate he wanted but they hated. "They would not have let me vote for a cross-party... They did not allow anybody to abandon their party..., it was like a betrayal to the nation..., a "herectic"..., a bad kid that did not deserve to be called a son...". Being a communist at that time was even worst. It was hard for him because he has already started to analyze and think differently.

He wanted to be apart from the traditionalism. Oscar was more attracted to socialist parties than for the PLN principles, so he realized that it was better if he abandons the party.

As a result, he had serious difficulties with his father, they became enemies because he decided to leave the party. According to Oscar, his father thought: “how on Earth I was able to give my son money to study and now he is betraying us”. For his father, Figueres, the most prominent PLN leader, was God, an idol. Oscar had never thought about abstaining and believes that electoral competition and party fights still are the mechanisms to achieve good means, collective benefits and expectations.

Why were Oscar’s relatives so confrontational against his political behavioral desires? Why was he abandoning the party he once identified with? Oscar’s story echoes the tensions individuals experience when the electoral competition is not polarized as it used to and partisan identities are not as determinant on voters’ turnout as before. The purpose of this chapter is to provide a novel explanation on why turnout rates change across time and identify macro-factors that contribute to understand these trends in the long run.

This chapter aims to answer three main questions. First, does entering to the electorate in a polarized deliberation setting matter for turnout? Second, how do voters react to changes in the level of deliberation over time? Lastly, how can the Costa Rican case shed some light of similar trends somewhere else?

Among all worldwide cases Costa Rica is a good laboratory for studying turnout fluctuations. During three decades between 1958 and 1994, political participation average rates remained high in a comparative perspective. Following that trend, one would easily predict that individuals socialized during that period of time must replicate automatically their parents’ and

grandparents' levels of high political activism. However, turnout patterns in the country since 1998 do not fit very well in that story.

Here, I postulate that the partisan identity makes people turn out to vote because they are loyal to the party in a context of conflict produces stronger motivation but it is activated selectively: only works in a context of “threat” or polarized deliberation. Therefore, individuals' likelihood to vote over time depends on the level of polarization of the deliberation at the time they enter to the electorate. Thus, the higher the polarization the stronger the motivation to participate. Essentially, if they enter to the electorate during highly polarized times and deliberation remains so one can expect them to show up to the polls every time they can. Nonetheless, if they achieve eligibility under a divided deliberation period and this level of polarization begins to erode as time evolves voters are going to show high turnout rates at the initial turnout exposures and follow a gradual declining trend over time. Therefore, once strong voters start exhibiting less commitment to the polls.

Now, if voters become members of the electorate when public deliberation is depolarized their dispositions to cast a voter are considerably smaller and will remain at a low level over time unless polarization rises again. In sum, the more polarized the deliberation the easier it will be for citizens to cast their vote but if this polarization declines turnout decreases as well.

This chapter has an important mission in the entire dissertation. It provides a theoretical argument and an explanation of turnout changes that goes beyond the strictly individual aspects of political participation. The story stipulates that voters' turnout decreases if the polarization of the deliberation when voters enter to the electorate gets smaller over time. A divided deliberation at the beginning of turnout exposures triggers and mobilizes voters to get to the polls.



Usually, a polarized public deliberation is produced by a deep political division in the society from which a party cleavage emerges. The logic of my argument relies on the assumption that individuals become members of the electorate at different polarization levels, sometimes high, sometimes low. Hence, some voters get in when political preferences are so apart that party identities are an important component of their self-identities. Others incorporate when parties' positions are quite similar that individuals have very hard times deciding whether to vote for one of them.

As long as polarization in the deliberation remains salient in voters' minds political participation stays high. Nevertheless, if voters achieve eligibility in less polarized deliberation settings their incentives to go to the polls are going to be smaller than they used to in the past. Under these circumstances political identities get weaker and the partisan component of the identity is no longer shaping voting decisions as before. Turnout rates do not change drastically in the short-run because the civic aspect of the political identity attenuates the fall but they may do so in the long-term.

In the first section of the chapter I discuss the most important theoretical contributions to understand the role of political identities in explaining turnout. Section two presents the empirical and theoretical contribution of this chapter. In the following sections I fully describe the data and the methodological approach implemented. In the last sections I analyze what the empirical results mean in a broader perspective and discuss their implications.

The findings of this chapter suggest that when polarization of the deliberation is at the lowest, voters' activism at the ballot box may not get back to its former levels unless new voters enter to the electorate in a new episode of polarization.

## 6.1 MACRO EXPLANATIONS TO TURNOUT CHANGES

The dominant social-psychological theory for understanding relationships between individuals and groups, called *social identity theory* (Tajfel 1974, Tajfel 1982), postulates that people “strive to achieve or maintain a positive social identity thus boosting their self-esteem and that this positive identity derives largely from favorable comparisons that can be made between the in-group and relevant outgroups” (Brown 2000: 747) (see also: Deaux 1993, Huddy 2001). *Social identity* is thus defined as “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership” (Tajfel 1974: 69).

A social identity is typically defined as an awareness of one’s objective membership in the group and a psychological sense of group attachment (Tajfel 1981). Membership in social groups or collectives provides an important basis for self-definition. This theory holds that individuals attempt to maximize differences between the in-group (the group to which one psychologically belongs) and the outgroup (psychologically relevant opposition group) and thus perceive greater differences between one’s in-group and the relevant out-group than actually exist and show favoritism toward in-group members (Tajfel and Turner 1986). What is more, Brewer (1991) views group life as characterized by two competing needs: the need to belong to a group, and the need to differentiate oneself from others.

Therefore, a need for positive distinctiveness drives social identity (Tajfel 1974, Huddy 2001). Consequently, one defines oneself as a member of a particular in-group vis-à-vis an outgroup (Deaux 1993). Social identity theory is essentially “a theory of group differentiation about how group members can make their in-groups distinctive from and wherever possible better than outgroups” (Brown 2000: 757). According to this approach, when group memberships are

framed by comparison with other groups, behavior within the group and toward members of out-groups can be conceived as deriving from the value and meaning that the group provides for its members' social identity and a self-perceived membership in a particular group (Abrams 2015). Thus, group identification involves a subjective sense of membership and can take different forms including social identity (Huddy 2013). Thus, in addition to whatever traits or characteristics people use to describe themselves as unique individuals, they also locate themselves in the social context through their claims to social categories (gender; parent; Democrat) (Deaux et al. 1995).

In social identity theory, intergroup differentiation occurs in two primary ways: in-group favoritism and out-group derogation (Brewer and Brown 1998). In-group favoritism simply refers to the tendency for group members to mentally exaggerate and enhance the favorable qualities of the relevant ingroup to which they see themselves belonging. Out-group derogation, in contrast, is the exaggeration of the negative characteristics of relevant outgroups, thereby also making one's in-group seem superior. The net result of either process is enhanced group differentiation (Huddy and Khatib 2007).

Following the same logic others argue that a political identity is "a social identity with political relevance or has become political through the emergence of explicitly political group norms governing members' outlook and action" (Huddy 2013: 742). This typically entails an identity as part of a group with norms concerning shared political beliefs, and the "correct" group position on a political candidate, political party, policy issue, or course of political action (Campbell et al. 1960).

In the realm of competitive politics Green et al. (2004) suggested that partisan attachment is a social identity, much like religion or ethnicity. As for other social identities, they argue, partisan affiliation inspires enduring allegiance, unaffected by changing political opinions.

Members of a political party, they say, are generally faithful to that party, even in the face of conflicting beliefs. This implies that this sense of identity remains in place after episodes of partisan's disapproval of party practices or performance. Interestingly, even when a partisan votes for a cross-party candidate, the person continues to identify with the original party.

As stated earlier by Tajfel (1974: 66) "in order for the members of an in-group to be able to hate or dislike an outgroup, or to discriminate against it, they must first have acquired a sense of belonging to a group which is clearly distinct from the one they hate, dislike or discriminate against. Much of the tradition in the literature ascribes the acquisition of this sense of belonging to the existence of outgroups perceived as threats, common enemies, etc. The existence or strength of the in-group are thus seen as phenomena derived from the relations between the in-group and its outgroups".

According to Greene (2002) few would challenge the idea that party identification represents an instance of the social-psychological concept of group identification. There has been little challenge to the classic definition of party identification as an affective attachment to an important group (Greene 1999). Moreover, Campbell et al's. (1960) original conceptualization of party identification in *The American Voter* claim that individuals look to political parties as a meaningful social reference groups with which they identify.

Furthermore, previous research underscores the power of identities to shape political outcomes (Conover 1984) and the factors that promote the development of strong social identities. For instance, experts have shown that group membership gains political content through norms and beliefs that connect them to specific political attitudes and actions. As noted, some groups, based for example on partisanship and ideology, are inherently political and guaranteed to generate political cohesion among strong identifiers (Huddy 2013). Others have also shown that political

action is more common among strong group identifiers. More concretely, strong partisans are more likely than weak partisans to have given money or volunteered their time to work for a political candidate or political party, voted, or engaged in other political activities (Fowler and Kam 2007, Huddy et al. 2010).

Strong partisans also feel more positive emotion than weak partisans when exposed to a reassuring message about future electoral victory (Mason 2011). Sidanius et al. (2008) found that UCLA students who were strongly identified with their ethnic group (white, African-American, Latino, Asian) were more inclined to vote for a group member, and demonstrate and sign a petition on behalf of a group-related cause. In the US context, strongly identified Americans are more likely than weak identifiers to adhere to civic norms and vote (Huddy and Khatib 2007).

There is growing consensus that political cohesion revolves centrally around social identity. In fact, some scholars have applied social identity to the study of political parties in other contexts. For instance Kelly (1989) found considerable evidence for a social identity basis of partisanship in Great Britain political parties. Similarly Abrams (1994) and Abrams and Emler (1992) gathered strong evidence for a social identity interpretation of party loyalties in Scotland. Duck et al. (1995) identified effects of political social identity on in-group and out-group perceptions of Australian partisans. Overall, these studies clearly demonstrate the utility of social identity theory for understanding partisanship in dissimilar contexts.

Research findings provide ample empirical evidence of the consequences of group membership for intergroup conflict but shed less light on the development of the identities. This is an important omission for political behavior researchers who are interested not only in what happens once group distinctions are made salient but also in the development of identities, especially strong identities that endure across situations and over time (Huddy 2001: 137).

There has been recent research on the factors that promote the development of strong social identities. The analyses have pointed to the existence of a threat as one of the pivotal factors in the development of a cohesive political outlook and a strong group identity. The notion of threat is relevant because it can strengthen in-group unity, in addition to inflaming outgroup hostilities (Huddy 2013). An external threat enhances in-group solidarity and tightens in-group boundaries in direct proportion to the degree of threat (Cosser 1956, LeVine and Campbell 1972). Threat may have its strongest effects on those who already hold a strong group identity as seen in research by Ethier and Deaux (1994). Overall, existential threats to the self can also intensify group attachment and identity (Huddy 2013).

For Stein (1976: 165) “external conflict does increase internal cohesion under certain conditions. The external conflict needs to involve some threat, affect the entire group and all its members equally and indiscriminately, and involve a solution”. When group status is low or threatened members have several choices: they can exit the group, redefine its status more positively, or challenge their low status directly (Tajfel and Turner 1979). Strong group identifiers are most affected by their group’s standing and least likely to abandon their membership in the face of intergroup threat (Ethier and Deaux 1994, Huddy 2001). They are thus more motivated than weak identifiers to view their group positively, and see it as stronger than an opposing group.

Other scholars have theorized that polarization can become a social identity threat and prompt political action. Huddy et al. (2010:5) believe that “partisan polarization is not an artifact primarily from a spirited defense of ideological principles, but rather derives from threatened group status and interparty competition”. Therefore, partisan polarization is thus more likely a product of political identities than a defense of ideology or issue positions. Thus, participation is not simply a reflection of the social conditions that people experience.

If the experience is politicized through group consciousness it can indirectly motivate political action (Burke and Stets 2009, Huddy 2013). Lupu (2015) has demonstrated that citizens in polarized systems also perceive their parties to be more polarized. And perceiving party polarization makes people more likely to be partisan, strengthening what he calls *party brands*. According to him, over the course of their lives, voters develop perceptions of partisan identities through their own observations of the party and its behavior. This brand plays a crucial role in the development of individuals' political identities.

If we think of partisanship as a social identity, then increased polarization among political parties allows citizens to better distinguish party categories from one another. For most people, a clear preference for one party goes hand-in-hand with a negative attitude toward the opposition party. A stronger partisanship leads to a more exaggerated process of selection and perceptual distortion (Greene 1999). Carmines and Stimson (1989) showed that when parties agree on policies, they become irrelevant to citizens. But when they disagree, partisan conflict becomes more heated and parties seem more important.

Thus, when parties converge, diluting their brands by becoming difficult for voters to distinguish, partisan attachments should weaken (Lupu 2013). Consequently, polarization correlates with increased voter turnout and more consistent ideological voting (Van der Eijk et al. 2005, Dalton 2008, Lachat 2008). In broad terms, a highly polarized system presumably produces clearer party choices, stimulates participation, affects representation, and has more intense partisan competition. He also says that “voting turnout appears strongly related to party system polarization” (Dalton 2008: 916). Several empirical studies have demonstrated that party system fractionalization, along with other institutional characteristics, is related to aggregate levels of

election turnout (Powell 1982, Jackman and Miller 1995, Blais and Dobrzynska 1998, Norris 2004).

Although it is almost always assumed that identities are quite stable, important changes occur, precipitated by alterations in the external environment. Dramatic political events may produce a sudden rise in the salience and/or distinctiveness of a group, thus encouraging an increase in group identifications (Conover 1984). Identity change occurs when the meanings of an identity shift over time. In identity theory, it is assumed that identity change is ongoing but very gradual (Burke and Stets 2009). Individuals may not find their identity as different from yesterday, last week, or last month. It is only when considering a longer period of time that we can see a difference. Changes in a situation can cause a discrepancy between identity meanings and perceived meanings of the self in the situation. If situational changes persist and people's meanings of themselves in situations are unable to adjust to match their identity meanings, their identity meanings may slowly change. From the social identity perspective, salient external events focus people's attention on a contrast between their own group or social category and the group or category that represents the opposition (Turner et al. 1987).

In sum, a strong political identity is expected to increase political involvement. As a consequence, we expect a strong identity to increase political interest and involvement, including voter turnout.



## 6.2 POLARIZATION AND TURNOUT

In previous chapters the findings point to the micro-foundations of voters' turnout changes in a stable democracy over time. In Chapter 2 I confirmed the well-known findings regarding voters' political participation: age boosts turnout rates; older cohorts of voters show up at the polls more often than younger generations; married voters exhibit higher participation rates than single ones. In Chapter 3 I showed that the probability of voting in the future gets bigger gradually if someone started voting at an early age and voted in the previous election. Chapter 4 studied the impact of parents' behavior on the manner offspring turn out to vote. As expected, the analysis shows that voters who have politically active parents are more likely to show up at the polls. Furthermore, the evidence confirms that the intensity of parental influence varies over time: parental effects are greater when voters are at the initial stages of turnout experiences and diminish as new opportunities to vote arrives. Finally, Chapter 5 showed that after solving the endogeneity issue the higher the spouses' turnout rates the greater the levels of voters' turnout.

In this chapter I argue that voters' turnout over time is only partially explained by individual-level attributes and political socialization processes. The findings of previous chapters, although advance our knowledge regarding voters' turnout trends, may not fully account for the decline of aggregate turnout over time.

The causal story in this chapter holds that achieving eligibility during a polarized deliberation setting is the main determinant of individuals' voting behavior changes along the way. A polarized competition for political identities motivates voters to go to the polls. When polarization decreases voters get deactivated and turnout rates will remain low unless a new polarization episode takes place.

Thus, episodes of polarized deliberation structure party competition by establishing powerful incentives to mobilize voters to the polls throughout the emergence of strong political identities. Political identities, typically defined by scholars as “the awareness of one’s objective membership in a group and a psychological sense of attachment” (Tajfel 1981) arise as a result of a macro-event leading to an episode of polarization of the deliberation which in turn provokes a sharp political division in the society under which a new political cleavage emerges. If individuals become eligible under polarized deliberation settings their party identities get activated and they are going to be heavily mobilized. As long as those political identities and their narratives remain salient in voters’ minds turnout continues to exhibit high rates. Otherwise, they are less committed to the polls if they achieve eligibility in less polarized deliberation electoral contests.

I theorize in this chapter that the partisan (group) identity that makes people turn out because they are loyal to the party in a context of conflict produces stronger motivation but it is activated selectively, and it only works in a context of “threat” or polarized deliberation. Nevertheless, these incentives may change over time, they may increase or decrease under certain circumstances impacting turnout. Essentially, the more polarized the deliberation when individuals enter politics the more motivated they will feel to go to the polls. Despite the fact that extreme polarization can destabilize democracy (Mainwaring and Pérez-Liñán 2005), under given circumstances it may be beneficial for voters’ mobilization. Concretely, a polarized competition setting makes party differences more salient and motivates voters to ground their electoral choices in identities, issues or outputs (Dalton 2008; Carlin et. al. 2015). Hence, politicized identities that become salient in polarized contexts to shape voters’ political behavior trigger higher turnout rates. Therefore, how elites structure deliberation by taking polarized rather than nebulous issue stances

can shape voters behaviors by determining how simply they can find a party that reflects their interests (Carlin et.al 2015).

The logic behind this argument relies on the idea that people who come of age at critical turning points that define political loyalties participate more in electoral politics than people who reach maturity in more ordinary times (Rosenstone and Hansen 1993).

The theoretical expectation for a polarized deliberation is very straightforward: as parties differentiate themselves, individuals should be better able to compare them and recognize which party is best positioned to represent them, thus they are far more interested in voting. Thus, voter mobilization is higher where electoral competition is structured by a high degree of polarized deliberation. Here I argue that the probability of turnout is a function of the level of polarization when individuals are socialized. The story is as follows: the level of polarization when individuals are socialized (constant over the rest of individuals' life) determine voters' turnout entry level. This mechanism suggests that, as electoral competition becomes less polarized individuals turnout entry level diminishes. A portion of those individuals with a robust partisan identity gets demobilized if levels of polarization decrease later. Moreover, individuals entering to electoral politics in less polarized deliberation era are more likely to adopt a weak identity and consequently less likely to vote.

Although some scholars have suggested that polarization turns off voters and depresses turnout (Fiorina et al. 2005), previous studies have compiled ample evidence showing that polarization instead energizes voters and stimulate participation (Downs 1957). For instance, using the United States presidential election scholars attributed the increment on turnout –from 54 percent of eligible population in 2000 to 61 percent in 2004- to the figure of George Bush, the

most polarizing presidential candidate in recent US political history (Abramowitz and Stone 2006, Abramowitz and Saunders 2008, Abramowitz 2010).

Others argue that polarization increases the salience of party identifications (Schmitt and Holmberg 1995, Berglund et al. 2005). Polarization effects may endure a long lasting impact on individuals' voting behavior due to the long-term impact of socialization. The central premise of political socialization research is that pre-adult formation affects adult political attitudes and behavior (Beck and Jennings 1982). This influence suggests that "the family has a pervasive effect on an individual's post-childhood thoughts and actions" (Dalton 1980: 421). As it has been stated, "when the offspring have embraced their parents' political predispositions, this legacy is evident throughout their life trajectories" (Dinas 2014: 399).

If voters' first experience at the polls occurs under circumstances of a highly polarized deliberation and strong political identities their chances to develop durable voting habits are very high. However, if their initial experience takes place in a less polarized context that does not facilitate the conditions for the emergence of long-lasting party identifications it is very likely that they experience a lower probability of voting. They adopt and reproduce an already eroded partisan identity that proves to be insufficient to mobilize them although many turn out to vote out of the personal civic duty. I test this theory using the following hypothesis:

### ***Hypothesis 6.1***

*The level of polarization of the deliberation when individuals are socialized determine voters' turnout entry level. The higher the polarization when voters enter to the electorate, the higher their likelihood of voting.*

In his seminal contribution Lipset and Rokkan (1967) explained that conflicts translated into party systems. For them, conflicts and controversies can arise out of a great variety of relationships in the social structure, but only a few of these tend to polarize the politics of any given system. The original formulation of the social cleavage theory of party systems postulates that divisions rooted in society such as class, religion, ethnicity, region and urban or rural location are the driving forces behind the appearance of a cleavage at a critical juncture and create the necessary conditions for the crystallization of political parties. Hence, this theory sees party systems primarily as expressions of different social divisions (Torcal and Mainwaring 2003).

A polarized deliberation, the key factor in this story, creates the conditions for the activation of strong partisan identities that stimulate voters' mobilization to the polls. Therefore, people vote more in a context of polarization. Conversely, if polarization declines, people will vote less. According to analysts, two conditions must be met for public opinion to be polarized. First, the substance of the disagreement must be major. Second, the public must be closely divided (Fiorina and Abrams 2010).

Abramowitz and Saunders (2008) suggest that the greater the differences voters perceive between the candidates and parties, the greater their stake in the outcome and the more engaged they are likely to be. Furthermore, Hetherington has shown that despite all the worry about low turnout, voters in the US have actually begun to participate more, not less, in a polarized age. In the 2004 election most measures of political participation and engagement improved. For example, adjusted turnout rates were higher than any presidential election since 1968. He concludes by saying that "polarization has stimulated participation at the mass level" (Hetherington 2008). There are at least two observable implications of this. First, traditionally less mobilized voters are going to be activated and second, strong partisans should vote more in response to the polarized setting.

In sum, “rather than turning off voters, data suggest that the intense polarization of the electorate increased public engagement and stimulated participation” (Abramowitz and Saunders 2008). Thus, among those voters who experienced or are socialized during a critical juncture polarization prompts an effect that makes voters more likely to vote at the entry to the electorate. This effect changes when polarization changes, and more importantly, it drops when polarization decreases diminishing the incentives to participate.

Unlike older members of the electorate who experience the polarization episode, among those who enter to electoral politics during a non-divisive competition the polarization effect to turn out to vote, I theorize here, is absent and the lack of incentives associated with it demobilize citizens in the long run. Also, they may not develop habituation under circumstances of low turnout rates or even worse, they may never cultivate their habit of voting. In sum, partisan identities erode over time in the absence of polarization. In other words, if we want to understand how each cohort of voters build habituation we need to look at the level of polarization that exists at the time they become eligible.

If we know that polarization is consequential on political participation and that socialization prolongs its effects over time, one may wonder why people turn out to vote in the absence of polarization or when socialization does not transmit those values. Under these circumstances voters are mobilized not by political identities but for another motivation, concretely, for the desire to fulfill one’s civic duty (Blais 2000).

Individuals’ civic-ness is the instrumental psychological attachment to the norms and values attributed to electoral democracy and competition through the recognition of the right to vote as a personal civic duty. Under the influence of the civic (national) identity people turn out because they are loyal to the society at large. Therefore, as long as voters continue to exhibit a

strong commitment to democratic rules and institutions this identity will remain constant in the long-run. If politics are stable and many voters still prefer democracy the majority of them are going to vote out of the civic mandate, setting a threshold for turnout and acting as a reservoir of electoral mobilization even under circumstances of weak partisan identities. Nonetheless, individuals' commitment to democracy can change over time as well. Even though peoples' attitudes toward democracy change rather slowly and less abruptly they have the potential to impact voters' dispositions to get out to vote.

According to Blais and Achen (2010) the ethical norm that citizens have a duty to vote is both widely endorsed and widely adopted by citizens. Scholars have long observed that "the more strongly a person feels a sense of obligation to discharge his civic duties, the more likely he is to be politically active" (Campbell et al. 1954). Also, in a classic contribution Riker and Ordeshook (1968) included a *D* term in their calculus of voting, a term that captures the positive feeling the voter experiences from fulfilling a civic duty regardless of any other consequences associated with the act.

I consider individuals' civic-ness as a constant factor in this chapter models for three main reasons. First, public opinion data compiled by the Latin American Public Opinion Project (Alfaro-Redondo et al. 2015) have shown that Costa Ricans score high in preference for democracy across time. Second, in my theory there is not a particular puzzle regarding turnout as a civic duty. Finally, measuring voters' civic duty has demonstrated to be very complex.

As it has become clear, the quality of the deliberation is crucial for understanding the evolution of turnout rates over time. This factor can contribute to explain why individuals' incentives to go to the polls vary depending on the level of polarization that prevails at the time they become eligible.

### **6.3 HISTORICAL BACKGROUND OF THE CASE STUDY**

In the following section I describe what happens to turnout when someone sees a critical juncture of polarized deliberation followed by more “civic” politics that de-polarize the process over decades. 1948 marks the beginning of a new political era in Costa Rica. The broad triple coalition between the Catholic Church, the Communist Party and the Republican Party approved an ambitious progressive social agenda in the early 1940s guaranteeing labor rights and creating a welfare state.

After an extremely contentious electoral process plagued by irregularities and violence in February 1948 the Electoral Tribunal declared that the opposition candidate Otilio Ulate, of the National Union Party, had been elected president. The incumbent coalition, commanded by Rafael Angel Calderón Guardia, alleged that the opposition committed fraud and petitioned Congress to invalidate the results and call for a new election. The vote of the National Assembly, dominated by pro-government forces, to annul the results precipitated a civil war with tremendous political implications. A rebel army commanded by José “Pepe” Figueres rose up against the government and defeated it. A provisional government, a civil junta, was in charge during a year and a half led by Figueres. That junta abolished the army and a Constitutional Assembly prepared a new Constitution in 1949.

The events in the 1940’s not only built the conditions for the emergence of two political forces (winners vs losers) but most relevant, they destroyed the main party and its identities until then, the Republican Party. This opened the political competition to many parties and political figures. One of the sides, the emergent and victorious National Liberation Party (PLN) got organized and structured quicker. Thus, the civil war winners imposed an identity rapidly.



In the other pole there were an amalgam of forces (Ulatismo, Calderonismo, communists) with only one thing in common: to be “anti-liberacionistas”. All these forces fought against each other to become the PLN challenger. It was a long competition. The “calderonismo” was astute enough to forge the opposition identity despite losing the conflict some years ago. The “calderonistas” and its’ old coalition with the communists broke apart due to the decision of the former to support Anastasio Somoza’s invasion (the Nicaraguan president) of Costa Rica in 1955 -that never happened- as a way to recapture power. Meanwhile, the communists realized that “Pepe” Figueres decided to shield rather than repeal the social reforms and ended up supporting his political project. Some of the communists supporters migrated to the PLN whereas others were persecuted, repressed, and exiled. The Costa Rican Communist Party remained proscribed until 1974, a restriction that caused the party to retract to its minimal size and focused its permanency in two fronts: banana workers’ unions and local progressive associations.

Overall, between 1948 and 1980 there was a big competition for creating the post-war political identities. On one side, the PLN was an early and successful case whereas on the other side all parties fought against each other. In the 1950’s and mid-1960s the PLN hegemony was huge: the party controlled the Executive, the legislative (even when they lost the presidency) and the Judicial Branch.

During the 1950s, 1960s and 1970s the occurrence of some events reinforced identities’ narratives boosting turnout: the invasion of Somoza in 1955; the return of Calderón Guardia from exile in 1958; the electoral victory of National Union Party and the alternation of power in 1958; the triumph of the opposition again 1966 in the closest contest in Costa Rican history; the internal rebellion in the PLN in 1968 and the reelection of Pepe Figueres in 1970. All these episodes reminded voters of their identity and contributed to their mobilization.

In the process of building an opposition force there were winners and losers. For instance, Otilio Ulate (former president 1949-1953) was the last liberal politician that tried to consolidate a party but failed. The “calderonismo” was the identity that triumphed over all others. After achieving a basic level of party organization they made an agreement with the PLN in 1982 institutionalizing their competition. They defeated all other forces that could have consolidated. Voters were energized and mobilized as a result of the rivalry between “liberacionistas” and “calderonistas”.

In the 1980’s the competition for identities and party competition stabilized, polarization has decreased its intensity and the original conflict and cleavage and its effects lie in the past. In addition, in this decade another macro-event moderated the influence of the 1940s political cleavage. The economic crisis reshaped the local context (poverty rates doubled and the exchange rate sky-rocketed) overshadowing the narratives of the political identities that emerged in the 1940s.

Political parties responded by implementing shock policies and introducing big adjustments. Parties started to move toward the center and voters had bigger difficulties differentiating what parties stand for. Consequently, when parties converged the competency turned less salient and the incentives to vote diminished. As suggested by Roberts (2013) the Latin American experience suggests that even where democratic regimes are reasonably stable, economic dependence and vulnerability to exogenous economic shocks can generate forms of political uncertainty that are highly disruptive for party systems. In particular, uncertainty as to what parties are likely to do in public office can inhibit the creation or reproduction of name-brand loyalties among the electorate. In some countries like Costa Rica Robert argues that critical junctures like the 1980s dealigned party systems by generating uncertainty about parties’

programmatic commitments. This uncertainty eroded programmatic linkages between parties and voters and channeled dissent into antisystem forms of social and political protest. Dealignment and realignment thus spawned a legacy of heightened electoral volatility and widespread vote shifts from traditional parties to new parties or political movements. Therefore, the new generations were mobilized to the polls more by other factors and less by the 1948 critical juncture. Older voters got demobilized slow but steadily and as time passes by they vote less than they used to.

Since the 1980s there has been several historical episodes with the potential to re-polarize the deliberation and political competition like the conflicts in Central America, the deterioration of the macro-economic conditions in mid-1980s, teachers' union strikes in the mid-1990s, the dispute over the privatization of the telecommunications in the early 2000, the emergence of new parties like Citizens' Action Party in 2002, the erosion of the two-party system in the mid-2000s or the negotiation of the Central America Free Trade Agreement in 2007. Even though these events polarized the deliberation at different points in time they all have something in common: none of these polarizing episodes were able to forge a cleavage that turns into strong and durable political identities. They all have failed. Despite that, politicians emphasize on political divisions in elections. Politicians purposely heighten the differences between the candidates and parties to induce voting.

In summary, in the Costa Rican case the civil war in 1948 and other episodes of political violence in the 1950s created profound political divisions that originated a new political cleavage embodied by the National Liberation Party (PLN) on one side, and several parties on the other side competing against each other for becoming the main PLN opponent. The PLN was very successful in shaping voters' identity in a short period of time. Among the PLN rivals it took more time to

the Social Christians to displace the old and new political forces to occupy a strategic position. The Communist Party, a key actor during the 1940s, was proscribed until mid-1970s and their supporters got demobilized. During the 1950s, 1960s and early 1970s vote choice was greatly influenced by the identities originated in the 1940s political cleavage. Individuals were very loyal partisans no matter what, so they had big incentives to go to the polls. For many voters, and for several elections, turnout was strictly a matter of partisan identity. Later, the old identities started to erode and turnout begins to show a downward trend.

In this chapter I theorize about how a polarized deliberation activates political identities boosting turnout. This process implies the occurrence of a divisive macro-event from which identities emerge structuring a political cleavage and party competition. As long as these identities and their narratives drive voters' political behavior turnout rates remain high. However, when the political competition gets de-polarized and the once strong political identities turn less salient for many voters the incentives to participate in politics diminish and turnout rates drop in the long-run. That behavioral legacy remains in place until a new episode of polarization occurs.

## 6.4 DELIBERATION MEASURE AND MODELS SPECIFICATION

Measuring the impact of polarization in the deliberation on voters' turnout is difficult largely because of the scarcity of systematic, rigorous and comparable empirical evidence. Deliberation is a good measure, I argue, given that it refers to "a cognitive process in which individuals form, alter, or reinforce their opinions as they weigh evidence and arguments from various points of view" (Lindeman 2002: 199) through an exchange of reasons (Habermas 1984, Habermas 1996) to any public or civic problem (Gastil and Dillard 1999a, 1999b). A participant defends a view by providing reasons; others probe the usefulness of this view through criticism; by reflecting together on the evidence for and against various views (Ryfe 2005).

Scholars argue that there are benefits ascribed to deliberation including informed and reflective judgments, a greater degree of political efficacy, and, ultimately, an increase in the frequency of political action (Fishkin 1991, Mathews 1994, Cohen , Pearce and Littlejohn 1997, Gastil and Dillard 1999a, 1999b, Gutmann and Thompson 2009). Despite that, the empirical findings regarding the implications of deliberation in the society have been mixed (Ryfe 2005, Nir 2011). On one side, some authors have questioned the positive effects of deliberation. For instance, Button and Mattson (1999) argue that deliberation is a complicated process marked by conflict, differing orientations, and political inequalities. Hendriks (2002) highlights the tensions between deliberative democracy and interest group pluralism. Holt (1999) discusses whether deliberating have undesirable practical consequences. Using tolerance as an example Kuklinski et al. (1993) cast doubt on the common view that suggests that deliberation produces better political choices.

On the other side, advocates argue that deliberation leads to more engaged citizens in politics and individuals with greater faith in democratic values who perceive their political system as more legitimate and with a healthier civic life (Mendelberg 2002). Deliberative democratic

theory posits that civic discussion yields to increased involvement in public affairs (Gastil et al. 2002). Thus, deliberation can produce more sophisticated, tolerant, and participative citizens (Luskin and Fishkin 1998, Gastil and Dillard 1999a, Fung 2001, Fung and Wright 2001, Sulkin and Simon 2001, Gastil et al. 2002, Walsh 2004).

For instance, Gastil and Dillard (1999b) have shown that deliberative discussions of political issues can increase the sophistication of individuals' political judgments. For Sulkin and Simon (2001) deliberation leads to decisions that are viewed as more fair and legitimate by the participants. Similarly, others believe that participation in public deliberation enhances the autonomy of citizens, promotes open-mindedness, and fosters democratic values while also stabilizing the political system and releasing tension among dissatisfied segments of society (Barber 1984, Manin et al. 1987, Greenawalt 1989). Moreover, scholars have shown that deliberation does increase knowledge and participation (Luskin and Fishkin 1998, Gastil and Dillard 1999, Kim et al. 1999).

Overall, the use of deliberation as a measure relies on the assumption that in a polarized era citizens actively justify their views (even to herself) or defend them against a challenge (even from herself) (Gundersen 1995: 199), motivating voters to go to the polls and being more engaged in politics as a whole. In sum, public discourse and deliberation can motivate engagement with the electoral process (Jacobs et al. 2009).

I measure deliberation using the indicator provided by the *Varieties of Democracy* project called *Respect counterarguments* (*v2dlcountr*). This indicator is one of the components of the deliberative democracy index. The V-Dem project has defined the deliberative principle, among other six, as a set of principles that embodies all the meanings of democracy. Deliberation, they argue, enshrines the core value that political decisions in pursuit of the public good should be

informed by a process characterized by respectful and reason-based dialogue at all levels, rather than by emotional appeals, solidary attachments, parochial interests, or coercion (Coppedge et al. 2016).

According to this principle, democracy requires more than an aggregation of existing preferences. It therefore focuses on the process by which decisions are reached in a polity. A deliberative process is one in which public reasoning focused on the common good motivates political decisions. There should also be respectful dialogue at all levels among informed and competent participants who are open to persuasion (Dryzek 2010). “The key objective is the transformation of private preferences via a process of deliberation into positions that can withstand public scrutiny and test” (Held 2006: 237).

The wording question of the indicator is the following:

*When important policy changes are being considered, to what extent do political elites acknowledge and respect counterarguments?*

Responses:

0: Counterarguments are not allowed or if articulated, punished.

1: Counterarguments are allowed at least from some parties, but almost always are ignored.

2: Elites tend to acknowledge counterarguments but then explicitly degrade them by making a negative statement about them or the individuals and groups that propose them.

3: Elites tend to acknowledge counterarguments without making explicit negative or positive statements about them.

4: Elites almost always acknowledge counterarguments and explicitly value them, even if they ultimately reject them for the most part.

5: Elites almost always acknowledge counterarguments and explicitly value them, and frequently also even accept them and change their position.

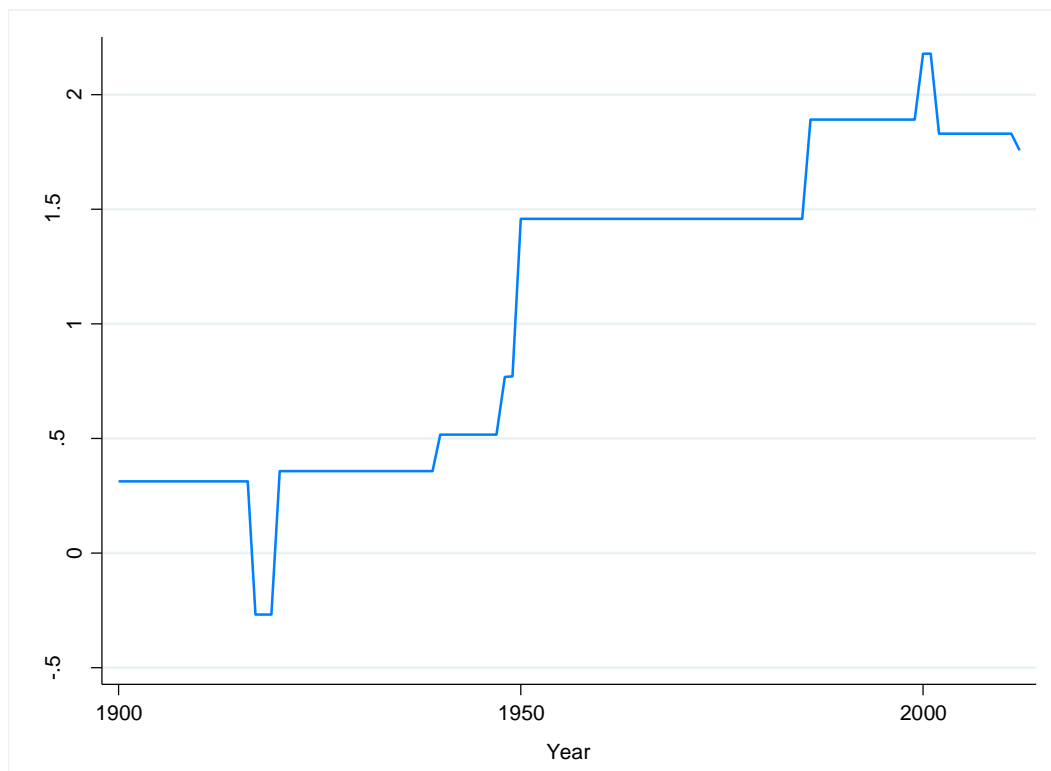
The scale of the original variable is ordinal. However, V-Dem transformed the indicator to interval by the measurement model using Bayesian item response theory measurement model as a method for cross-coder aggregation. Given that the V-Dem indicator I use for measure deliberation relies on country experts coding, issues like reliability and bias arise as big concerns. They use Bayesian item response theory (IRT) modeling techniques to estimate latent polity characteristics from their collection of expert ratings for each ordinal question. Specifically, they fit ordinal IRT models to each of their ordinal questions. In their methodological explanation of their indicator building process they say that “these models achieve three goals. First, they work by treating coders’ ordinal ratings as imperfect reflections of interval-level latent concepts. Second, IRT models allow for the possibility that coders have different thresholds for their ratings (e.g. one coder’s *somewhat* might fall above another coder’s *almost* on the latent scale), estimate those thresholds from patterns in the data, and adjust latent trait estimates accordingly. Therefore, they allow us to correct for this potentially serious source of bias. Finally, IRT models assume that coder reliability varies, produce estimates of rater precision, and use these estimates—in combination with the amount of available data and the extent to which coders agree—to quantify confidence in reported scores.

This measure is based on the methodology of the Varieties of Democracy project which draws on multiple expert perceptions of a large number of disaggregated indicators from a global sample of countries since 1900. More precisely, they use ratings provided by over 2,600 scholars and other experts on 36 specific indicators at country-year level to measure the core “institutional



guarantees” in Robert Dahl’s concept of “polyarchy.” They also launch an aggregate index of these components to measure electoral democracy. At all levels, they provide both point estimates and a measure of uncertainty. Figure 6.1 shows the deliberation measure trends in the long run for my case study. The mean value of 113 observations is 1.07 with a standard deviation of 0.68. The range varies from -0.27 to 2.18. As a reminder, in this measure, the higher the value the more respect in the deliberation process.

Figure 6.1: Respect of counterarguments in Costa Rica. 1900-2012



The empirical analysis in this chapter involves two sets of models. Model one does not include the deliberation predictor. This is the combined model from all previous chapters. Model two adds the key predictor of this chapter: the level of polarization by the time voters enter to the

electorate (Varieties of democracy variable *respect counterarguments* transformed). It is called *respect counterargument when entering to the electorate*. For this key predictor the higher the value of *respect counterarguments* the more agreement and the lower the level of polarization.

Model two is estimated using the following specification:

## Models Specification

### Individual level Time-varying variables:

$$\text{Prob}(\text{Turnout}_{it}=1|\beta_{ij}) = \phi_{ij}$$

$$\log[\phi_{ij}/(1 - \phi_{ij})] = \eta_{ij}$$

$$\begin{aligned} \eta_{ij} = & \beta_{0ij} + \beta_{1ij}*(\text{turnout}_{t-1ij}) + \beta_{2ij}*(\text{age}_{ij}) + \beta_{3ij}*(\text{age squared}_{ij}) + \beta_{4ij}*(\text{moved}_{ij}) + \beta_{5ij}*(\text{married}_{ij}) + \\ & \beta_{6ij}*(\text{time since eligible}_{ij}) + \beta_{7ij}*(\text{only mother votes}_{ij}) + \beta_{8ij}*(\text{only father votes}_{ij}) + \beta_{9ij}*(\text{both parents} \\ & \text{vote}_{ij}) + \beta_{10ij}*(\text{no-known parents}_{ij}) + \beta_{11ij}*(\text{first turnout}_{ij}) + \beta_{12ij}*(\text{turnout}_{t-1ij}*\text{moved}_{ij}) + \\ & \beta_{13ij}*(\text{turnout}_{t-1ij}*\text{first turnout}_{ij}) + \beta_{14ij}*(\text{time since eligible}_{ij}*\text{only mother votes}_{ij}) + \beta_{15ij}*(\text{time since} \\ & \text{eligible}_{ij}*\text{only father votes}_{ij}) + \beta_{16ij}*(\text{time since eligible}_{ij}*\text{both parents vote}_{ij}) + \beta_{17ij}*(\text{turnout}_{it-} \\ & \text{1}_{ij}*\text{moved}_{ij}) + \beta_{18ij}*(\text{turnout}_{it-1ij}*\text{first turnout}_{ij}) + \beta_{19ij}*(\text{spouse 's turnout}_{ij}) + e_{ij} \end{aligned}$$

### Individual level Time-constant variables:

$$\beta_{0ij} = \beta_{00j} + \beta_{01j}*(\text{female}_{ij}) + \beta_{02j}*(\text{respect counterargument when entering to the electorate}_{ij}) + r_{0ij}$$

## 6.5 MAIN FINDINGS

Table 6.1 shows in the first column the model regressing voters' turnout on several explanatory variables. When testing the effect of polarization on voters' turnout, the critical predictor of interest is the deliberation measure. As a reminder, I use a measure called respect of counterarguments in which higher values mean lower levels of polarization. This is the model that appears in the second column of the table. If my theoretical expectation is correct, this key predictor must be negatively and significantly related to voters' turnout, demonstrating that voters are less likely to vote if they enter to the electorate in less polarized deliberation periods of time.

As it becomes clear, those individuals who experienced or were socialized during a polarization episode are strongly engaged to the polls. In short, voters are heavily mobilized by their partisan identities as the self-identity theories suggest. Their motivation to show up to the polls is quite high and it will remain high as polarization stays high. Nonetheless, as data corroborates, individuals who enter to electoral politics in less polarized contexts vote less than they used to because polarization has declined.

Given that deliberation is less polarized once strong identities begin to erode and electoral politics enter into a lethargic phase characterized by a more civilized level of political engagement in which their motivation to participate is considerably lower. In this scenario, people who enter the electorate at a time for lower respect for counterarguments get a boost in their voting levels that remain in place as long as polarization remains salient. In consequence, achieving eligibility in a depolarization setting discourages new voters lowering the turnout rate bar among those new voters. This finding also suggests that in terms of voters' turnout the best case scenario will be entering to the electorate in a polarized election.

Table 6.1: Deliberation effects on Turnout Models

	Model 1 b/se	Model 2 b/se
Voters' Turnout Lag	0.236*** (0.009)	0.160*** (0.009)
Female	0.316*** (0.004)	0.319*** (0.004)
Voters' Age	-0.307*** (0.001)	-0.300*** (0.001)
Age^2	0.001*** (0.000)	0.001*** (0.000)
Moved	0.382*** (0.005)	0.385*** (0.005)
Married	-0.160*** (0.004)	-0.152*** (0.004)
First turnout	0.472*** (0.001)	0.476*** (0.001)
Time since being eligible (TSE)	0.121*** (0.000)	0.102*** (0.000)
Only mother voted	1.737*** (0.020)	1.704*** (0.020)
Only father voted	1.524*** (0.019)	1.474*** (0.019)
Both parents voted	2.566*** (0.125)	2.469*** (0.126)
No-known parents	0.807*** (0.006)	0.781*** (0.006)
Spouse voted	1.146*** (0.003)	1.144*** (0.003)
<b>Interactions</b>		
Turnout lag x Age	-0.000 (0.000)	0.001*** (0.000)
Turnout lag x Moved	-0.756*** (0.007)	-0.754*** (0.007)
Turnout lag x first turnout	0.102*** (0.001)	0.101*** (0.001)
TSE x Only mother voted	-0.065*** (0.001)	-0.063*** (0.001)
TSE x Only father voted	-0.058*** (0.001)	-0.054*** (0.001)
TSE x Both parents voted	-0.092*** (0.008)	-0.088*** (0.008)
Respect counterarguments (deliberation measure)		-1.367*** (0.011)
Constant	1.973*** (0.015)	4.681*** (0.026)
Insig2u	0.750*** (0.004)	0.756*** (0.004)
Wald Chi-squared	1357289	1356170
Prob > chi2	0.000	0.000
Number of cases	10.872.871	10.872.871

\* p<0.001

Like in previous chapters, for the ease and the substantive interpretation of the findings I estimate predicted probabilities for voter turnout holding key variables at different values for relevant voters' profiles. The aim of this procedure is to facilitate the interpretation of the substantive effects and practice significance of the covariates in the models. Shortly, the idea is to contextualize the results in terms of real voters and their personal experiences. In this section, the estimation and interpretation of the predicted probabilities of turnout include, besides the classical variation of gender and age, characteristics like the quality of deliberation at the time voters have entered to the electorate.

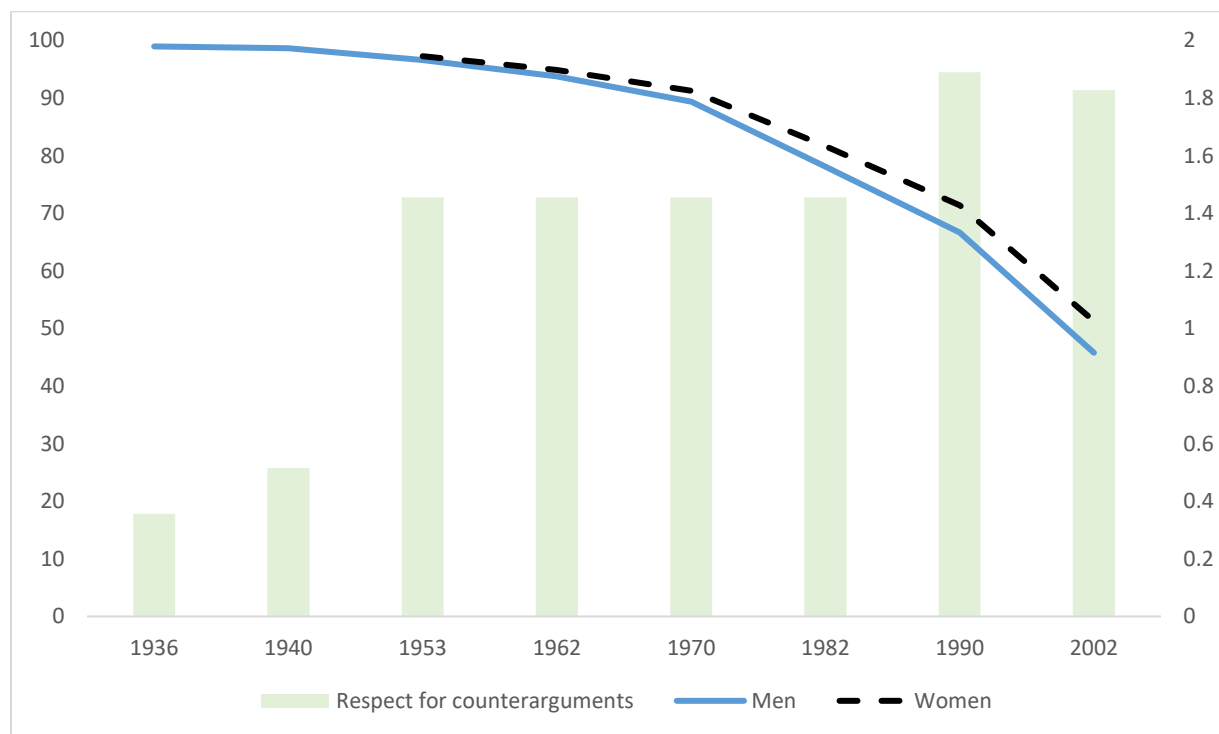
According to the evidence, the probabilities of voting for someone who entered to the electorate during times of higher polarization are significantly higher than the likelihood of those members of the electorate who incorporate when polarization is lower. Concretely, among male the probability of going to the polls for an individual who became eligible in 1936 is 10 percentage points higher (74% versus 64%) than for someone who did so 2010. In addition, for women the likelihood of voting is 9 percentage points higher for a female who entered to the electorate in 1953, when women achieved eligibility, vis-à-vis one that incorporates to the electorate fifty-seven years later (2010). In terms of my theory, these probabilities represent voters' turnout entry level.

Overall, the evidence gathered in this chapter confirms the theoretical assumption that suggests that entering to the electorate during polarized deliberation matters. This finding showed that as long as no other deep political division takes place, or if the old one is not reignited, the incentives to turn out to vote are smaller and participation rates will remain lower. In the absence of polarization, the lack of a "threat" demobilizes voters alienating them from the polls impacting turnout rates.

Concretely, the quality of the deliberation matters for turnout. When individuals incorporate to the electorate during polarization their chances to vote are higher than for voters entering to electoral politics in a less polarized setting. In sum, people vote more in a context of polarization.

In Figure 6.1 I estimate the predicted probabilities for turn out to vote in five of the most recent presidential elections between 1994 and 2010 for male and female based on when they achieved eligibility. As we can see there are two significant gaps. The first one, the most relevant for this study is the one between those who achieved eligibility during times of high polarization and those who did so in less polarized contexts. For instance, the probability of voting for someone who enter to the electorate in 1953, four years after the civil war, is quite high (almost =1) whereas the likelihood to show up to the polls of someone who incorporate to the voting population in 2002 is significantly lower (less than 0.5). The second one is a gender based gap. In the first set of estimates I run, the probabilities of turnout for men and women were pretty much the same, merely 1 percentage point difference among them until 1962. However, among those who become eligible in recent elections (1990 and 2002) the likelihood of voting is 5 percentage points higher for women vis-à-vis men.

Figure 6.2: Predicted probabilities for voters' turnout based on gender, eligibility and respect for counterarguments



### 6.5.1 “Divided we vote...” in comparative perspective

I have shown that individuals vote at lower rates than they used to when deliberation is less polarized. However, one may wonder to what extent this finding can travel to other contexts? A ten percentage point turnout drop, like that one in Costa Rica, is not atypical in comparative perspective. In the last sixty years voter turnout has decreased in 23 out of 36 established democracies worldwide. Turnout reductions are not trivial in democratic regimes. They have serious implications for the survival and consolidation of democracy.

If under typical circumstances big portions of the electorate do not show up at the polls this may call into question the legitimacy of the new authorities. Furthermore, episodes of lower turnout can be interpreted as showing that voters' commitments to democratic norms and values

are fragile. In addition, the circumstances related to lower turnout may cause an enduring effect on individuals' political behavior, alienating disenchanting voters from the political system.

Using the *Voter Turnout Dataset* compiled by the International Institute for Democracy and Electoral Assistance with 2,608 country observations in total (IDEA, available here: <http://www.idea.int/vt/viewdata.cfm>) I plot turnout rates and quality of the deliberation for all consolidated democracies included in the dataset, separated by presidential and parliamentary elections, between 1945 and 2015.

Figures 6.2 and 6.3 illustrate the comparative potential of my explanation that as individuals enter to electoral politics in a depolarized contexts individuals' incentives to go to the polls are smaller than the ones if they do so in polarized deliberation settings. These graph reveal two things. First, there is an inverse relationship between the degree of polarization and turnout levels and second, that the relationship mentioned is not exclusive for Costa Ricans. When we contrast Costa Rica's turnout level with other similar presidential mature democracies I have found that as the respect of counterarguments increases, meaning higher levels of consensus within political elites, the level of participation decreases. Speaking of broader significance, finding explanations of the current trends of turnout in Costa Rica contributes to illuminate what factors drive this phenomenon and why we see similar patterns in other places.



Figure 6.3: Voters' turnout and respect of counterarguments in presidential elections

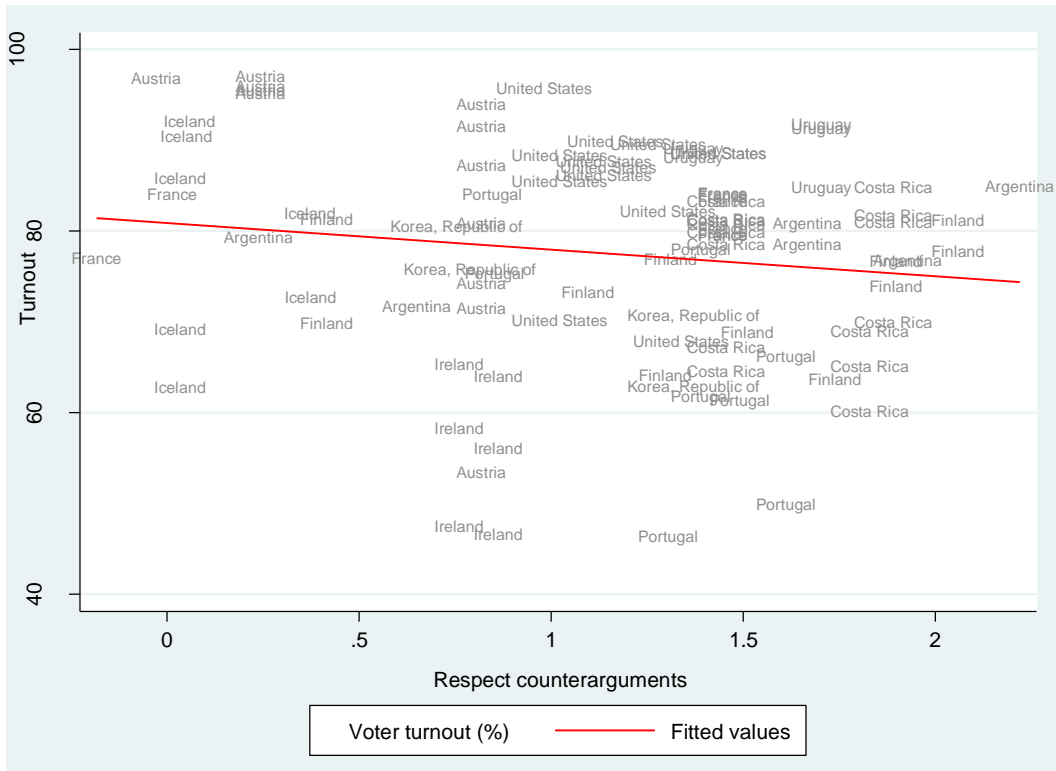
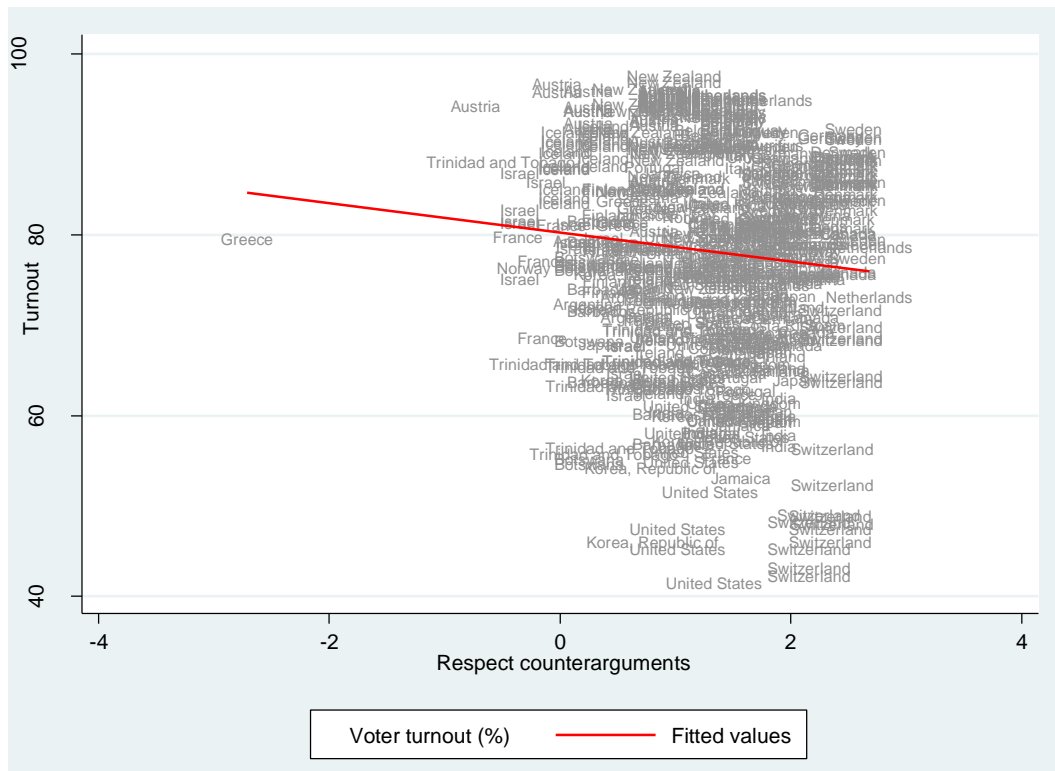


Figure 6.4: Voters' turnout and respect of counterarguments in parliamentary elections



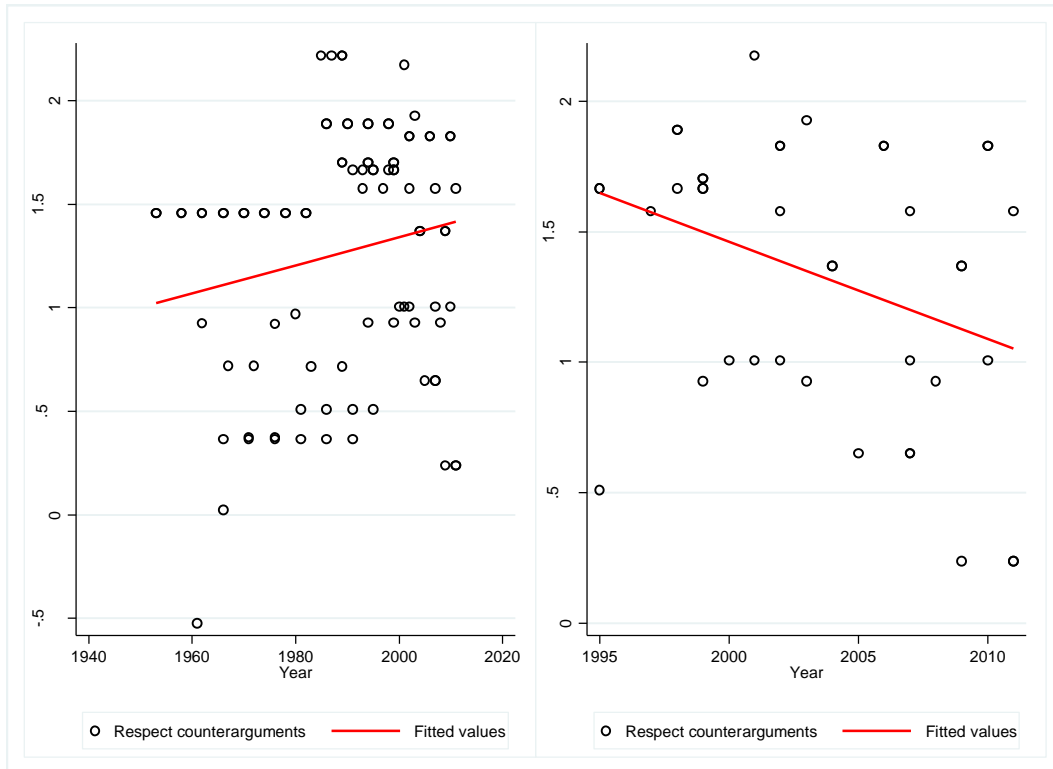
That said, still one may put into question the feasibility of applying the findings of this contribution somewhere else by saying that they are artifacts of the measure of polarization I use. Here I examine whether this concern deserves some attention.

As a matter of fact, scholars have recently developed some measures of elite polarization. For instance, drawing on legislative surveys for 18 Latin American countries Singer (forthcoming) has found that, individual level voting patterns from mass survey data confirm that the connection between voters' self-placement on the left-right scale and their electoral choice is stronger in polarized party systems. Unfortunately, the fact that this measure does not extend over a long period of time limits severely its scope. It only captures fifteen years trends. Two other aspects restrict its applicability to the Costa Rican case. First, the country is classified among those with

few differences across party positions which means no differences among them and second, the measure depicts no variation in three out of the five periods analyzed (remains constant), then there is a big decrease followed by a huge increment in the last observation. Thus, the pattern of the data is very irregular. Other measures available are also limited given the number of countries included (Coppedge 1998, 2007) or because they analyze trends of ideological polarization for a single cross-section of countries (Kitschelt and Freeze 2010; Zechmeister and Corral 2013).

Despite the limitations I have mentioned, Singer's contribution (forthcoming) is still useful for the purpose of this dissertation to show whether the polarization patterns I have described before are consistent to previous findings. Singer concludes that levels of polarization have increased, on average, throughout the hemisphere over the 1995-2010 period. Does this outcome contradict my conclusions? The answer is not necessarily for a key reason. This result mirrors what I have found for the same period of time. However, when we examine a longer time span the conclusion is different. Figure 6.4, on the right-hand side, shows that between 1995 and 2010 the that political deliberation becomes more polarized. But, the left-hand side of the graph does not tell the same story. In this case, polarization in the deliberation has diminished over time.

Figure 6.5: Respect of counterarguments in Latin America 1953-2010 and 1995-2010



That said, to what extent do these results can be extended to a broader set of cases? When we put together the trends of all nations considered as free -despite that not all of them are established democracies- by the Freedom House Index it is clear that as polarization diminishes turnout rates drops as well (Figure 6.5). In addition to this scrutiny, Eastern European nations, that achieved democracy more recently, are good candidates for calling this assumption into question. Data for these countries suggest two patterns. First, turnout rates in Eastern Europe have mirrored the downward trend over time we have seen worldwide and even, the slope is steeper among them than within mature democracies showed before. Second, the respect of counterarguments measure in these cases shows a small but inconclusive decline in the long run (Figure 6.6). Although the

period of time I analyzed here is shorter, one can identify somewhat similar patterns regarding political participation and polarization of the deliberation in these newer democracies.

Figure 6.6: Turnout and respect of counterarguments in free democratic countries (Freedom House)

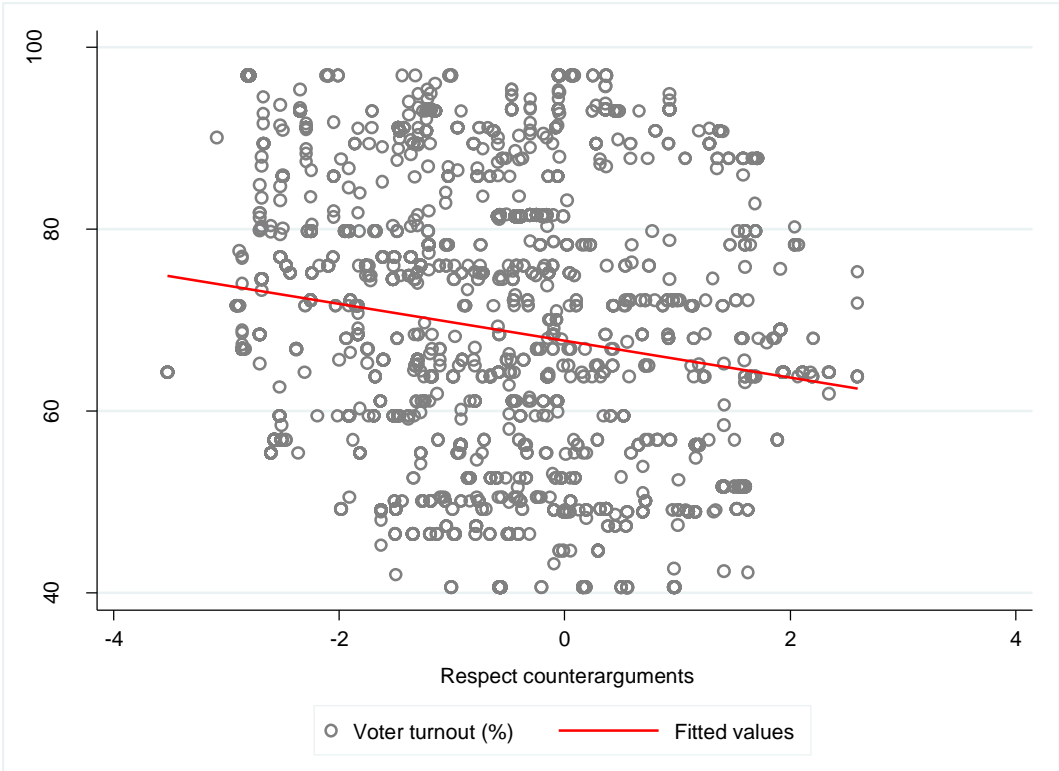
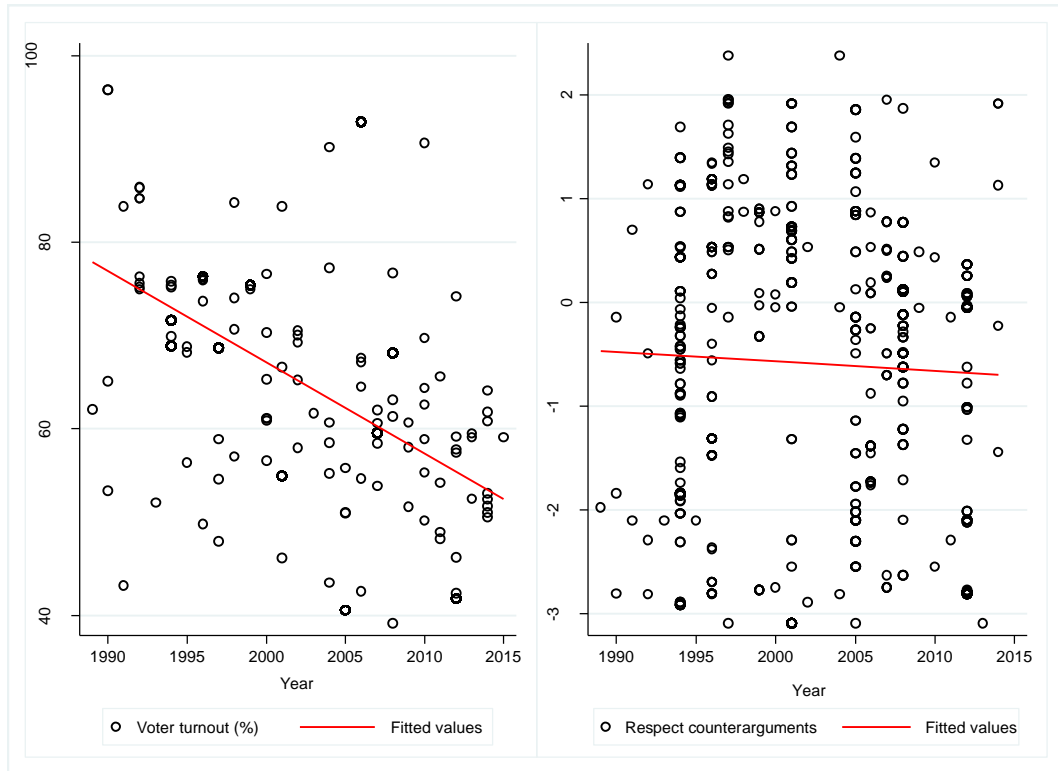


Figure 6.7: Turnout and respect of counterarguments in Eastern European countries



## 6.6 CONCLUSIONS

Bad political outcomes are quite often, although not exclusively, attributed to polarization in the specialized literature. Gridlock, inadequate policy outputs, ideological extremism, regime instability and democratic breakdowns have been linked to greater distances among individuals' positions or preferences, no matter if they are politicians or ordinary citizens. In the common view, a polarized deliberation has traditionally been seen as a source of conflict and irreconcilable disagreement up to the point that many scholars intensely advocate against it. In sum, polarization has been perceived as an undesirable condition for mature democracies.

In spite of the dominant negative perception about polarized deliberation, in this chapter I found a beneficial effect of polarization upon democratic politics. Deliberation, I argue, is a key mechanism for stimulating voters' mobilization to the polls. Accordingly, a polarized deliberation triggers participation by facilitating the indispensable conditions for the emergence of vibrant partisan identities throughout voters are activated and mobilized to the polls. Thus, turnout rates will continue high as long as the electoral competition remains polarized. Hence, the best case scenario for encouraging voters is one characterized by strong political identities that emerge in a deeply divided electoral contest.

However, turnout rates are sensitive to changes in polarization levels in the long run. More concretely, voters' turn out to vote less than they used to if the identities competition becomes less polarized. This change is not perceived immediately given that it follows a temporal sequence across two kinds of voters. First, as polarization begins to vanish strong partisan identities start to erode slowly pushing away once habitual voters from the polls. Secondly, voters who enter to the electorate in a non-polarized context lack of the incentives to turn out to vote that existed in a divided electoral setting. The net effect of the combination of these two things is a reduction of

turnout rates. As a result, electoral competition enters into a lethargy phase in which voters exhibit a progressive demobilization and if participation rates continue to drop low aggregate turnout rates may freeze in the long run.



## **7.0 TURNOUT IN AN ERA OF (DE)POLARIZATION: CONCLUDING REMARKS**

Almost two thirds of the established democracies worldwide have experienced a significant reduction in turnout since 1945. Under typical conditions the alienation of a growing part of the electorate should ring some alarms in terms of calling the legitimacy of the elected authorities and their decisions into question. Moreover, episodes of lower turnout can be interpreted as showing that voters' attachments to the political system are fragile and vulnerable. In addition, the circumstances related to lower turnout may cause an enduring effect on individuals' political behavior. In sum, falling turnout is often seen as signal of voters' dissatisfaction or disengagement with the political system. This could have long-term and dramatic impacts on support for and viability of the political system in the long-run. The worst case scenario would be one in which this legacy could extend individuals' apathy toward politics during lifetime, causing low turnout to freeze for decades. Therefore, if we want to understand the implications of turnout decline in established democracies, we first need to comprehend the conditions under which these changes occur. The purpose of this study was to find answers to the question of why turnout is declining over time. This dissertation has attempted to show first, why people change their voting behavior patterns in the long run and second, what factors drive these trends over time.

## 7.1 CENTRAL FINDINGS

The key aim of my dissertation is contributing to shed some light about the issue of why are we seen turnout declines in many mature democracies around the globe. Scholars have offered different reasons why some people show up at the polls whereas others lack of the incentives to participate. However, few efforts have emphasized in the causes of voters' turnout persistence over time (or the lack thereof); the puzzle of this dissertation. This document has two big sections. In the first part I examine in detail several individually based explanations of turnout trends. In the second part I provide a novel theoretical assumption regarding macro factors influencing voters' turnout.

In Chapter 2, I reviewed the literature on political participation and run a baseline model testing the most common assumptions in the field. Given the almost universal acceptance of the findings showing the impact of individuals' sociodemographic attributes in explaining voters' turnout patterns it seems normal to start by testing that conventional wisdom in the field (Downs 1957, Finkel 1985, Rosenstone 1993, Brady et al. 1995, Bratton 1999, Gerber, Green et al. 2008). The canonical view says that political participation differs by gender (Chaney 1979, Desposato and Norrander 2009), increases as individuals age (Nie et al. 1974, Wass 2007), and get married (Straits 1990, Kern 2010, Stoker and Jennings 1995). My findings in this chapter confirm the well-known results regarding voters' political participation mentioned. Also, interestingly data prove the occurrence of a reversion of the turnout gender gap in Costa Rica since mid-1990s, similar to the ones experienced by other established democracies. In sum, the mission of this chapter was establishing the basis for more sophisticated and innovative analysis in chapters 3-6.

Chapters 3-5 of this study analyze the micro-foundations of voter turnout over time. In chapter 3 I study the influence of one political participation trigger. Experts argue that under

normal circumstances individuals will develop habitual voting as a function of time, which basically means that if someone voted in the previous election, his probability to participate in the second or third electoral contests must be higher *per se*. The logic behind this assumption says that first turnout experiences leave a “footprint” on individuals’ political behavior in the long run (Denny and Doyle 2009). Despite a big consensus, there is little evidence regarding the mechanisms driving voters’ behavior during that decisive period of time. The empirical evidence reveals that if I theorize that voting once makes you more likely to vote twice, but voting twice makes you even more likely to vote three times and so on.

In Chapter 4 I examine the puzzle of why individuals who were socialized during times of high participation, and by politically active parents and relatives, vote at lower rates than older generations. The traditional view of political socialization processes relies, heavily, on the idea that parents transmit directly to their offspring most of their political views or beliefs (Hyman 1959, Davies 1965, Niemi and Sobieszek 1977). This literature argues that children tend to mirror their parents on social and political values. The analysis conducted in this chapter shows that, as expected, voters who have politically active parents are more likely to show up at the polls. Nonetheless, the evidence confirms that the intensity of parental influence varies over time. Using the time since being eligible for the first time I demonstrate that parental effects are greater when voters are at the initial stages of turnout experiences and diminish as new opportunities to vote arrives. Under these conditions, a significant portion of the older members of the electorate are currently socializing and transmitting to their offspring, as the intergenerational chain continues, the lower turnout rates they learnt and adopted to a third generation and so on.

Also, the evidence compiled in this chapter reveals that mothers are the most influential socialization agents in Costa Rica. This is a very interesting finding in comparative perspective,

particularly if we consider that in many democracies around the globe women turn out to vote at lower levels than men. Women possess not only an advantageous position in terms of offspring behavior shaping but they also impact both daughters and sons in a greater extent than fathers. A natural strong biological connection with their kids puts them in a leading position vis-à-vis fathers to shape individuals' political behavior particularly at the beginning of turnout exposures.

The last chapter of the trilogy examining individual factors influencing voting behavior is the one on spouses' reciprocal influence. The widespread notion in the literature postulates that husbands and wives' political behavior, although dissimilar at the beginning, converge and become the same thing (Glaser 1959, Milbrath 1965). Two competing theories have been postulated for explaining whether spouses' turnout trends impact their partners' voting behavior. Previous work argued that spousal influence is a matter of time. So, there is something about sharing their life with someone else, especially if that person has high predispositions to go to the polls, which has the potential to change the way they behave in politics (Cutts and Fieldhouse 2009).

Revisionists heavily criticize these theories claiming that mate choice, rather than the influence over time, is the key factor for explaining why married people turn out to vote at higher rates than single ones (Feng and Baker 1994, Watson et al. 2004). In this dissertation I endorse the theories that suggest that the effects of marriage on turnout are occasioned through the mechanism of mutual influence. Thus, I test a methodological way to address the endogenous relationship between spouses' behavior and voters' turnout. Data show that the higher the spouses' turnout rates the greater the levels of voters' turnout finding holds after controlling for the endogeneity issue. In sum, the popular adage that says that "two become one" fits very well to electoral politics.

Chapters 3-5 innovate in terms of the compilation and use of turnout data that have proven to be very difficult to gather for the entire country. For instance, in chapter 3 I use two different

datasets. The first one is the complete version of the panel of individuals entitled to vote in Costa Rica in five of the most recent presidential elections 1994, 1998, 2002, 2006 and 2010. The second one is a reduced version of the former panel and it includes only individuals who started voting at the same time in 1994 and after –those born between 1973 and 1987.

For the purpose of analyzing parent-children turnout patterns in chapter 4 I combined information from two different datasets available. I joined the *National Register*, a universal *Birth Registry* dataset with the database that includes voters' political behavior. Similarly, studying spouse's influence on voters' turnout in chapter 5 was possible by merging the *National Register Marital Status* dataset with the one on political participation.

In sum, in Chapters 2-5 the findings point to the micro-foundations of voters' turnout changes in a stable democracy over time. In Chapter 2 I confirmed the well-known findings regarding voters' political participation: age boosts turnout rates; older cohorts of voters show up at the polls more often than younger generations; married voters exhibit higher participation rates than single ones. In Chapter 3 I showed that the probability of voting in the future gets bigger gradually if someone started voting at an early age and voted in the previous election. Chapter 4 studied the impact of parents' behavior on the manner offspring turn out to vote. As expected, the analysis shows that voters who have politically active parents are more likely to show up at the polls. Furthermore, the evidence confirms that the intensity of parental influence varies over time: parental effects are greater when voters are at the initial stages of turnout experiences and diminish as new opportunities to vote arrives. Finally, Chapter 5 showed that after solving the endogeneity issue the higher the spouses' turnout rates the greater the levels of voters' turnout.

In the last chapter of this section I argued that voters' turnout over time is only partially explained by individual-level attributes and political socialization processes. The findings of

previous chapters, although advance our knowledge regarding voters' turnout trends, may not fully account for the decline of aggregate turnout over time.

In the second section of this document I go beyond a pure individually oriented approach and propose a macro explanation of turnout changes over time. This was one of the main goals of the dissertation. The main theoretical contribution of this dissertation is the identification of the causal mechanisms that explain the impact of polarization on voters' turnout. My argument postulates that, a polarized deliberation, rather than demobilizing voters, encourage them to go to the polls. Even though this assumption is certainly not new in the literature (Hetherington 2008, Abramowitz and Saunders 2008), I argue that it is not polarization by itself what motivates individuals as others have suggested. Electoral competition creates the conditions for the emergence of partisan identities which are selectively activated through divided deliberation.

A social identity is typically defined as an awareness of one's objective membership in the group and a psychological sense of group attachment (Tajfel 1981). Membership in social groups or collectives provides an important basis for self-definition. This theory holds that individuals attempt to maximize differences between the in-group and the outgroup and thus perceive greater differences between one's in-group and the relevant out-group than actually exist and show favoritism toward in-group members (Tajfel and Turner 1986). The analyses have pointed to the existence of a threat as one of the pivotal factors in the development of a cohesive political outlook and a strong group identity. In this logic, the notion of threat is relevant because it can strengthen in-group unity, in addition to inflaming outgroup hostilities (Huddy 2013). Shortly, an external threat enhances in-group solidarity and tightens in-group boundaries in direct proportion to the degree of threat (Coser 1956, LeVine and Campbell 1972).

Scholars have theorized that a polarized deliberation can become a social identity threat and prompt political action. Huddy et al. (2010: 5) believe that “partisan polarization is not an artifact primarily from a spirited defense of ideological principles, but rather derives from threatened group status and interparty competition”. Carmines and Stimson (1989) showed that when parties agree on policies, they become irrelevant to citizens. But when they disagree, partisan conflict becomes more heated and parties seem more important. Thus, when parties converge, diluting their brands by becoming difficult for voters to distinguish, partisan attachments should weaken (Lupu 2013). Consequently, polarization correlates with increased voter turnout and more consistent ideological voting (Van der Eijk et al. 2005, Dalton 2008, Lachat 2008). In broad terms, a highly polarized system presumably produces clearer party choices, stimulates participation, affects representation, and has more intense partisan competition. Scholars argue that “voting turnout appears strongly related to party system polarization” (Dalton 2008: 916). Overall, a polarized deliberation triggers voters’ mobilization through the reinforcement of politicized self-identities.

In my theory an episode of highly polarized electoral competition is the equivalent to what Collier and Collier (1991) call critical junctures, defined as a period of significant change and produce distinct legacies. In the Costa Rican case the civil war of 1948 and its effects, that reshaped the political arena and party competition, fits very well with this definition of historical turning points. These dramatic political events may produce a sudden rise in the salience and/or distinctiveness of a group, thus encouraging an increase in group identifications (Conover 1984). Thus, partisan identities are a by-product of a cleavage, a profound political division that is shaped through a series of intervening steps. Essentially, these identities are the kind of legacies critical juncture scholars have theorized (Collier and Collier 1991).

When a party cleavage crystallizes polarization energizes and mobilizes voters. After that, the narratives and personal experiences associated with the episode of polarization act as a reminders for voters about which party they identify with and who their opponents are. Essentially, the more polarized the public deliberation the easier it will be for citizens to cast their vote. Political participation is a function of the level of polarization of the deliberation at the time voters enter to the electorate. If deliberation when individuals achieve eligibility is polarized voters' incentives to participate are high. However, if deliberation when they enter to politics is less polarized their motivations to show up at the polls are low. As a result, an important portion of the electorate vote at lower rates than they used to in the past and new voters integrate to the realm of politics in times of depolarization and demobilization.

Hence, politicized identities that become salient in polarized contexts to shape voters' political behavior trigger higher turnout rates. Under that conditions turnout rates will be high as long as the electoral competence remains salient in voters' minds. However, those identities, the critical juncture legacies, can vanish alienating voters from the polls if no other deep political division takes place or if the old one is reignited. Put another way, if no new cleavage emerges the incentives to turn out to vote decrease and participation rates will remain lower. Although the gradual decline of the identities does not necessarily constitute the end of the legacy of the critical juncture, that legacy is certainly at its minimum level. That legacy it is not strong and influential as before as a result of the erosion of polarization.

This finding contributes to explain why despite showing irrefutable signs of stability during quite long periods of time, party systems do not "freeze" in the long run in the way it was postulated earlier by Lipset and Rokkan (1967). In depolarized electoral contests even once strong partisans may regularly fail to the polls or decide to change their identity and support a cross-party more



often then never before. And for those who are just entering to the electorate their attachments to the parties and consequently, their disposition to support them at the polls are going to be remarkably weaker and will likely remains unchangeable in the long term.

There are significant findings in the last chapter. First, I demonstrate that a polarized deliberation in a politicized identities setting becomes a key incentive for voters' mobilization. Nevertheless, these incentives can change over time, it may increase or decrease. Scholars have identified a worrisome broad pattern of weakening partisanship among advanced industrial democracies carrying detrimental effects on turnout.

Second, the temporal sequence of turnout decline differs from the decline of polarization and party identification. If polarization erodes partisan identities turn increasingly less relevant for mobilizing voters in the long term. This change does not impact turnout rates immediately, however a weak party identification combined with a non-polarized competition incubates a lagged effect on voters' turnout pushing political participation rates down one or more generations later. As stated by Dalton and Wattenberg (2000: 263) "partisan dealignment is transforming the relationship between some voters and political parties –a relationship that was once seen as an essential element in the process of representative democracy".

Substantively, a practical implication of my explanation states that there is a tense and complex equilibrium between agreement and conflict in democratic regimes regarding political participation, like the *yin and yang* in the Chinese philosophy. In short, too much social agreement disincentives and alienate individuals from the ballot boxes and turns the electoral competition boring and irrelevant, but too much collective disagreement may energize voters in such a way that introduces tensions and destabilize the system. Vibrant participation in the long run demands a minimum level of polarization in the public deliberation. Otherwise, voters enter into a long

lethargy of turnout decline unless a new episode of polarization and strength of identities takes place. The best scenario lays somewhere in between the two extremes. This is what I call a turnout reduction dilemma.

## **7.2 FUTURE RESEARCH AGENDA**

The theoretical and empirical findings of this dissertation leave many other questions unanswered. In this section I propose some avenues for contributing to understand why voters' turnout changes over time.

### **7.2.1 Turnout changes in the long-term**

A lot of effort has been devoted to find explanations for why some people voter whereas others prefer not to do so. A vast amount of literature analyzes the main determinants of voters' turnout. There are multiple and diverse theories available for explaining why individuals show up at the polls. The list is long covering a broad array of theoretical traditions including economic, institutional, behavioral, biological, sociological, anthropological, historical, and psychological frameworks. Less attention has been paid to study why individuals change their voting patterns during lifetime. Most of the time this kind of studies are severely constrained by data availability. Nonetheless, many more data are accessible now than in the past, it is possible to analyze other dimensions of political participation. Studying the dynamics of turnout in the long run would allow us to better comprehend what drives changes on individuals' dispositions to cast a vote. In these pages I have proposed a cohesive set of individual and macro factors but much more analyses are

needed. In addition, finding better explanations for turnout changes over time is an interesting avenue for exploring.

### **7.2.2 Turnout reductions or changes in consolidating democracies**

We know far more about how turnout evolves over time in established democracies than in less consolidated ones. The knowledge equation in this issue is not balanced. We need to figure out whether the finding that shows that changes in the level of polarization alter the incentives to vote in mature democracies can travel to other settings, particularly among less consolidated democracies. The reduction in turnout in the last seven decades is not exclusive of stable democratic regimes as I have shown in the first chapter. Also, the slide down trend we have seen does not take place only, or mainly, in presidential or parliamentary systems. What is more, the trend is not inherent to two-party or multiparty systems. It has occurred all over the place. Tentatively, the same causal argument identified in my theory may apply to less consolidated democracies. An important limitation among these cases we need to take into consideration is the number of free and fair elections available. However, the number of democracies worldwide has increased significantly. The cases that still are not considered as consolidated today can achieve that condition at some point in the future and be good candidates for testing this theory.

### **7.2.3 Deliberation measure**

Many bad things that occur in the political system are mostly attributed to polarization. Deadlock, instability and violence, among others, have been associated with greater and irreconcilable positions between political actors. Drawing on one of the few macro deliberation measures

available, called respect of counterarguments, I found a beneficial effect of polarization upon electoral politics. Despite the fact that this *Varieties of Democracy* measure is based on perception given that it relies on experts' coding perceptions and may not capture all attributes related to deliberation, it exhibits a general trend that is, as a whole, consistent with the country's observed evolution of political events and situations. In other words, although this is not a perfect measure at least capture the minimal attributes required. That being said, an interesting effort would be to design a new deliberation measure that allow us to compare over time and across cases. This new measure would give us more leverage to study the implications of polarization on different issues including voters' turnout.

#### **7.2.4 Tense equilibrium in democratic regimes**

Disagreement in democratic regimes is often seen as a bad condition. Arguing that some level of disagreement is good for stable democracies, and particularly important for turnout, is controversial because an extreme level of divergence can even lead to breakdowns. However one can identify some benefits associated with a polarized deliberation.

In this dissertation I provided evidence regarding a positive effect of polarization on turnout through the alteration of the individuals' incentives to go to the polls. This positive effect may not be the only one. We can identify other beneficial impacts. From a citizens' perspective, in polarized contests people are much more clear of what they stand for and what they want.

From an institutional perspective political parties can define their policy positions and interests in a way that will be easier to the electorate to identify what party's proposals are and which parties' ideology they feel closer to. In contrast, in context in which parties' positions are

very similar one from another voters' information costs to determine which party agrees or disagrees on different issues will be higher.

From a representatives' point of view, although they may face much more difficulties to build durable coalitions, a polarized setting can be a better scenario for a president or a legislator given that they can frame and transmit their interests to the public knowing, a priori, that they are sending crystal clear signals to them that will guide their behavior.

Finally, polarization can increase confidence in government for two reasons. First, in polarized contexts individuals are strongly identified with those who are in charge of govern. Second, confidence in government can be higher in polarized contexts due to the fact that when choosing whom to support or oppose individuals are going to be more certain about what to expect from them or anticipate their decisions.

## APPENDIX A

### VARIABLES DESCRIPTION

#### Dependent variable

The dependent variable is *voter turnout* in the 1998, 2002, 2006 and 2010 national elections. Voters who cast their vote were coded as 1, and 0 otherwise. Because I use the objective measure of political participation and the universe of voters, I can get rid of concerns regarding dropout rates causing attrition bias (typically in panel data) or inflated measures that suggest that turnout may be overstated (survey cases). In other words, my turnout rates are neither above nor below the national aggregate turnout rate, they are the official ones.

#### Independent variables

In this section I describe the operationalization of the independent variables.

***Turnout***  $t-1$ : for measuring habitual voting I lagged the dependent variable –turnout (t-1), so I lose the first observation to have the lag. This would leave me with four waves of political participation 1998, 2002, 2006, and 2010 for examining the extent to what voting habit is developed.

*Female* is a dichotomous variable. Men were coded as 0 and women as 1. In the Costa Rican case, since 1994 presidential election women cast their votes at higher rates than men (For more details see: Raventos 2005).

*Age* is a continuous predictor that indicates voters' age at each election year. Data for this indicator are available at the National Register office.

*Age squared*, this variable accounts for non-linear effects of age on turnout. In this case I would expect to find a negative coefficient. As one gets older, the likelihood of voting increases through late middle-age, and then declines as one becomes more elderly. In this case the effect of age on turnout is positive up to a certain point, then it would become negative.

*Moved*: I also examine the effect of residential mobility on turnout. In the literature the typical assumption is that residential changes disrupts political behavior and increases the costs of voting. I use a binary variable to study mobility effects. Voters who moved (change in real address and updated it with the electoral tribunal) between elections (by the time of the t+1 election) were coded as 1, and 0 otherwise.

*First turnout*: The dynamic approach I applied here postulates that individuals develop the habit of voting not only due to age changes but also as a result of the time they decided to cast their vote for first time. Voters who participate in the first elections they were entitled to do so would activate habits earlier than those who did not show up in the polls. *First turnout* is a continuous predictor that measures the number of years since an individual cast his vote for first time using 2006

election as the temporal point. Thus, if someone voted for first time in 1994 *First turnout* is: 2010-1994 = 16 years. *First turnout* values can be 4, 8, 12 or 16 years. This predictor was used in the estimation of chapter 3 for the population of voters entering to the electorate in 1994, 1998, 2002, and 2006.

***Married*** is a dichotomous variable. Single individuals were coded as 0 and married ones as 1.

***Existed mother***: dummy variable coded as 1 if voters' mother is in the dataset and 0 if not.

***Existed father***: dummy variable coded as 1 if voters' father is in the dataset and 0 if not.

***Only Mother voted***: coded as 1 if mother appears in the dataset and voted and 0 otherwise.

***Only Father voted***: coded as 1 if father is included in the dataset and voted and 0 otherwise.

***Both parents voted***: refers to those cases in which both parents cast their vote (coded as 1 and 0 otherwise).

***Unknown parents***: are cases of parents who are not included in the dataset (coded as 1 and 0 otherwise).



***Time since eligible:*** refers to a continuous predictor that measures the number of years since an individual was entitled to vote for the first time. Values vary between 0 and 12 years. The elections covered in the analysis are 1994-2010.

***Wife voted:*** coded 1 if voters' wife show up at the polls and 0 if abstain.

***Husband voted:*** coded 1 if voters' husband voted and 0 if abstain.

***Spouse voted:*** this variable refers to the combination of wife voted and husband voted. In the case of female voters, it was coded as 1 if their husband cast a vote and 0 otherwise. Whereas, in the case of male voters, 1 means that their wives voted and 0 that they abstain.

***Spouse age:*** is a continuous predictor that combines in one single predictor the age of husband (if voters are female) and the age of wives (if voters are male).

***Respect counterarguments:*** is a continuous variable that refers to the level of agreement or disagreement among political elites. The higher the value the more agreement and the lower the level of polarization.

## Interactive predictors

I use the following interaction terms in different chapters:

- $Turnout_{t-1} * age$
- $Turnout_{t-1} * moved$
- $Turnout_{t-1} * first\ turnout$
- $Time\ since\ voted\ election\ t * only\ mother\ voted$
- $Time\ since\ voted\ election\ t * only\ father\ voted$
- $Time\ since\ voted\ election\ t * both\ parents\ voted$

## APPENDIX B

### DESCRIPTIVE STATISTICS OF SOME VARIABLES OF INTEREST

Table Appendix B.1: Descriptive Statistics for Existed Mother (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.162666	.3690607	0	1	N =19687243
between		.3651181	0	1	n = 3456864
within		0	.162666	.162666	T-bar = 5.69512

Table Appendix B.2: Descriptive Statistics for Existed Father (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.1607073	.3672607	0	1	N =19687243
between		.3401937	0	1	n = 3456864
within		.134041	-.1230931	.8769069	T-bar = 5.69512

Table Appendix B.3: Descriptive Statistics for Both Parents Existed (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.0375025	.1899897	0	1	N =19687243
between		.1793574	0	1	n = 3456864
within		0	.0375025	.0375025	T-bar = 5.69512

Table Appendix B.4: Descriptive Statistics for Only Mother Voted (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.0980254	.2973489	0	1	N =19687243
between		.2706009	0	1	n = 3456864
within		.1167985	-.885308	1.075803	T-bar = 5.69512

Table Appendix B.5: Descriptive Statistics for Only Father Voted (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.0662184	.2486635	0	1	N =19687243
between		.2242983	0	1	n = 3456864
within		.1040502	-.9115594	1.049552	T-bar = 5.69512

Table Appendix B.6: Descriptive Statistics for Both Parents Voted (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.0189116	.136213	0	1	N =19687243
between		.111538	0	1	n = 3456864
within		.063883	-.9588661	.9966894	T-bar = 5.69512

Table Appendix B.7: Descriptive Statistics for Unknown Parents in the dataset (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	.7141292	.4518282	0	1	N =19687243
between		.4379204	0	1	n = 3456864
within		.134041	-.0020704	.9979296	T-bar = 5.69512

Table Appendix B.8: Descriptive Statistics for Times since eligible (all voters)

	Mean	Std. Dev.	Min	Max	Observations
overall	19.72801	16.65965	0	97	N =19687218
between		16.16264	0	97	n = 3456859
within		0	19.72801	19.72801	T-bar = 5.69512

Table Appendix B.9: Descriptive Statistics for Existed Mother (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.2942379	.4556994	0	1	N = 9887378
between		.4694332	0	1	n = 1506115
within		0	.2942379	.2942379	T-bar = 6.56482

Table Appendix B.10: Descriptive Statistics for Existed Father (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.26782	.4428233	0	1	N = 9887378
between		.4277484	0	1	n = 1506115
within		.1891426	-.0159803	.9840197	T-bar = 6.56482

Table Appendix B.11: Descriptive Statistics for Both Parents Existed (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.1261878	.3320609	0	1	N = 5791811
between		.3359919	0	1	n = 876632
within		0	.1261878	.1261878	T-bar = 6.60689

Table Appendix B.12: Descriptive Statistics for Only Mother Voted (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.1776822	.382245	0	1	N = 9887378
between		.3619855	0	1	n = 1506115
within		.1581554	-.8023178	1.15546	T-bar = 6.56482

Table Appendix B.13: Descriptive Statistics for Only Father Voted (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.1049271	.3064595	0	1	N = 9887378
between		.2877599	0	1	n = 1506115
within		.1346242	-.8728507	1.082705	T-bar = 6.56482

Table Appendix B.14: Descriptive Statistics for Both Parents Voted (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.0372018	.1892559	0	1	N = 9887378
between		.1655851	0	1	n = 1506115
within		.0898055	-.940576	1.01498	T-bar = 6.56482

Table Appendix B.15: Descriptive Statistics for Unknown Parents in the dataset (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	.5118602	.4998593	0	1	N = 9887378
between		.4999572	0	1	n = 1506115
within		.1891426	-.2043395	.7956605	T-bar = 6.56482

Table Appendix B.16: Descriptive Statistics for Times since eligible (first-time voters subpopulation)

	Mean	Std. Dev.	Min	Max	Observations
overall	5.592726	4.877597	0	16	N = 4388078
between		2.266233	.1081081	15.11111	n = 1204305
within		4.294633	-9.518386	20.44987	T-bar = 3.64366

Table Appendix B.17: Number of cases of Only Mother Voted when both parents were fully identified

	Cases
-----+-----	
Only mother voted	167,162
-----+-----	

Table Appendix B.18: Number of cases of Only Father Voted when both parents were fully identified

	Cases
-----+-----	
Only father voted	116,226
-----+-----	

Table Appendix B.19: Number of cases of Both Parents Voted when both parents were fully identified

	Cases
-----+-----	
Both parents voted	422,771
-----+-----	

Table Appendix B.20: Number of cases of Only Mother Voted when only mother was fully identified

	Cases
-----+-----	
Only mother voted	2,014,588
-----+-----	

Table Appendix B.21: Number of cases of Only Father Voted when only father was fully identified

	Cases
-----+-----	
Only father voted	1,358,940
-----+-----	

## APPENDIX C

### Personal characteristics of the interviewees

<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Province</b>	<b>Type of voter</b>
María	Female	90	San José	Non-voter
Juan	Male	25	Heredia	New voter in 2010
Carmen	Female	37	Puntarenas	Habitual voter
Raúl	Male	45	Puntarenas	Habitual voter
Vanessa	Female	55	San José	Habitual voter
Juana	Female	45	San José	Habitual voter
Ramón	Male	70	San José	Non-voter
Elisa	Female	70	Heredia	Habitual voter
Ana	Female	35	Cartago	Random voter
Lucía	Female	60	Guanacaste	Habitual voter
Alberto	Male	80	Heredia	Habitual voter
Julio	Male	70	Heredia	Habitual voter
Bernal	Male	65	San José	Random voter
John	Male	37	Heredia	Random voter
Oscar	Male	70	San José	Habitual voter
Ronny	Male	50	Cartago	Random voter
Sara	Female	30	Cartago	Random voter
Luis	Male	55	Puntarenas	Random voter
Carlos	Male	37	San José	Random voter



## BIBLIOGRAPHY

- Aarts, H., B. Verplanken and A. van Knippenberg (1998). "Predicting Behavior From Actions in the Past: Repeated Decision Making or a Matter of Habit?" *Journal of Applied Social Psychology* 28(15): 1355-1374.
- Abramowitz, A. I. (2010). *The disappearing center: Engaged citizens, polarization, and American democracy*. New Heaven: Yale University Press.
- Abramowitz, A. I. and K. L. Saunders (2008). "Is polarization a myth." *Journal of Politics* 70(2): 542-555.
- Abramowitz, A. I. and W. J. Stone (2006). "The Bush effect: Polarization, turnout, and activism in the 2004 presidential election." *Presidential Studies Quarterly* 36(2): 141-154.
- Abrams, D. (1994). "Political distinctiveness: An identity optimising approach." *European Journal of Social Psychology* 24(3): 357-365.
- Abrams, D. (2015). *Social Identity and Intergroup relations*. M. S. Mikulincer, Phillip R; Dovidio, John F; Simpson, Jeffrey A. In: *Handbook of Personality and Social Psychology*. Washington: American Psychological Association. (2): 203-228.
- Abrams, D. and N. Emler (1992). "Self-denial as a paradox of political and regional social identity: Findings from a study of 16–and 18–year-olds." *European Journal of Social Psychology* 22(3): 279-295.
- Acock, A. C. and V. L. Bengtson (1978). "On the Relative Influence of Mothers and Fathers: A Covariance Analysis of Political and Religious Socialization." *Journal of Marriage and Family* 40(3): 519-530.
- Aldrich, J., J. Montgomery and W. Wood (2011). "Turnout as a Habit." *Political Behavior* 33(4): 535-563.
- Alfaro-Redondo, R. (2014). "Lifecycle changes and the activation of habitual voting: The case of Costa Rica." *Electoral Studies* 35(0): 188-199.
- Alfaro-Redondo, R., J. Vargas-Cullell and M. Seligson (2015). *Political Culture in Costa Rica: Long-term slide continues in attitudes favoring stable democracy. Perspectivas desde el Barómetro de las Américas: 2015. Insights Series*. Nashville, Vanderbilt University.
- Alford, J. R., P. K. Hatemi, J. R. Hibbing, N. G. Martin and L. J. Eaves (2011). "The politics of mate choice." *The Journal of Politics* 73(02): 362-379.
- Alford, R. R. and E. C. Lee (1968). "Voting turnout in American cities." *American Political Science Review* 62(03): 796-813.

- Alt, J., I. Crewe and T. Fox (1977). *Non-Voting in British General Elections 1966-October 1974*. London: Croom Helm.
- Andersen, K. (1975). Working women and political participation, 1952-1972. *American Journal of Political Science*, 439-453.
- Andolina, M. W., K. Jenkins, C. Zukin and S. Keeter (2003). "Habits from home, lessons from school: Influences on youth civic engagement." *Political Science and Politics* 36(02): 275-280.
- Barber, B. (1984). *Strong democracy: Participatory democracy for a new age*. Berkeley: University of California.
- Barquero, J. and W. Molina (2012). Nuevas tendencias de la migración interna en Costa Rica. Hacia un patrón de migración intrametropolitana en la GAM. 2000-2011. Simposio Costa Rica a la luz del Censo 2011. San José, Costa Rica., Instituto Nacional de Estadística y Censos: 1-11.
- Beck, P. A. (1977). The role of agents in political socialization. In: Renshon, S. *Handbook of Political Socialization*. New York, Free Press: 115-141.
- Beck, P. A. (1991). "Voters' Intermediation Environments in the 1988 Presidential Contest." *Public Opinion Quarterly* 55(3): 371-394.
- Beck, P. A. and M. K. Jennings (1982). "Pathways to participation." *American Political Science Review* 76(01): 94-108.
- Bélanger, P. and M. Eagles (2007). "Partisan Cross-Pressure and Voter Turnout: The Influence of Micro and Macro Environments." *Social Science Quarterly* 88(3): 850-867.
- Bell, M. and C. Charles-Edwards (2013). *Cross-national comparisons of internal migration an update on global patterns and trends*. New York: United Nations.
- Bell, M. and S. Muhidin (2009). *Cross-national comparisons of internal migration*. Human Development Research Paper. New York: United Nations Development Program.
- Bengtson, V. L., T. J. Biblarz and R. E. Roberts (2002). *How families still matter: A longitudinal study of youth in two generations*, Cambridge: Cambridge University Press.
- Berelson, B. R., F. L. Paul and a. W. N. McPhee. (1954). *Voting: A study of opinion formation in a presidential campaign*, Chicago: University of Chicago Press.
- Berger, J., M. Meredith and S. C. Wheeler (2008). "Contextual priming: Where people vote affects how they vote." *Proceedings of the National Academy of Sciences* 105(26): 8846-8849.
- Berglund, F., S. Holmberg, H. Schmitt and J. Thomassen (2005). Party identification and party choice. In: J. Thomassen. *The European Voter: a Comparative Study of Modern Democracies*. Oxford, Oxford University Press: 106-124.

- Bhatti, Y. (2012). "Distance and Voting: Evidence from Danish Municipalities." *Scandinavian Political Studies* 35(2): 141-158.
- Bhatti, Y., J. O. Dahlgaard, J. H. Hansen and K. Hansen (2014). How voter mobilization spread in households and families—The use of short text messages on cell phones to boost turnout. APISA 2014 Annual Meeting Paper.
- Bhatti, Y., K. Hansen and H. Wass (2012). Voting for the Very First Time: The Effect of Past Eligibility on Turnout. APISA 2012 Annual Meeting Paper.
- Bhatti, Y. and K. M. Hansen (2012). "Leaving the nest and the social act of voting: turnout among first-time voters." *Journal of Elections, Public Opinion & Parties* 22(4): 380-406.
- Bhatti, Y. and K. M. Hansen (2013). The effect of co-residence on turnout. MPSA Annual Conference 2013.
- Bhatti, Y., K. M. Hansen and H. Wass (2012). "The relationship between age and turnout: a roller-coaster ride." *Electoral Studies* 31(3): 588-593.
- Blais, A. (2000). *To vote or not to vote?: the merits and limits of rational choice theory*. Pittsburgh: University of Pittsburgh Press.
- Blais, A. (2006). "What affects voter turnout?" *Annual Review of Political Science* 9(1): 111-125.
- Blais, A. and C. H. Achen (2010). "Taking civic duty seriously: Political theory and voter turnout." Unpublished manuscript.
- Blais, A. and A. Dobrzynska (1998). "Turnout in electoral democracies." *European Journal of Political Research* 33(2): 239.
- Blais, A., E. Gidengil and N. Nevitte (2004). "Where does turnout decline come from?" *European Journal of Political Research* 43(2): 221-236.
- Bolaños, L. and I. Montenegro (2007). "Ley de Paternidad Responsable y Registro Civil." *Revista de Derecho Electoral* (4): 1-25.
- Boulianne, S. and M. Brailey (2014). "Attachment to Community and Civic and Political Engagement: A Case Study of Students." *Canadian Review of Sociology* 51(4): 375-388.
- Brady, H. E., S. Verba and K. L. Schlozman (1995). "Beyond SES: A Resource Model of Political Participation." *American Political Science Review* 89(2): 271-294.
- Bratton, M. (1999). *Political participation in a new democracy: institutional considerations from Zambia*. Glasgow: Centre for the Study of Public Policy, University of Strathclyde.
- Brewer, M. B. (1991). "The social self: On being the same and different at the same time." *Personality and Social Psychology Bulletin* 17(5): 475-482.

- Brewer, M. B. and R. J. Brown (1998). Intergroup relations. In: Gilbert D., and Lindzey G. The Handbook of Social Psychology. Boston: McGraw-Hill. 2: 554-594.
- Brody, R. A. and P. M. Sniderman (1977). "From Life Space to Polling Place: The Relevance of Personal Concerns for Voting Behavior." *British Journal of Political Science* 7(03): 337-360.
- Brown, R. (2000). "Social identity theory: Past achievements, current problems and future challenges." *European Journal of Social Psychology* 30(6): 745-778.
- Burke, P. J. and J. E. Stets (2009). *Identity theory*. Cambridge: Oxford University Press.
- Butler, D. and D. E. Stokes (1969). *Political change in Britain; forces shaping electoral choice*. New York: St. Martin's Press.
- Buton, F., C. Lemerrier and N. Mariot (2012). "The household effect on electoral participation. A contextual analysis of voter signatures from a French polling station (1982–2007)." *Electoral Studies* 31(2): 434-447.
- Button, M. and K. Mattson (1999). "Deliberative democracy in practice: Challenges and prospects for civic deliberation." *Polity*: 609-637.
- Campbell, A., P. E. Converse, W. E. Miller and D. E. Stokes (1960). *The American Voter*. New York: Wiley.
- Campbell, A., G. Gurin and W. E. Miller (1954). *The Voter Decides*. Evanston: Row, Peterson.
- Carlin, R., M. Singer and E. Zechmeister (2015). *The Latin American Voter*. Michigan: University of Michigan Press.
- Carmines, E. G. and J. A. Stimson (1989). *Issue evolution: Race and the Transformation of American Politics*. Princeton: Princeton University Press.
- Delli, M. (1986). *Stability and change in American politics: The coming of age of the generation of the 1960s*. New York: New York University Press.
- Carreras, M. (2016). "Compulsory Voting and Political Engagement (Beyond the Ballot Box): A Multilevel Analysis." *Electoral Studies*. In Press.
- Caspi, A., and Herbener, E. S. (1993). Marital assortment and phenotypic convergence: Longitudinal evidence. *Social Biology*, 40(1-2), 48-60.
- Castro, L. J. and A. Rogers (1981). *Model migration schedules: a simplified formulation and an alternative parameter estimation method*. Laxenburg: International Institute for Applied Systems Analysis.

- Cesarini, D., M. Johannesson and S. Oskarsson (2014). "Pre-birth factors, post-birth factors, and voting: Evidence from Swedish adoption data." *American Political Science Review* 108(01): 71-87.
- Champion, A. G. (1989). *Counterurbanization: the changing pace and nature of population deconcentration*. London: E. Arnold.
- Chaney, E. M. (1979). *Supermadre: Women in Politics in Latin America*. Austin, University of Texas Press.
- Cho, W. K. T., J. G. Gimpel and J. J. Dyck (2006). "Residential concentration, political socialization, and voter turnout." *Journal of Politics* 68(1): 156-167.
- Clarke, J. W. (1973). "Family structure and political socialization among urban black children." *American Journal of Political Science* 17: 302-315.
- Coffé, H. and M. Voorpostel (2010). "Young people, parents and radical right voting. The Case of the Swiss People's Party." *Electoral Studies* 29(3): 435-443.
- Cohen, J. (1997). *Deliberation and Democratic Legitimacy. Deliberative Democracy: Essays on Reason and Politics*. J. R. W. Bohman. Cambridge: MIT Press.
- Collier, R. B. and D. Collier (1991). *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America*. Princeton: Princeton University Press.
- Collins, N. A., S. Kumar and J. Bendor (2009). "The adaptive dynamics of turnout." *The Journal of Politics* 71(2): 457-472.
- Comisión Económica para América, L. (2008). *2007: Panorama social de América Latina*. Nueva York: Naciones Unidas.
- Condon, M. and M. Holleque (2013). "Entering Politics: General Self-Efficacy and Voting Behavior Among Young People." *Political Psychology* 34(2): 167-181.
- Connell, R. W. (1972). "Political Socialization in the American Family: The Evidence Re-Examined." *The Public Opinion Quarterly* 36(3): 323-333.
- Conover, P. J. (1984). "The Influence of Group Identifications on Political Perception and Evaluation." *The Journal of Politics* 46(3): 760-785.
- Conover, P. J. (1991). "Political socialization: Where's the politics." In: Crotty, W. *Political science: Looking to the future* (3): 125-152.
- Coppedge, M. (1998). "The dynamic diversity of Latin American party systems". *Party Politics*, 4(4), 547-568.

- Coppedge, M. (2008). "Continuity and change in Latin American party systems". *Taiwan Journal of Democracy*, 3(2), 119-149.
- Coppedge, M., J. Gerring, S. I. Lindberg, J. Teorell, D. Altman, M. Bernhard, M. S. Fish, A. Glynn, A. Hicken and C. H. Knutsen (2016). *Varieties of Democracy: Codebook version 6*. Varieties of Democracy Project: Project Documentation Paper Series.
- Coppedge, M., J. Gerring, S. I. Lindberg, J. Teorell, D. Altman, M. Bernhard, M. S. Fish, A. Glynn, A. Hicken and C. H. Knutsen (2016). *Varieties of Democracy: Dataset version 6*, Varieties of Democracy (V-Dem) Project.
- Coppedge, M., J. Gerring, S. I. Lindberg, J. Teorell, D. Altman, M. Bernhard, M. S. Fish, A. Glynn, A. Hicken and C. H. Knutsen (2016). *Varieties of Democracy: Methodology version 6*. Varieties of Democracy (V-Dem) Project.
- Coppock, A. and D. P. Green (2013). Is voting habit forming? New evidence suggests that habit-formation varies by election type. Annual Meeting of the American Political Science Association.
- Coser, L. A. (1956). *The Functions of Social Conflict*. Glencoe: Free Press.
- Christy, C. A. (1987). *Sex Differences in Political Participation: Processes of Change in Fourteen Nations*. New York: Praeger.
- Cutts, D. and E. Fieldhouse (2009). "What small spatial scales are relevant as electoral contexts for individual voters? The importance of the household on turnout at the 2001 general election." *American Journal of Political Science* 53(3): 726-739.
- Czesnik, M., M. Zerkowska-Balas and M. Kotnarowski (2013). "Voting as a habit in new democracies—Evidence from Poland." *Communist and Post-Communist Studies* 46(1): 95-107.
- Dalhouse, M. and J. Frideres (1996). "Intergenerational Congruency: The Role of the Family in Political Attitudes of Youth." *Journal of Family Issues* 17(2): 227-248.
- Dalton, R. J. (1980). "Reassessing parental socialization: Indicator unreliability versus generational transfer." *American Political Science Review* 74(02): 421-431.
- Dalton, R. 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.
- Danner, U. N., H. Aarts and N. K. de Vries (2008). "Habit vs. intention in the prediction of future behaviour: The role of frequency, context stability and mental accessibility of past behaviour." *British Journal of Social Psychology* 47(2): 245-265.
- Davies, J. C. (1965). "The Family's Role in Political Socialization." *Annals of the American Academy of Political and Social Science* 361: 10-19.

- Davis, J. L. and C. E. Rusbult (2001). "Attitude alignment in close relationships." *Journal of personality and social psychology* 81(1): 65.
- Dawson, R. E. and K. Prewitt (1968). *Political socialization: an analytic study*. Boston, Little, Brown.
- Deaux, K. (1993). "Reconstructing Social Identity." *Personality and Social Psychology Bulletin* 19(1): 4-12.
- Deaux, K., A. Reid, K. Mizrahi and K. A. Ethier (1995). "Parameters of social identity." *Journal of personality and social psychology* 68(2): 280.
- Dennis, J. (1968). "Major problems of political socialization research." *Midwest Journal of Political Science*: 85-114.
- Dennis, J. and D. Easton (1969). *Children in the political system: Origins of political legitimacy*. New York: McGraw-Hill.
- Denny, K. and O. Doyle (2009). "Does Voting History Matter? Analysing Persistence in Turnout." *American Journal of Political Science* 53(1): 17-35.
- Desposato, S., and Norrander, B. (2009). *The Gender Gap in Latin America: Contextual and Individual Influences on Gender and Political Participation*. *British Journal of Political Science*, 39(1): 141–162.
- Diemer, M. A. (2012). "Fostering marginalized youths' political participation: Longitudinal roles of parental political socialization and youth sociopolitical development." *American Journal of Community Psychology* 50(1-2): 246-256.
- Diemer, M. A. and C. H. Li (2011). "Critical consciousness development and political participation among marginalized youth." *Child Development* 82(6): 1815-1833.
- Dinas, E. (2014). *The Long Shadow of Parental Political Socialization on the Development of Political Orientations*. The Forum.
- Dinas, E. and M. Franklin (2013). "The Shadow of the Voting Booth." Paper presented in the 7th General Conference of the European Consortium for Political Research, September 2013, Bordeaux, France.
- Dirk De Graaf, N. and A. Heath (1992). "Husbands' and Wives' Voting Behaviour in Britain: Class-dependent Mutual Influence of Spouses." *Acta Sociologica* 35(4): 311-322.
- Dowding, K., P. John and D. Rubenson (2012). "Geographic Mobility, Social Connections and Voter Turnout." *Journal of Elections, Public Opinion & Parties* 22(2): 109-122.
- Downs, A. (1957). *An Economic Theory of Democracy*. New York: Harper.

- Dryzek, J. S. (2010). *Foundations and frontiers of deliberative governance*. Oxford: Oxford University Press.
- Duck, J. M., M. A. Hogg and D. J. Terry (1995). "Me, us and them: Political identification and the third-person effect in the 1993 Australian federal election." *European Journal of Social Psychology* 25(2): 195-215.
- Erikson, E. H. (1993). *Childhood and society*. New York: WW Norton & Company.
- Esipova, N., A. Pugliese and J. Ray. (2013). "The demographics of global internal migration." Retrieved 03/02/2015, 2015, from <http://www.iom.int/cms/en/sites/iom/home/what-we-do/migration-policy-and-research/migration-policy-1/migration-policy-practice/issues/aprilmay-2013/the-demographics-of-global-inter.html>.
- Estrada-Correa, V. and M. Johnson (2012). "Foreclosure depresses voter turnout: neighborhood disruption and the 2008 presidential election in California." *Social Science Quarterly* 93(3): 559-576.
- Ethier, K. A. and K. Deaux (1994). "Negotiating social identity when contexts change: Maintaining identification and responding to threat." *Journal of Personality and Social Psychology* 67(2): 243.
- Feng, D., and Baker, L. (1994). Spouse similarity in attitudes, personality, and psychological well-being. *Behavior Genetics*, 24(4), 357-364.
- Fieldhouse, E. and D. Cutts (2012). "The companion effect: household and local context and the turnout of young people." *The Journal of Politics* 74(03): 856-869.
- Finkel, S. E. (1985). "Reciprocal Effects of Participation and Political Efficacy: A Panel Analysis." *American Journal of Political Science* 29(4): 891-913.
- Fiorina, M. P. and S. Abrams (2010). "Where's the polarization." In: Niemi, Richard G and Weisberg, Herbert F and Kimball, David C (eds.) *Controversies in voting behavior*. 309-318. Washington: CQ Press.
- Fiorina, M. P., S. J. Abrams and J. Pope (2005). *Culture war?* New York: Pearson Longman.
- Fishkin, J. S. (1991). *Democracy and deliberation: New directions for democratic reform*, Cambridge: Cambridge University Press.
- Flanagan, C. A., J. M. Bowes, B. Jonsson, B. Csapo and E. Sheblanova (1998). "Ties that bind." *Journal of Social Issues* 54(3): 457-475.
- Flanagan, C. A. and L. R. Sherrod (1998). "Youth political development: An introduction." *Journal of Social Issues* 54(3): 447-456.
- Flickinger, R. S. and D. T. Studlar (1992). "The disappearing voters? Exploring declining turnout in Western European elections." *West European Politics* 15(2): 1-16.



- Fornos, C. A., T. J. Power and J. C. Garand (2004). "Explaining Voter Turnout in Latin America, 1980 to 2000." *Comparative Political Studies* 37(8): 909-940.
- Fosco, C., A. Laruelle and A. Sánchez (2011). "Turnout Intention and Random Social Networks." *Advances in Complex Systems* 14(01): 31-53.
- Fowler, J. (2005). "Turnout in a small world." In: Zuckerman, A. (ed.) *The social logic of politics: personal networks as contexts for political behavior*. Philadelphia: Temple University Press, 269-287.
- Fowler, J. H., L. A. Baker and C. T. Dawes (2008). "Genetic variation in political participation." *American Political Science Review* 102(02): 233-248.
- Fowler, J. H. and C. T. Dawes (2008). "Two genes predict voter turnout." *Journal of Politics* 70(3): 579-594.
- Fowler, J. H. and C. D. Kam (2007). "Beyond the self: Social identity, altruism, and political participation." *Journal of Politics* 69(3): 813-827.
- Franklin, M. N. (1999). "Electoral engineering and cross-national turnout differences: what role for compulsory voting?" *British Journal of Political Science* 29(01): 205-216.
- Franklin, M. N. (2004). *Voter turnout and the dynamics of electoral competition in established democracies since 1945*. Cambridge: Cambridge University Press.
- Franklin, M. N., P. Lyons and M. Marsh (2004). "Generational Basis of Turnout Decline in Established Democracies." *Acta Politica* 39(2): 115-151.
- Fung, A. (2001). "Accountable Autonomy: Toward Empowered Deliberation in Chicago Schools and Policing." *Politics and Society* 29(1): 73-103.
- Fung, A. and E. O. Wright (2001). "Deepening democracy: innovations in empowered participatory governance." *Politics and Society* 29(1): 5-42.
- Gastil, J., E. P. Deess and P. Weiser (2002). "Civic awakening in the jury room: A test of the connection between jury deliberation and political participation." *Journal of Politics* 64(2): 585-595.
- Gastil, J. and J. P. Dillard (1999a). "The aims, methods, and effects of deliberative civic education through the National Issues Forums." *Communication education* 48(3): 179-192.
- Gastil, J. and J. P. Dillard (1999b). "Increasing political sophistication through public deliberation." *Political Communication* 16(1): 3-23.
- Gay, C. (2011). "Moving to opportunity: The political effects of a housing mobility experiment." *Urban Affairs Review* 48(2): 147-179.

- Gerber, A. S., D. P. Green and C. W. Larimer (2008). "Social pressure and vote turnout: Evidence from a large-scale field experiment." *American Political Science Review* 102(1): 33.
- Gimpel, J. G., J. J. Dyck and D. R. Shaw (2004). "Registrants, voters, and turnout variability across neighborhoods." *Political Behavior* 26(4): 343-375.
- Gimpel, J. G., J. C. Lay and J. E. Schuknecht (2003). *Cultivating democracy: Civic environments and political socialization in America*. Washington: Brookings Institution Press.
- Glaser, W. A. (1959). "The Family and Voting Turnout." *Public Opinion Quarterly* 23(4): 563-570.
- Glass, J., V. L. Bengtson and C. C. Dunham (1986). "Attitude similarity in three-generation families: Socialization, status inheritance, or reciprocal influence?" *American Sociological Review* 51(5): 685-698.
- Gómez, M. and J. Madrigal ([no date]). *Migración Interna en Costa Rica en el período 1927-2000*. San José, Costa Rica., Instituto Nacional de Estadística y Censos: 1-34.
- Górecki, M. A. (2013). "Electoral context, habit-formation and voter turnout: A new analysis." *Electoral studies* 32(1): 140-152.
- Green, D. P., B. Palmquist and E. Schickler (2004). *Partisan hearts and minds: Political parties and the social identities of voters*. New Haven: Yale University Press.
- Green, D. P. and R. Shachar (2000). "Habit Formation and Political Behaviour: Evidence of Consuetude in Voter Turnout." *British Journal of Political Science* 30(4): 561-573.
- Greenawalt, K. (1989). *Speech, crime, and the uses of language*. Oxford: Oxford University Press.
- Greene, S. (1999). "Understanding party identification: A social identity approach." *Political Psychology* 20(2): 393-403.
- Greene, S. (2002). "The social-psychological measurement of partisanship." *Political Behavior* 24(3): 171-197.
- Greenstein, F. (1965). *Children and Politics*. New Haven: Yale University Press.
- Groppo, V. (2014). "Internal Migration in Developing Countries." Retrieved 02/03/2015, 2015, from [http://www.diw.de/de/diw\\_01.c.471438.de/presse/diw\\_roundup/internal\\_migration\\_in\\_developing\\_countries.html](http://www.diw.de/de/diw_01.c.471438.de/presse/diw_roundup/internal_migration_in_developing_countries.html).
- Gundersen, A. G. (1995). *The environmental promise of democratic deliberation*. Madison: University of Wisconsin Press.
- Gutmann, A. and D. Thompson (2009). *Democracy and disagreement*. Cambridge: Harvard University Press.

- Habermas, J. (1984). *The theory of communicative action: Reason and the rationalization of society*. Boston: Beacon Press.
- Habermas, J. (1996). "Between facts and norms: contributions to a discourse theory of law and democracy." Cambridge: MIT Press.
- Harder, J. and J. A. Krosnick (2008). "Why Do People Vote? A Psychological Analysis of the Causes of Voter Turnout." *Journal of Social Issues* 64(3): 525-549.
- Harrop, M., A. Heath and S. Openshaw (1991). "Does neighbourhood influence voting behaviour- and why?" *British Elections and Parties Yearbook* 1(1): 101-120.
- Held, D. (2006). *Models of democracy*. Stanford: Stanford University Press.
- Hendriks, C. (2002). "Institutions of deliberative democratic processes and interest groups: Roles, tensions and incentives." *Australian Journal of Public Administration* 61(1): 64-75.
- Hess, R. D. and J. V. Torney-Purta (1967). *The development of political attitudes in children*. Garden: Doubleday.
- Hetherington, M. J. (2008). "Turned off or turned on? How polarization affects political engagement." In: Nivola, P. S., and Brady, D. W. *Red and blue nation: consequences and correction of America's polarized politics* (2): 1-33. Stanford: Hoover Institution on War, Revolution, and Peace, Stanford University.
- Highton, B. (2000). "Residential Mobility, Community Mobility, and Electoral Participation." *Political Behavior* 22(2): 109-120.
- Highton, B. and R. E. Wolfinger (2001). "The First Seven Years of the Political Life Cycle." *American Journal of Political Science* 45(1): 202-209.
- Hill, K. Q. and P. A. Hurley (1984). "Nonvoters in Voters' Clothing: The Impact of Voting Behavior Misreporting on Voting Behavior Research." *Social Science Quarterly* 65(1): 199-206.
- Hill, L. (2006). "Low Voter Turnout in the United States Is Compulsory Voting a Viable Solution?" *Journal of Theoretical Politics* 18(2): 207-232.
- Hirczy, W. (1994). "The impact of mandatory voting laws on turnout: A quasi-experimental approach." *Electoral Studies* 13(1): 64-76.
- Holdsworth, C. (2000). "Leaving home in Britain and Spain." *European Sociological Review* 16(2): 201-222.
- Holt, L. (1999). "Rationality is still hard work: Some further notes on the disruptive effects of deliberation." *Philosophical Psychology* 12(2): 215-219.

- Huckfeldt, R., E. Plutzer and J. Sprague (1993). "Alternative contexts of political behavior: Churches, neighborhoods, and individuals." *The Journal of Politics* 55(02): 365-381.
- Huckfeldt, R. and J. Sprague (1987). "Networks in context: The social flow of political information." *American Political Science Review* 81(4): 1197-1216.
- Huckfeldt, R. R. (1979). "Political participation and the neighborhood social context." *American Journal of Political Science* 23(3): 579-592.
- Huckfeldt, R. R. and J. D. Sprague (1995). *Citizens, politics and social communication: Information and influence in an election campaign*. New York: Cambridge University Press.
- Huddy, L. (2001). "From social to political identity: A critical examination of social identity theory." *Political Psychology*: 127-156.
- Huddy, L. (2013). *From Group Identity to Political Cohesion and Commitment*. In: Huddy L., D. O. Sears and J. S. Levy. *The Oxford Handbook of Political Psychology*. New York: Oxford University Press.
- Huddy, L. and N. Khatib (2007). "American patriotism, national identity, and political involvement." *American Journal of Political Science* 51(1): 63-77.
- Huddy, L., L. Mason and L. Aarøe (2010). *Measuring partisanship as a social identity, predicting political activism*. Annual Meeting of the International Society for Political Psychology.
- Hull, C. L. (1943). *Principles of Behavior, an Introduction to Behavior Theory*. New York: D. Appleton-Century Co.
- Hull, C. L. (1951). *Essentials of Behavior*. New Haven: Yale University Press.
- Hyman, H. H. (1959). *Political Socialization: A Study in the Psychology of Political Behavior*. Glencoe: Free Press.
- Inglehart, R. (1977). *The Silent Revolution*. Princeton: Princeton University Press.
- Jackman, R. W. and R. A. Miller (1995). "Voter turnout in the industrial democracies during the 1980s." *Comparative Political Studies* 27(4): 467-492.
- Jacobs, L. R., F. L. Cook and M. X. D. Carpini (2009). *Talking together: Public deliberation and political participation in America*. Chicago: University of Chicago Press.
- Jennings, M. K. (2007). *Political socialization*. *The Oxford Handbook of Political Behavior*. In: Dalton R., Klingeman, Hans-Dieter. New York: Oxford University Press: 29-44.
- Jennings, M. K., K. R. Allerbeck and L. Rosenmayr (1979). *Generations and families: General orientations*. In: Barnes, S and Kaase, M. (eds.). *Political action: Mass participation in five Western Democracies*. Beverly Hills: Sage Publications. 449-486.

- Jennings, M. K. and K. P. Langton (1969). "Mothers Versus Fathers: The Formation of Political Orientations Among Young Americans." *The Journal of Politics* 31(2): 329-358.
- Jennings, M. K. and R. G. Niemi (1968). "The transmission of political values from parent to child." *The American Political Science Review* 62(1): 169-184.
- Jennings, M. K. and R. G. Niemi (1975). "Continuity and change in political orientations: A longitudinal study of two generations." *American Political Science Review* 69(04): 1316-1335.
- Jennings, M. K. and R. G. Niemi (1981). *Generations and politics : a panel study of young adults and their parents*. Princeton: Princeton University Press.
- Jennings, M. K. and L. Stoker (2001). *Political Similarity And Influence Between Husbands And Wives*. Berkeley: Institute of Governmental Studies, University of California.
- Jennings, M. K., L. Stoker and J. Bowers (2009). "Politics across generations: Family transmission reexamined." *Journal of Politics* 71(3): 782-799.
- Johnston, R., K. Jones, C. Propper, R. Sarker, S. Burgess and A. Bolster (2005). "A missing level in the analyses of British voting behaviour: the household as context as shown by analyses of a 1992–1997 longitudinal survey." *Electoral Studies* 24(2): 201-225.
- Kasarda, J. D. and M. Janowitz (1974). "Community attachment in mass society." *American Sociological Review*: 328-339.
- Kasperson, R. E. (1969). "On suburbia and voting behavior." *Annals of the Association of American Geographers* 59(2): 405-411.
- Kelly, C. (1989). "Political identity and perceived intragroup homogeneity." *British Journal of Social Psychology* 28(3): 239-250.
- Kenny, C. (1993). "The Microenvironment of Political Participation." *American Politics Research* 21(2): 223-238.
- Kern, H. L. (2010). "The political consequences of transitions out of marriage in Great Britain." *Electoral Studies* 29(2): 249-258.
- Kim, J., R. O. Wyatt and E. Katz (1999). "News, talk, opinion, participation: The part played by conversation in deliberative democracy." *Political communication* 16(4): 361-385.
- Kingston, P. W. and S. E. Finkel (1987). "Is There a Marriage Gap in Politics?" *Journal of Marriage and the Family* 49(1): 57-64.
- Kitschelt, H., & Freeze, K. (2010). Programmatic party system structuration: Developing and comparing cross-national and cross-party measures with a new global data set. In APSA Annual Meeting, Washington, DC.

- Klofstad, C. A. (2007). "Talk leads to recruitment how discussions about politics and current events increase civic participation." *Political Research Quarterly* 60(2): 180-191.
- Konzelmann, L., C. Wagner and H. Rattinger (2012). "Turnout in Germany in the course of time: Life cycle and cohort effects on electoral turnout from 1953 to 2049." *Electoral Studies* 31(2): 250-261.
- Kritzer, H. M. (1984). "Mothers and fathers, and girls and boys: socialization in the family revisited." *Political Methodology*: 245-265.
- Kuklinski, J. H., E. Riggle, V. Ottati, N. Schwarz and R. Wyer Jr (1993). *Thinking About Political Tolerance, More or Less, with More*. In: Marcus, G. (ed.) *Reconsidering the democratic public*. University Park: Pennsylvania State University Press. 225-247.
- Lachat, R. (2008). "The impact of party polarization on ideological voting." *Electoral Studies* 27(4): 687-698.
- Lall, S. V., H. Selod and Z. Shalizi (2006). *Rural-Urban Migration In Developing Countries : A Survey Of Theoretical Predictions And Empirical Findings Policy Research Working Papers*. Washington, DC. USA, World Bank.
- Lally, P., C. H. M. van Jaarsveld, H. W. W. Potts and J. Wardle (2010). "How are habits formed: Modelling habit formation in the real world." *European Journal of Social Psychology* 40(6): 998-1009.
- Lane, R. E. (1959). "Fathers and sons: Foundations of political belief." *American Sociological Review*: 502-511.
- Lazarsfeld, P. F., B. Berelson and H. Gaudet (1968). "The peoples choice: how the voter makes up his mind in a presidential campaign." New York: Columbia University Press.
- Levin, M. (1961). "Social climates and Political Socialization." *Public Opinion Quarterly* 25(4): 596-606.
- LeVine, R. A. and D. T. Campbell (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior*. New York: John Wiley.
- Lewis-Beck, M. S. (2008). *The American Voter Revisited*. Ann Arbor: University of Michigan Press.
- Lindeman, M. (2002). "Opinion quality and policy preferences in deliberative research." *Political decision making, deliberation and participation* 6: 195-224.
- Lipset, S. and S. Rokkan (1967). *Party Systems and Voter Alignments: Cross-National Perspectives*. New York, Free Press.
- Lipset, S. (1963). *Political man: The social bases of politics*. New York: Doubleday Garden City.

- Loewen, P. J. and C. T. Dawes (2012). "The heritability of duty and voter turnout." *Political Psychology* 33(3): 363-373.
- Long, L. (1991). "Residential mobility differences among developed countries." *International Regional Science Review* 14(2): 133-147.
- Long, L. (1992). "Changing residence: Comparative perspectives on its relationship to age, sex, and marital status." *Population Studies* 46(1): 141-158.
- Long, L., C. J. Tucker and W. L. Urton (1988). "Migration distances: An international comparison." *Demography* 25(4): 633-640.
- Lupu, N. (2013). "Party brands and partisanship: Theory with evidence from a survey experiment in Argentina." *American Journal of Political Science* 57(1): 49-64.
- Lupu, N. (2015). "Party polarization and mass partisanship: A comparative perspective." *Political Behavior* 37(2): 331-356.
- Luskin, R. C. and J. S. Fishkin (1998). *Deliberative polling, public opinion, and democracy: The case of the national issues convention*. Annual meeting of the American Political Science Association. Boston.
- Lyons, W. and R. Alexander (2000). "A Tale of Two Electorates: Generational Replacement and the Decline of Voting in Presidential Elections." *The Journal of Politics* 62(4): 1014-1034.
- Maccoby, E. E., R. E. Matthews and S. M. Anton (1954). "Youth and Political Change." *The Public Opinion Quarterly* 18(1): 23-39.
- Magalhaes, P. (2007). *Social Micro-Contexts and Electoral Turnout: A Preliminary Exploration of the CNEP Data*. Conference and Workshop of the Comparative National Elections Project, Trieste, Italy.
- Magre, J., J.-J. Vallbé and M. Tomàs (2014). "Moving to suburbia? Effects of residential mobility on community engagement." *Urban Studies* 53(1): 17-39.
- Mainwaring, S., A. Pérez-Liñán. (2005). "Latin American Democratization since 1978: Democratic Transitions, Breakdowns, and Erosions". In: *The third wave of democratization in Latin America: Advances and Setbacks*, edited by Frances Hagopian and Scott Mainwaring. New York: Cambridge University Press.
- Manin, B., E. Stein and J. Mansbridge (1987). "On legitimacy and political deliberation." *Political Theory* 15(3): 338-368.
- Marsden, P. V. (1987). "Core discussion networks of Americans." *American Sociological Review*: (1987): 122-131.
- Mascie-Taylor, C. (1989). "Spouse similarity for IQ and personality and convergence." *Behavior Genetics* 19(2): 223-227.

- Mason, L. (2011). Political Identity Alignment and Polarized Behavior. A paper presented at the annual meeting of the International Society for Political Psychology, Istanbul, Turkey.
- Mathews, F. D. (1994). Politics for people: Finding a responsible public voice. Chicago: University of Illinois Press.
- Matsusaka, J. G. and F. Palda (1999). "Voter turnout: How much can we explain?" *Public Choice* 98(3): 431-446.
- Melton, J. (2014). "Why Is Voting Habit-Forming?: Evidence From Sweden". Unpublished paper.
- Mendelberg, T. (2002). "The deliberative citizen: Theory and evidence." *Political Decision Making, Deliberation and Participation* 6(1): 151-193.
- Meredith, M. (2009). "Persistence in political participation." *Quarterly Journal of Political Science* 4(3): 187-209.
- Merelman, R. M. (1980). "The family and political socialization: toward a theory of exchange." *The Journal of Politics* 42(02): 461-486.
- International Organization Office of Migration (2008). *World migration 2008: Managing labour mobility in the evolving global economy* Vol. 4. Geneva: Hammersmith Press.
- Milbrath, L. W. (1965). *Political participation; how and why do people get involved in politics?* Chicago: Rand McNally.
- Milbrath, L. W. and M. L. Goel (1977). *Political participation: how and why do people get involved in politics?* Washington: University Press of America.
- Miller, W. E. (1970). The political behavior of the electorate. In: Dreyer, E. and W. A. Rosenbaum (eds.). *Political Opinion and Electoral Behaviour: Essays and Studies*. Belmont: Wadsworth.
- Miller, W. E. (1992). "The Puzzle Transformed: Explaining Declining Turnout." *Political Behavior* 14(1): 1-43.
- Miller, W. E. and J. M. Shanks (1996). *The New American Voter*, Cambridge: Harvard University Press.
- Molloy, R., C. L. Smith and A. K. Wozniak (2011). *Internal migration in the United States*, Washington: National Bureau of Economic Research.
- Mutz, D. C. (2002). "The consequences of cross-cutting networks for political participation." *American Journal of Political Science* 46(4): 838-855.
- Nam, C. B., W. J. Serow and D. F. Sly (1990). *International Handbook on Internal Migration*. New York: Greenwood Press.



- United Nations (1978). *Statistics of Internal Migration: a Technical Report*. New York: United Nations.
- United Nations (2000). *World Population Monitoring 1999: Population Growth, Structure and Distribution*. New York: United Nations.
- Neal, D. T., W. Wood and J. M. Quinn (2006). "Habits—A Repeat Performance." *Current Directions in Psychological Science* 15(4): 198-202.
- Neundorf, A., K. Smets and G. M. García-Albacete (2013). "Homemade citizens: The development of political interest during adolescence and young adulthood." *Acta Politica* 48(1): 92-116.
- Newbold, K. B. and M. Bell (2001). "Return and onwards migration in Canada and Australia: evidence from fixed interval data." *International Migration Review*. 35(4): 1157-1184.
- Nickerson, D. W. (2008). "Is Voting Contagious? Evidence from Two Field Experiments." *American Political Science Review* 102(1): 49-57.
- Nie, N. H., S. Verba and K. Jae-on (1974). "Political Participation and the Life Cycle." *Comparative Politics* 6(3): 319-340.
- Nie, N. H., S. Verba and J. R. Petrocik (1976). *The changing American voter*. Cambridge: Harvard University Press.
- Niemi, R. G., R. Hedges and M. K. Jennings (1977). "The similarity of husbands' and wives' political views." *American Politics Research* 5(2): 133-148.
- Niemi, R. G. and M. A. Hepburn (1995). "The rebirth of political socialization." *Perspectives on Political Science* 24(1): 7-16.
- Niemi, R. G., R. D. Ross and J. Alexander (1978). "The similarity of political values of parents and college-age youths." *Public Opinion Quarterly* 42(4): 503-520.
- Niemi, R. G. and B. I. Sobieszek (1977). "Political socialization." *Annual Review of Sociology* 3(1): 209-233.
- Niemi, R. G., H. W. Stanley and C. L. Evans (1984). "Age and Turnout Among the Newly Enfranchised: Life Cycle versus Experience Effects." *European Journal of Political Research* 12(4): 371-386.
- Niemi, R. G. H. M. A. (1995). "The rebirth of political socialization." *Perspectives on Political Science* 24(1): 7-16.
- Nieuwbeerta, P. and K. Wittebrood (1995). "Intergenerational transmission of political party preference in the Netherlands." *Social Science Research* 24(3): 243-261.

- Nir, L. (2011). "Disagreement and opposition in social networks: does disagreement discourage turnout?" *Political Studies* 59(3): 674-692.
- Norris, P. (1991). Gender Differences in Political Participation in Britain: Traditional, Radical and Revisionist Models. *Government and Opposition*, 26(1), 56-74.
- Norris, P. (2002). *Democratic phoenix: Reinventing political activism*. Cambridge: Cambridge University Press.
- Norris, P. (2004). *Electoral engineering: Voting rules and political behavior*. Cambridge: Cambridge University Press.
- Okada, Y. (2013). "Do You Remember Whether You Participated in the Past Election?" *Journal of Political Science and Sociology* 18: 1-22.
- Olsen, M. E. (1972). "Social participation and voting turnout: A multivariate analysis." *American Sociological Review*: 317-333.
- Osborn, T. and J. Morehouse Mendez (2011). "Two Become One? Spouses and Agreement in Political Opinions." *American Politics Research* 39(5): 783-803.
- Ouellette, J. A. and W. Wood (1998). "Habit and Intention in Everyday Life: The Multiple Processes by Which Past Behavior Predicts Future Behavior." *Psychological Bulletin* 4(1): 54-74.
- Pacheco, J. S. (2008). "Political socialization in context: The effect of political competition on youth voter turnout." *Political Behavior* 30(4): 415-436.
- Panagopoulos, C. (2008). "The Calculus of Voting in Compulsory Voting Systems." *Political Behavior* 30(4): 455-467.
- Pearce, W. B. and S. W. Littlejohn (1997). *Moral conflict: When social worlds collide*. Oakland: Sage.
- Pérez-Liñán, A. (2001). "Neoinstitutional accounts of voter turnout: moving beyond industrial democracies." *Electoral Studies* 20(2): 281-297.
- Plutzer, E. (2002). "Becoming a Habitual Voter: Inertia, Resources, and Growth in Young Adulthood." *American Political Science Review* 96(01): 41-56.
- Plutzer, E. and N. Wiefek (2006). "Family Transitions, Economic Status, and Voter Turnout Among African-American Inner-City Women." *Social Science Quarterly* 87(3): 658-678.
- Powell, G. B. (1982). *Contemporary democracies: participation, stability, and violence*. Cambridge: Harvard University Press.
- Powell, G. B., Jr. (1986). "American Voter Turnout in Comparative Perspective." *The American Political Science Review* 80(1): 17-43.

- Quintelier, E. (2007). "Differences in political participation between young and old people." *Contemporary Politics* 13(2): 165-180.
- Rabinowitz, S. M. (1969). "Socialization Within the Family: A Reciprocal or Causal Model." Unpublished mimeo, University of Michigan.
- Ramírez, O (ed.) (2010). *Comportamiento del electorado costarricense : elecciones del 2006*. San José: Editorial UCR.
- Raventos-Vorst, C., M. V. Fournier, O. Ramirez, A. L. Gutierrez and J. R. Garcia (2005). *Abstencionistas en Costa Rica: ¿quiénes son y por qué no votan?* San José: Editorial de la Universidad de Costa Rica.
- Rees, P. H. and M. Kupiszewski (1999). *Internal migration and regional population dynamics in Europe : a synthesis*. Strasbourg: Council of Europe Publishing.
- Rees, P. H., M. Kupiszewski, E. Council of and C. European Population (1996). *Internal migration and regional population dynamics: what data are available in the Council of Europe member states?* Leeds, School of Geography, University of Leeds.
- Richardson, B. M. (1986). "Japan's Habitual Voters Partisanship on the Emotional Periphery." *Comparative Political Studies* 19(3): 356-384.
- Riker, W. H. and P. C. Ordeshook (1968). "A Theory of the Calculus of Voting." *American Political Science Review* 62(01): 25-42.
- Roberts, K. M. (2013). "Market reform, programmatic (de) alignment, and party system stability in Latin America". *Comparative Political Studies* 46(11): 1422-1452.
- Robinson, T. and S. Noriega (2010). "Voter migration as a source of electoral change in the Rocky Mountain West." *Political Geography* 29(1): 28-39.
- Rodríguez Vignoli, J., CEPAL (2004). *Migración interna en América Latina y el Caribe: estudio regional del período 1980-2000*. Santiago, Naciones Unidas, CEPAL, CELADE, División de Población de la CEPAL.
- Rogers, T., C. R. Fox and A. S. Gerber (2012). "Rethinking why people vote: Voting as dynamic social expression." *Behavioral Foundations of Policy*: 91-107.
- Rosenstone, S. J. H. J. M. (1993). *Mobilization, participation, and democracy in America*. New York: Maxwell Macmillan.
- Ryfe, D. M. (2005). "Does deliberative democracy work?" *Annual Review Political Science* 8: 49-71.
- Sances, M. W. (2013). "Disenfranchisement Through Divorce? Estimating the Effect of Parental Absence on Voter Turnout." *Political Behavior* 35(1): 199-213.

- Sandell, J. and E. Plutzer (2005). "Families, divorce and voter turnout in the US." *Political Behavior* 27(2): 133-162.
- Sapiro, V. (2004). "Not Your Parents' Political Socialization: Introduction for a New Generation." *Annual Review Political Science* 7: 1-23.
- Schimmack, U. and R. E. Lucas (2010). "Environmental influences on well-being: A dyadic latent panel analysis of spousal similarity." *Social Indicators Research* 98(1): 1-21.
- Schmitt-Beck, R. and C. Mackenrodt (2010). "Social networks and mass media as mobilizers and demobilizers: A study of turnout at a German local election." *Electoral Studies* 29(3): 392-404.
- Schmitt, H. and S. Holmberg (1995). Political parties in decline? In: Klingemann, F. and Fuchs, D. (eds.) *Citizens and the State*. Oxford: Oxford University Press.
- Schlozman, K. L., Burns, N., Verba, S., & Donahue, J. (1995). Gender and citizen participation: Is there a different voice? *American Journal of Political Science*, 267-293.
- Searing, D., G. Wright and G. Rabinowitz (1976). "The primacy principle: Attitude change and political socialization." *British Journal of Political Science* 6(1): 83-113.
- Searing, D. D., J. J. Schwartz and A. E. Lind (1973). "The structuring principle: Political socialization and belief systems." *The American Political Science Review* 67(2): 415-432.
- Sears, D. O. and S. Levy (2003). Childhood and adult political development. In: Berinsky, A., Crenshaw, M., Mendelberg, T., Sears, D. O., Huddy, L., & Jervis, R. *Oxford Handbook of Political Psychology*. New York: Oxford University Press: 60-110.
- Settle, J. E., R. Bond and J. Levitt (2011). "The social origins of adult political behavior." *American Politics Research* 39(2): 239-263.
- Shachar, R. (2003). "Party loyalty as habit formation." *Journal of Applied Econometrics* 18(3): 251-269.
- Sidanius, J., S. Levin, C. Van Laar and D. O. Sears (2008). *The diversity challenge: Social identity and intergroup relations on the college campus*. New York: Russell Sage Foundation.
- Singer, M. M. Forthcoming. "Elite Polarization and the Electoral Impact of Left-Right Placements: Evidence from Latin America, 1995–2009." *Latin American Research Review*.
- Smith, K. and D. E. Sylvester (2013). "Is it the message or the person? Lessons from a field experiment about who converts to permanent vote by mail." *Election Law Journal* 12(3): 243-260.
- Squire, P., R. E. Wolfinger and D. P. Glass (1987). "Residential mobility and voter turnout." *The American political science review*. 81(1):45-65.

- Stein, A. A. (1976). "Conflict and cohesion a review of the literature." *Journal of Conflict Resolution* 20(1): 143-172.
- Steiner, N. D. (2010). "Economic globalization and voter turnout in established democracies." *Electoral Studies* 29(3): 444-459.
- Stoker, L. and K. Jennings (1995). "Life-cycle transitions and political participation: the case of marriage." *American Political Science Review* 89(2): 421-434.
- Straits, B. C. (1990). "The social context of voter turnout." *Public Opinion Quarterly* 54(1): 64-73.
- Straits, B. C. (1991). "Bringing strong ties back in interpersonal gateways to political information and influence." *Public Opinion Quarterly* 55(3): 432-448.
- Strate, J. M., C. J. Parrish, C. D. Elder and C. Ford (1989). "Life Span Civic Development and Voting Participation." *The American Political Science Review* 83(2): 443-464.
- Stuckey, M. E., Conway, M. M., Steurnagel, G. A., and Ahern, D. W. (1998). *Women and Political Participation: Cultural Change in the Political Arena*. Washington: CQ Press.
- Sulkin, T. and A. F. Simon (2001). "Habermas in the lab: A study of deliberation in an experimental setting." *Political Psychology* 22(4): 809-826.
- Tajfel, H. (1974). "Social identity and intergroup behaviour." *Social Science Information/sur les sciences sociales*.
- Tajfel, H. (1981). *Human groups and social categories*. Cambridge: Cambridge University Press.
- Tajfel, H. (1982). "Social psychology of intergroup relations." *Annual Review of Psychology* 33(1): 1-39.
- Tajfel, H. and J. Turner (1986). *The Social Identity Theory of Intergroup Behavior*. In: Austin, W. G., and Worchel, S. *Psychology of Intergroup Relations*. Chicago: Nelson-Hall Publishers: 7-24.
- Tajfel, H. and J. C. Turner (1979). "An integrative theory of intergroup conflict." *The social psychology of intergroup relations* 33(47): 74.
- Tedin, K. L. (1974). "The influence of parents on the political attitudes of adolescents." *American Political Science Review* 68(4): 1579-1592.
- Teixeira, R. A. (1987). *Why Americans don't vote : turnout decline in the United States, 1960-1984*. New York: Greenwood Press.
- Timpone, R. J. (1998). "Structure, Behavior, and Voter Turnout in the United States." *The American political science review*. 92(1): 145.

- Tóka, G. (2009). Expressive vs. Instrumental Motivation of Turnout, Partisanship and Political Learning. In: Klingemann, H (ed.) *The Comparative Study of Electoral Systems*. Oxford: Oxford University Press: 186-204.
- Torcal, M. and S. Mainwaring (2003). "The political recrafting of social bases of party competition: Chile, 1973–95." *British Journal of Political Science* 33(01): 55-84.
- Triandis, H. (1980). *Values, attitudes, and interpersonal behavior*. Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press.
- Tuorto, D. (2014). "Transition to adulthood and turnout. Some unexpected implications from the Italian case." *Società Mutamento Politica* 5(10): 193-216.
- Turner, J. C., M. A. Hogg, P. J. Oakes, S. D. Reicher and M. S. Wetherell (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Basil Blackwell.
- Van der Eijk, C., H. Schmitt and T. Binder (2005). Left–right orientations and party choice. In: J. Thomassen, J. (ed.) *The European voter: A comparative study of modern democracies*. Oxford: Oxford University Press: 167-191.
- Vaus, D., and McAllister, I. (1989). The changing politics of women: gender and political alignment in 11 nations. *European Journal of Political Research*, 17(3), 241-262.
- Ventura, R. (2001). "Family political socialization in multiparty systems." *Comparative Political Studies* 34(6): 666-691.
- Verba, S. and N. H. Nie (1972). *Participation in America: political democracy and social equality*. New York: Harper & Row.
- Verba, S., Nie, N. H., & Kim, J. (1979). *Participation and political equality: A seven-nation comparison*. Cambridge: Cambridge University Press.
- Verba, S., K. Schlozman and N. Burns (2005). Family ties: Understanding the intergenerational transmission of participation. In: Zuckerman, A. *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior*. Philadelphia: Temple University Press. 95-116.
- Verplanken, B. (2006). "Beyond frequency: Habit as mental construct." *British Journal of Social Psychology* 45(3): 639-656.
- Vollebergh, W. A., J. Iedema and Q. A. Raaijmakers (2001). "Intergenerational transmission and the formation of cultural orientations in adolescence and young adulthood." *Journal of Marriage and Family* 63(4): 1185-1198.
- Vonnahme, G. (2012). "Registration Deadlines and Turnout in Context." *Political Behavior* 34(4): 765-779.

- Voorpostel, M. and H. Coffé (2014). "The Effect of Parental Separation on Young Adults' Political and Civic Participation." *Social Indicators Research*: 1-22.
- Walsh, K. C. (2004). *Talking about politics: Informal groups and social identity in American life*. Chicago: University of Chicago Press.
- Wass, H. (2007). "The effects of age, generation and period on turnout in Finland 1975–2003." *Electoral Studies* 26(3): 648-659.
- Watson, D., Klohnen, E. C., Casillas, A., Nus Simms, E., Haig, J., and Berry, D. S. (2004). Match makers and deal breakers: Analyses of assortative mating in newlywed couples. *Journal of personality*, 72(5), 1029-1068.
- Wattenberg, M. (1998). *Turnout Decline in the U.S. and other Advanced Industrial Democracies*. Irvine: University of California Irvine, School of Social Sciences, Center for the Study of Democracy.
- Weisberg, H. F. (1987). "The demographics of a new voting gap marital differences in American voting." *Public Opinion Quarterly* 51(3): 335-343.
- Weissberg, R. (1974). *Political Learning, Political Choice and Democratic Citizenship*, Englewood Cliffs: Prentice-Hall.
- Welch, S. (1977). "Women as political animals? A test of some explanations for male-female political participation differences." *American Journal of Political Science*: 711-730.
- Wolak, J. (2009). "Explaining change in party identification in adolescence." *Electoral Studies* 28(4): 573-583.
- Wolfinger, N. H. and R. E. Wolfinger (2008). "Family structure and voter turnout." *Social Forces* 86(4): 1513-1528.
- Wolfinger, R. E. and S. J. Rosenstone (1980). *Who votes?* New Haven: Yale University Press.
- Wood, W. and D. T. Neal (2007). "A New Look at Habits and the Habit-Goal Interface." *Psychological Review* 114(4): 843-863.
- Wood, W., J. M. Quinn and D. A. Kashy (2002). "Habits in everyday life: thought, emotion, and action." *Journal of Personality and Social Psychology* 83(6): 1281.
- Wood, W., L. Tam and M. G. Witt (2005). "Changing circumstances, disrupting habits." *Journal of Personality and Social Psychology* 88(6): 918.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. Massachusetts: MIT Press.
- Zechmeister, E. J., & Corral, M. (2013). Individual and Contextual Constraints on Ideological Labels in Latin America. *Comparative Political Studies*, 46(6), 675-701.

- Zietsch, B. P., Verweij, K. J., Heath, A. C., and Martin, N. G. (2011). Variation in human mate choice: simultaneously investigating heritability, parental influence, sexual imprinting, and assortative mating. *The American Naturalist* 177(5): 605.
- Zuckerman, A. S. (2005). Returning to the social logic of political behavior. In: Zuckerman, A. *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior*. Philadelphia: Temple University Press: 3-20.
- Zuckerman, A. S. (2005). *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior*. Philadelphia: Temple University Press.
- Zuckerman, A. S., J. Dasovic and J. Fitzgerald (2007). *Partisan families: The social logic of bounded partisanship in Germany and Britain*, Cambridge: Cambridge University Press.
- Zuckerman, A. S., J. Fitzgerald and J. Dasovic (2005). Do couples support the same political parties? Sometimes. In: Zuckerman, A. *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior*. Philadelphia: Temple University Press: 75-94.
- Zuckerman, A. S., L. A. Kotler-Berkowitz and L. A. Swaine (1998). "Anchoring political preferences: The structural bases of stable electoral decisions and political attitudes in Britain." *European Journal of Political Research* 33(3): 285.