# DIVIDED WE FAIL: ECONOMIC INEQUALITY, SOCIAL MISTRUST, AND POLITICAL INSTABILITY IN LATIN AMERICAN DEMOCRACIES

By

Abby Beatriz Córdova Guillén

Dissertation

Submitted to the Faculty of the

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

### DOCTOR OF PHILOSOPHY

in

**Political Science** 

December, 2008

Nashville, Tennessee

Approved:

Professor Mitchell A. Seligson

Professor John Geer

Professor Marc Hetherington

Professor Jonathan Hiskey

## **DEDICATION**

To my family in El Salvador

and

the love of my life, DZ

#### ACKNOWLEDGEMENTS

This study would not have been possible without the financial support of the Department of Political Science, the Center for the Americas at Vanderbilt University, and the institutions that made possible the collection of the survey data that served as the basis for this study. I would like to specially thank the United States Agency for International Development (USAID), the United Nations Development Program (UNDP), the Inter-American Development Bank (IADB), and the Center for the Americas of Vanderbilt University for providing the funding for the AmericasBaromenter surveys by the Latin American Public Opinion Project (LAPOP). I am also thankful to the Centro Centroamericano de Población at the Universidad de Costa Rica and its director Luis Rosero Bixby, the Instituto Nacional de Estadística y Censos (INEC) de Costa Rica, and Jorge Vargas Cullel, deputy director of the Programa Estado de la Nación de Costa Rica, for their suggestions and making available the data for Costa Rica used in this study.

I am also grateful to the visitors who came to the Department of Political Science of Vanderbilt University in the Spring and Fall semesters of 2008 for their valuable comments and suggestions. I would like to especially thank professors Christopher Anderson, Larry M. Bartels, and Luis Felipe López Calva, with whom I had the opportunity to meet and discuss my research. Also, many thanks to all the professors at Vanderbilt University who were always there to answer my questions, especially professors James Foster, Cindy Kam, and Christian Grose.

I extend many thanks to the members of my Dissertation Committee, Professors John Geer, Marc Hetherington, Jonathan Hiskey, and Mitchell Seligson, for their invaluable guidance throughout the development of my dissertation. Each of them gave me insightful suggestions and comments about my research and advice for my professional life. In particular, I would like to thank Professor Mitchell Seligson, the chair of my committee. It is not an exaggeration to say that Mitch is as good as a mentor and teacher can possibly be. I will be eternally grateful for all his support and inspiration. With his teachings, Mitch has truly changed my life.

I am also indebted to those institutions and persons who supported me from the start to pursue graduate studies. I am thankful to the Fulbright Program and Alvaro Trigueros, former chair of the Department of Economics at the Universidad Centroamericana José Simeón Cañas of El Salvador for their magnificent support. With his example, Alvaro encouraged me to aim high, travel abroad to study, and join Vanderbilt. Finally, I would like to express many thanks to my family in El Salvador and my husband for their support and love.

## **TABLE OF CONTENTS**

DEDICATION	ii
ACKNOWLEDGEMENTS	iii
LIST OF FIGURES	vii
LIST OF TABLES	viii

## Chapters

I. INTRODUCTION	1
Theory	3
The Latin American Context as a Case Study	7
Research Outline	10
Methods	
The Data	16
References	
II. THE ECONOMIC BASIS OF INTERPERSONAL TRUST IN THE AMERIC	AS 21
Introduction	21
The Economic Origins of Interpersonal Trust Exposed: A Review of the Literature	27
Modeling Interpersonal Trust: Hypotheses and Model Specification	41
The Determinants of Interpersonal Trust in the Americas: A Multi-level Analysis	47
Explaining the Findings	65
Prejudice against the Poor?	65
Fear of being a Victim of Crime?	
Conclusion	
Appendix	
References	
III. CULTURE OR ECONOMIC STRUCTURE? A SUB-NATIONAL MUL ANALYSIS OF THE DETERMINANTS OF INTERPERSONAL TRUST I	TILEVEL N COSTA
Introduction	
Literatura	view of the
Deeg Culture Matter for the Formation of Internargonal Trust? Evidence for Costa Dice	102
Explaining Costa Rica's Sub National Economic Disparities: their Origin and Current State	
Poverty and Inequality in the Municipalities Included in the Sample	
Is the Effect of Context Conditioned on Individual Wealth? A First Look at the Data	122
Modeling Interpersonal Trust: Building a Sub-National Multilevel Model	120
Sub-National Multilevel Results	136
What explains the varying levels of interpersonal trust in Costa Rica? Indi	vidual and
Municipal Level Factors	126

What are the main determinants of interpersonal trust at the municipal level? Do en	conomic
structural factors at the municipal level explain observed differences in interperso	nal trust
across economic groups?	141
Conclusion	147
Appendix	
References	
IV. OVERCOMING GRIDLOCK POLITICS BETWEEN HAVES AND HAVE THE ROLE OF INTERPERSONAL TRUST IN CITIZENS' SUPPOR'	NOTS:
REDISTRIBUTIVE POLICIES IN LATIN AMERICA	156
Introduction	
The Data and Descriptive Statistics	164
Multivariate Analysis	
Gridlock Politics between the Rich and Poor	169
Testing the Impact of Social Capital on Support for Redistributive Policies	171
Interpersonal Trust as a Source of Support for Redistribution among the Well-Off	173
Conclusion	
Appendix	
References	179
V. FINAL REMARKS	181

## **LIST OF FIGURES**

Figure II-1. Hypothetical Cases: Absolute and Relative Well-Being as Reinforcing Factors	37
Figure II-2. Modeling Interpersonal Trust: Conceptual Multilevel Model	45
Figure II-3. Average Interpersonal Trust in the Americas	49
Figure II-4. Predicted Average Interpersonal Trust by Economic Inequality and Country	58
Figure II-5. Predicted Value Slope of Income Variable by HDI and Country	63
Figure II-6. Per cent of Population Victims of Discrimination by Country	66
Figure II-7. Effect of Discrimination on Interpersonal Trust	68
Figure II-8. Predictors of Discrimination	69
Figure II-9. Impact of Discrimination on Interpersonal Trust by Quintiles of Wealth	71
Figure II-10. Average Fear of Crime by Country	74
Figure II-11. Impact of Fear of Crime on Interpersonal Trust	75
Figure II-12. Standardized Regression Coefficient of the Richest 40% relative to Poorest 40	)% as
Predictor of Fear of Crime by Country	77
Figure II-13. Impact of Area of Residence on Fear of Crime by Quintiles of Wealth	79
Figure II-14. Impact of Area of Residence on Interpersonal Trust by Quintiles of Wealth	80
Figure III-1. Mean Interpersonal Trust by Municipality	. 112
Figure III-2. Poverty Rates across Municipalities in Costa Rica	. 120
Figure III-3 Poverty Rates across Municipalities Included in the Sample	. 122
Figure III-4. Wealth Inequality across Municipalities Included in the Sample	. 126
Figure III-5 Levels of Poverty and Inequality across Municipalities Included in the Sample	. 127
Figure III-6. Relationship between Interpersonal Trust and Individual Wealth by Municip	pality
	. 128
Figure III-7. Dynamics of Interpersonal Trust Formation at the Local Level, an Illustration	. 145
Figure IV-1. Average Support for Government Redistribution by Country	. 166
Figure IV-2. Percentage of the Population in Latin America Showing low or high support	rt for
Income Redistribution	. 167
Figure IV-3. Average Support for Redistribution by Quintiles of Wealth	. 168
Figure IV-4. Predicted Probability to Strongly Support Redistributive Policies	. 175

## LIST OF TABLES

Table II-1. Results Multilevel Model: Intercept as an outcome model	56
Table II-2. Results Multilevel Model: Intercept and slope as outcomes model	61
Table II-3. Difference in Mean Fear of Crime between the Richest 20% and Poorest 20%.	
Table III-1. Correlation Matrix: Contextual Factors at the Municipal Level, Costa Rica	135
Table III-2. Results Multilevel Model: Intercept as outcomes model	139
Table III-3. Results Multilevel Model: Intercept and Slope as Outcomes Model	142
Table IV-1. Ordered Logit Model: Impact of Individual Wealth on Support for Redistr	ributive
Policies	170
Table IV-2. Ordered Logit Model: Impact of Interpersonal Trust on Support for Redistr	ributive
Policies	171
Table IV-3. Ordered Logit Model: Interpersonal Trust as a Mediating Factor between Inc	lividual
Wealth and Support for Redistributive Policies	174

#### **CHAPTER I**

#### **INTRODUCTION**

"Where democracies have no middle class, and the poor are greatly superior in number, trouble ensues and they are speedily ruined"

Aristotle, Politics IV<sup>1</sup>

Why do unequal economies produce fragile democracies? At least since Aristotle, philosophers and theorists have believed that countries characterized by high economic inequality are not likely to be able sustain democracy. In particular, the literature suggests that in economically divided societies, where a large proportion of the population is economically deprived and few are exceptionally prosperous, social and political conflict is inevitable, and may ultimately result in revolution (Gurr 1970; Midlarsky 1986; Muller and Seligson 1987). Thus, just as the well-known contention that "the more well-to-do a nation, the greater the chances that it will sustain democracy" (Lipset 1961) has received great attention in the literature so too has the assertion that "no middle class, no democracy" (Moore 1966) been a popular mantra in the field. Surprisingly, however, despite extensive research, the underlying mechanisms through which economic inequality might erode democratic stability and the role that ordinary citizens may play in this process have not been elucidated. *By placing ordinary* 

<sup>&</sup>lt;sup>1</sup> In Aristotle, Barker and Stalley (1998).

citizens at the center of the causal chain, my dissertation seeks to explore in an empirical manner the "black box" of how economic inequality may prevent the sustainability of robust democracy.

The bulk of the empirical literature indicates that once democracy has been established, economic underdevelopment and inequality work against the consolidation of democratic regimes. Indeed, the finding that strong democracies are more likely to be found in economically developed *countries* constitutes one of the few empirical regularities in political science; additionally, it is also well established that in *countries* characterized by high economic inequality, democracy is more likely to breakdown (Geddes 1999; Geddes 2007). However, interestingly enough, although at the country level the economic factors associated with democratic stability are well-known, the micro-foundations or individual level dynamics that explain such correlations remain largely unexplored. This limitation in the empirical literature has led some observers to conclude that "given the quality and amount of effort expended on understanding democratization, it is frustrating to understand so little" (Geddes 2007 319).

Since most empirical studies that address the topic consist of macro analyses that rely exclusively on aggregate data at the country level, it becomes difficult, if not impossible, to empirically test the channels through which economic underdevelopment and inequality are likely to affect democratic stability. Most empirical studies do not specify the process through which citizens internalize the information provided by the features of the economic environment in which they reside, and how it shapes their political attitudes and in turn favors or mitigates political conflict. A missing piece in the democratization literature is citizens' role in preventing or fomenting democratic stability under particular economic contexts.

Thus, ordinary citizens, the very actors behind aggregate indicators, have been for the most part overlooked in the empirical literature that examines the impact of economic structural factors on democratization. *Differing from previous works, by adopting a multilevel strategy, this study simultaneously takes into account the characteristics of both the economic structure and citizens for understanding the economic basis of democratic stability.* 

Generally, most qualitative and statistical works on the topic emphasize one point: economic inequality generates envy and discontent. As a consequence, it has been suggested that in unequal economies these negative feelings prevent the emergence of a widespread democratic political culture among the citizenry, resulting in weak democracies. Nevertheless, *what* democratic attitudes are likely to be eroded, *who* are more likely to adopt undemocratic attitudes among the citizenry under these circumstances, and *how* this translates into political conflict remain underspecified. My dissertation aims at exploring each of these questions.

The remaining pages of this introductory chapter summarize the theory that serves as the basis to build the main argument of my dissertation. It then presents the research design of this study and the methods and data to be employed.

#### Theory

As in Aristotle's philosophy, the contemporary literature points out the "evils" of economic inequality for democratization. For instance, in *Polyarchy*, one of the most influential works in the democratization literature, Dahl (1971) suggests that inequalities, including economic ones, work to endanger democracy because they result in a skewed distribution of "political resources and skills," leading to "the creation of resentments and frustrations" among the citizenry. Thus,

for Dahl inequality is a primary source of discontent among the population, suggesting that it has a negative effect on citizens' political attitudes.

Similarly, Lipset (1961) stresses the importance of transforming the class structure of democratic societies from an "elongated pyramid" to a "diamond" shape, pointing out that "a large middle class tempers conflict by rewarding moderate and democratic parties and penalizing extremist groups" (Lipset 1961 51). Lipset goes further, suggesting that in underdeveloped and unequal societies, negative feelings such as envy and resentment grow especially among individuals at the bottom of the economic ladder, making them more vulnerable to the appeals of authoritarian political groups. Thus, according to Lipset, in societies with a weak middle class, the poor rather than the rich are more likely to show an undemocratic political culture. In fact, until recently Lipset's view on the distinct political attitudes of the poor constituted the conventional wisdom in the field of comparative politics.

Yet, recent empirical evidence for developing countries based on individual level data rejects the notion that the poor are unambiguously undemocratic (Krishna 2008). The works contained in Krishna's (2008) edited volume, however, do not explore whether the features of economic environment where individuals reside, such as the extent of economic development and inequality, make the poor more likely to hold undemocratic attitudes. In order to answer the "who" question stated above, one of the objectives of this dissertation is to examine the political attitudes of individuals across economic groups taking into account the characteristics of the economic context.

In contrast, other authors argue that, rather than the erosion of democratic attitudes among the citizenry, the main source of political instability in economically unequal democracies is the heightened conflict between the rich and poor over public policy choices (Boix 2003; Boix and Stokes 2003; Acemoglu and Robinson 2006). It has been suggested that high levels of inequality and poverty lead to fervent disputes over public policies between the rich and poor, explaining why democracy is more likely to breakdown under these conditions. For instance, Acemoglu and Robinson's (2006 20) formal model departs from the supposition that "most policy choices create distributional conflict," adding that in nature "the rich and the poor have conflicting preferences over policies, and every policy choice creates winners and losers...with high taxes, the rich are the losers and the poor are the winners, whereas when low taxes are adopted, the roles are reversed." Accordingly, they conclude that under conditions of high economic inequality democracy is less likely to consolidate because of more intense redistributive conflicts between the rich and poor. In sum, this approach draws attention to disagreements over public policies across economic classes as the main destabilizing force in economically unequal democracies. However, empirical evidence at the individual level corroborating these theories is almost nonexistent in the literature.

Alternatively, my dissertation proposes an integrative approach for understanding the underpinnings of democratic instability under conditions of high economic inequality in developing countries. It considers both undemocratic attitudes and distributional conflicts as important sources of political turmoil in economically unequal democracies. *The main argument of my dissertation is that through the erosion of a key democratic attitude, generalized interpersonal trust, the high levels of economic inequality that characterize most democracies in the developing world make political conflict over redistributive policies between the rich and poor more likely, putting democratic stability at risk.* 

Therefore, this study identifies one of the components of social capital,<sup>2</sup> generalized interpersonal trust,<sup>3</sup> as an important wellspring of democratic stability, since it is likely to attenuate conflict over redistributive policies in unequal democracies. The reason for this is explained in turn.

Since Almond and Verba's (1963) seminal work, *The Civic Culture*, it has been wellestablished that stable democracies show higher levels of interpersonal trust and consequently a widespread democratic political culture. Almond and Verba (1963 357-58) underscore the importance of interpersonal trust for democratic stability, stating that,

"Social trust facilitates political cooperation among the citizens...and without it democratic politics is impossible...general social attitudes temper the extent to which emotional commitment to a particular political subgroup leads to political fragmentation. This general set of social attitudes, this sense of community over and above political differences, keeps the affective attachments to political groups from challenging the stability of the system. Furthermore, it acts as a buffer between the individual and the political system...these norms...place a limit on politics...this management of cleavage is accomplished by subordinating conflicts on the political level to some higher, overarching attitudes of solidarity"

Thus, Almond and Verba suggest that interpersonal trust is a key democratic attitude for citizens to hold given that it neutralizes conflict across individuals even if they have antagonistic interests. Subsequently, based on this argument, it can be inferred that sharp conflict over the

 $<sup>^2</sup>$  "Social capital" defined as the "connections among individuals, social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam 2000 19), commonly operationalized in terms of participation in voluntary organizations and interpersonal trust, has been considered key for building robust and efficient democracies.

<sup>&</sup>lt;sup>3</sup> Defining interpersonal trust is not an easy task. Many definitions of "interpersonal trust" can be found in the literature (Newton 2001 ; Hardin 2002 ; Uslaner 2002 ; Cook,Hardin and Levi 2005 ; Hardin 2006). For example, Newton (2001 202) defines interpersonal trust as "the actor's belief that, at worst, others will not knowingly or willingly do him [her] harm, and at best, that they will act in his [her] interests." According to this definition, interpersonal trust is a *rational* response to the characteristics of those around us, contrasting with the view that interpersonal trust is the byproduct of norms or *moral* values learned through a socialization process that have its roots in child rearing practices (Banfield 1958 ; Uslaner 2002). Thus, according to the rational approach, for interpersonal trust to grow, it first requires considering others trustworthy, and therefore the extent of interpersonal trust in a society is considered conditioned on the characteristics of the environment where individuals interact with each other (Nannestad 2008). By exploring how contextual economic characteristics and individual experiences shape citizens' level of interpersonal trust, this study considers interpersonal trust largely the product of a rational process.

implementation of redistributive policies between the rich and poor in highly unequal democracies is likely to be less intense between trusting individuals even if they belong to different economic classes.

Although social capital in the form of interpersonal trust is likely to play an important role in neutralizing conflict over redistributive policies between rich and poor particularly in unequal democracies, at the same time the literature indicates that interpersonal trust is less likely to flourish in places characterized by high economic inequality. Hence, interpersonal trust seems to be generally absent where it is most needed. *Consequently, this research identifies a possible vicious circle in economically underdeveloped democracies between high economic inequality, low interpersonal trust, and low support for redistributive policies within certain segments of the population, especially among the wealthy.* 

In sum, in developing countries, economic inequality is expected to foment negative attitudes for democracy among the citizenry, in particular interpersonal *mis*trust, that are likely to result in intense political conflict over redistributive policies and therefore in low support for such policies, and consequently in low probability that democratic governments will implement serious policies to redress economic disparities, perpetuating a state of poverty and economic inequality, mistrust, and political conflict between haves and have nots.

#### The Latin American Context as a Case Study

This study tests the aforementioned propositions in the Latin American context. As a region, Latin America and the Caribbean constitute a perfect setting for exploring how contextual factors such as poverty and inequality mold political attitudes of citizens, ultimately contributing to political conflict or instability. High poverty and economic inequality and political conflict are some of the prototypical features of most countries in the region.

In the past twenty years, Latin America has made significant progress in raising the standards of living of its population. According to the most recent data, the Latin American region as a whole shows a trend toward convergence with the developed world in quality of life indicators such as life expectancy, infant mortality and literacy rates, and access to basic services (ECLAC 2007). Although these achievements have been praised by policy makers and seen as signs of modernization and economic development, these positive outcomes depict only partially the region's socio-economic trends of recent years. These positive outcomes contrast sharply with the slow progress in poverty reduction and the lack of improvement in the distribution of economic resources in spite of the region's moderate economic growth.

Meeting the goal of halving poverty rates by 2015, set at the 2000 United Nations Millennium Summit is now virtually impossible (IADB 2005; UN Millennium Project. 2005), and even more discouraging is the scenario for economic inequality. *Latin America remains the most unequal region in the world, and even countries with the lowest economic inequality in the region, show higher inequality rates than any developed country in the world (De Ferranti 2004)*. Moreover, the absence of serious policies to redress inequality makes it very unlikely to significantly shrink the gap between haves and have nots in the near future (Sáinz 2007). "Unequal" economic development (i.e., high poverty and economic inequality) rather than economic development per se seems to best describe Latin America's economic record over the past twenty years.

Contrary to the expectations, after more than two decades of stunning economic and political transformations in Latin America, high poverty and inequality have endured. Transitions from

government led economic development to free market oriented strategies and from authoritarianism to democracy did not set the basis for the improvement of the already highly skewed distribution of economic resources. In fact, many suggest that economic liberalization (Portes and Hoffman 2003) and the exclusion of important sectors of the population in the negotiation of political pacts that facilitated the installment of elected governments (Bermeo 1990; Karl 1990) have contributed to the perpetuation of poverty and economic disparity. In economic terms, these important reforms are said to have disproportionately favored economic elites. Thus, rather than lack of entrepreneurial ambition, enduring poverty and inequality in Latin America has been considered products of political processes (Acemoglu and Robinson 2008) and consequently of the unbalanced influence of powerful economic minorities on state reforms and policies.<sup>4</sup>

Discouraging is the fact that deep-seated economic inequality and high poverty in Latin America have been found detrimental for achieving high and sustained economic growth in the long-run (Birdsall,Ross and Sabot 1995; Londoño and Székely 2000), and it has also been suggested, although not proven empirically, that high poverty and inequality are jeopardizing democratic stability in the region as they erode social capital, particularly interpersonal trust, and produce disenchantment among the bulk of the population toward the political system (Márquez, *et al.* 2008), predicting a bleak future for Latin American democracies.

Moreover, recent qualitative studies suggests that as a product of Latin America's high inequality and poverty conflict over distributive policies across economic classes are keen in the region. Teichman (2008 446,56), for example, states that "while electoral democracy has propelled redistributive issues onto the policy agenda, redistributive struggles are intense and

<sup>&</sup>lt;sup>4</sup> According to a recent study from The World Bank, between a quarter and half of the income inequality among adults in Latin America is due to "inequality of opportunities" they faced early in life and "through no fault of their own" (Barros, *et al.* 2008).

progress in policy to address inequality is slow to emerge," and concludes that "without at least the attempt at a new societal compromise distributional struggles will fester and less than optimal policy solutions will continue to be the norm," suggesting that Latin American countries may be trapped in a vicious circle of underdevelopment and political instability. An important question that emerges is, of course, how societal compromises can be reached. In my dissertation, I claim that high levels of interpersonal trust among the citizenry are largely part of the answer.

In sum, despite Latin America's high poverty and economic inequality and the political turmoil that characterizes the region, the mechanisms through which these factors may be linked remained unexplored in the empirical literature.<sup>5</sup> This study examines empirically the channels through which Latin America's economic inequality may be fostering political conflict among the citizenry and the identity of the actors involved in this process.

#### **Research Outline**

In order to test the main argument of this research, I will proceed as follows. In the first stage (Chapter II), I will examine the sources of interpersonal trust across *countries* in the Americas, including Canada and the United States, and also test specific hypotheses about the contribution of the poor and rich to the generation of trust or mistrust in Latin American societies. In a second stage (Chapter III), by considering smaller units of analysis, municipalities, I will further explore the causal mechanisms that link economic inequality and interpersonal trust, in this case at the sub-national level.

Methodologically, taking municipalities as units of analysis makes it possible to increase the number of cases and also hold constant other intervening factors (Snyder 2001) that may

<sup>&</sup>lt;sup>5</sup> The almost non-existent literature about the political impact of economic inequality on democratization has been recently pointed out in a study by the Economic Commission for Latin America and the Caribbean (ECLAC 2007 62)

confound the relationship between economic inequality and interpersonal trust, such as national cultural traits and the national history of and degree of democracy. Thus, a sub-national strategy allows testing additional hypotheses such as the role that culture vis-à-vis economic structure may play in the creation of interpersonal trust. In this sense, looking at municipal level data helps to empirically test the well-known proposition that "all politics are local politics" (Cited in Huckfeldt and Sprague 1995), and therefore explore how the characteristics of the immediate context where individuals live, in this case the extent of economic inequality at the local level, determine their degree of trust in others.

While in the first stage of this research I will take into account most countries in the Americas, in the second stage my analysis will be limited to Costa Rica. Focusing on this country offers important advantages. First, difficult to obtain fine-grained data at the municipal level is for the most part available for this country and, as it will be explained in Chapter III, the structure of the individual level data for this country used in this study facilitates engaging in sub-national multilevel analysis; that is, it allows taking into account simultaneously the features of the economic structure of municipalities and individual characteristics for explaining levels of interpersonal trust.

Secondly, in this research Costa Rica constitutes what in political methodology is termed a "critical case" (Eckstein 1975) or a case where at first glance the probability to falsify established hypotheses is likely to be high. Critical cases are useful for confirming or disconfirming a theory, making the Costa Rican case ideal for this task. Costa Rica has often been cited as a role model for other Latin American countries as it has been praised by its superior economic development, lower economic inequality, long-standing democratic stability, and higher levels of interpersonal trust, suggesting that economic inequality is less likely to lead to high levels of mistrust within this country. Thus, it is often assumed in the literature for Costa Rica that aggregate level characteristics are also likely to be found at the sub-national level, implying that the economic structure of municipalities may be irrelevant for the formation of interpersonal trust (and other democratic attitudes) since little variation in levels of interpersonal trust across municipalities is expected. Indeed, some have forcefully argued that Costa Rica's homogenous and superior culture, rather than economic structural factors, is the main determinant of this country's highly democratic political culture (Harrison 1985).

Thus, examining the impact of economic structure on the creation of interpersonal trust in the Costa Rican context constitutes a high test to one of the main arguments of this research: economic inequality erodes interpersonal trust. If the empirical results for Costa Rica support the country level findings of this research, a country where low variation in levels of interpersonal trust and other democratic attitudes across municipalities is usually predicted, this would constitute strong evidence in favor of the proposition that economically divided environments erode interpersonal trust and on the hypothesized mechanisms that explain this outcome.

Finally, in the third stage of the research (Chapter IV), I asses the importance of interpersonal trust for reducing conflict over the role of the state in the improvement of the distribution of economic resources among Latin American citizens. Specifically, in this chapter the hypothesis that high levels of interpersonal trust work as a "buffer" between individualistic interests and desirable social outcomes is tested. Specifically, it tests the proposition that even if redistributive policies work against the economic interests of the wealthy, affluent individuals who show high levels of interpersonal trust toward unlike others are more likely to strongly support the implementation of public policies aimed to shrink the gap between rich and poor.

#### Methods

Methodologically, the approach is to carry out a multilevel statistical analysis (Hierarchical Non-Lineal Modeling) in the first and second stages of this research (Raudenbush, *et al.* 2000; Raudenbush and Bryk 2002). Thus, multilevel models at the country and individual levels are estimated in Chapter II, and multilevel models at the municipal and individual levels are estimated in Chapter III. Finally, in Chapter IV of this dissertation, an individual level analysis of the determinants of citizens' support for redistributive policies is performed. Specifically, in Chapter IV, because of the nature of the dependent variable (i.e. ordinal variable), ordered logit models are estimated. Given the novelty of the methodological approach used, particularly, in Chapters II and III, some additional comments are appropriate on this respect.

By making use of multilevel modeling, this research hopes to shed new light on the study of the determinants of citizens' political attitudes. Despite that the importance of contextual factors for understanding political attitudes and behaviors has been emphasized in comparative public opinion research (Putnam 1966; Huckfeldt 1979; MacKuen and Brown 1987; Knack and Kropf 1998; Gibson 2006; Franseze 2007), traditionally research in this field has been restricted to either an individual or country level analysis.

While studies that consider individuals as units of analysis do not take into account how the outside world shapes people's political attitudes, those that rely on average data at the country level cannot explain within-country variations and therefore conclusions reached using aggregated data might not hold at the individual level. In other words, aggregate studies are likely to fall prey to the "ecological fallacy" (Robinson 1950; King 1997; Seligson 2002b). In contrast, with the estimation of multilevel models, it is possible to take into account how *both*  contextual and individual factors shape individual level variables. This study will look at how contextual characteristics (at the municipal and country levels) and individual traits and experiences affect the formation of interpersonal trust in Latin American countries.

As will be demonstrated, the dual strategy implemented in this study, taking into account countries as well as municipalities as the highest level of aggregated units in Chapter II and III respectively, allows overcoming one of the most prominent problems of previous works that have implemented multilevel modeling using data for countries in a geographical region or for a subset of nations (i.e. industrialized countries), namely the small-N problem.

Indeed, multilevel analysis in comparative public opinion research has been precluded by the well-known "too many variables, only few cases" problem (Lijphart 1971). In statistical terms, this is also called the "over-determination of the dependent variable" (Przeworski and Tenue 1970; Landman 2000) or simply the too few "degrees of freedom" problem. Thus, comparativists who work with survey data for a relatively small number of countries face the following challenge: while plenty of cases are available at the individual level or level-1, relatively few cases are available at the country level or level-2, resulting in two major methodological constraints for employing multilevel modeling.

First, given the small number of countries included in the analysis, regional or small-N works that do implement a multilevel strategy are often criticized for omitting key country level independent variables that are also likely to be linked with both the country level independent variable of interest and the individual level dependent variable, raising the question whether an observed relationship between a contextual and individual level variable is spurious or not.

For example, in the case of this research given the relatively high correlation between many important country level determinants of interpersonal trust in the Latin American context, such as the extent of and experience with democracy, cultural background, crime rates, economic development, economic inequality and so on, each variable might turn out to be statistically significant when entered separately in a multilevel model. However, given the small number of cases at the country level or level-2, it is not possible to simultaneously take into account all these factors in a single model and therefore to parcel out the effect of each variable and determine which of them is the most important determinant of interpersonal trust.

A further related problem in regional or small-N multilevel modeling at the country and individual levels is that robust standard errors for the regression coefficients might not be appropriately estimated. This increases uncertainty about whether the null hypothesis of no relationship between the dependent variable and a country or individual level independent variable should or should not be rejected. The following explanation by Raudenbush and Bryk (2002 276), the pioneers in the development of multilevel statistical tools and the creators of the widely used HLM software, make clear the importance of obtaining *appropriate* robust standard errors in multilevel analysis:

"In many applications, the primary interest is in the fixed coefficients, denoted by  $\gamma$ . In standard applications of hierarchical models, inferences about these depend to some degree on assumptions about the distribution of the random effects at each level. It would be unfortunate if false assumptions about the random effects seriously distorted inferences about the fixed effects. To check the sensitivity of inferences about the fixed effects to these assumptions about the random effects, it is often useful to compute robust or "Huber-corrected" standard errors...Use of these robust standard errors is most appropriate when the number of highest-level units is large."

As will be demonstrated in this research, computations of multilevel models based on a sample as large as twenty two cases at the country level or level-2 does not yield appropriate robust standard errors and they often differ substantially from the estimated model-based standard errors, making it impossible to determine the statistical significance of the estimated parameters and therefore the ability to draw meaningful conclusions.

This study presents a novel methodological strategy to deal with these two related problems. It encourages complementing multilevel modeling based on a relatively small sample of countries with multilevel analysis at the sub-national level. As this research will demonstrate, by increasing the number of cases at level-2, a sub-national multilevel strategy can create the possibility to estimate appropriate robust standard errors, increasing our confidence in the statistical significance of the results, while holding constant other intervening variables, resulting in a net gain of degrees of freedom and therefore allowing for the inclusion of more level-2 variables in a single model.

#### The Data

For the statistical analysis, I make use of survey data collected by the Latin American Public Opinion Project (LAPOP) at Vanderbilt University.<sup>6</sup> The LAPOP surveys for Latin American and Caribbean countries consist of face to face interviews based on probabilistic, stratified, and multistage samples representative of the voting age population at the national and strata levels. In Chapter II of this dissertation, data from the AmericasBarometer 2006 by LAPOP for twenty Latin American and Caribbean countries plus Canada and the United States are used. Phone interviews were carried out in Canada and the United States with a sample size of 609 and 601 interviews, respectively. The dataset includes over 34,000 individual cases.

In Chapter III, the 2004, 2006, and 2008 LAPOP datasets for Costa Rica were merged in order to increase the number of observations available for each municipality included in the sample. Although the LAPOP data is not representative at the municipal level, as will be shown in Chapter III, by following this strategy it becomes possible to increase the sample size for each municipality for this country and obtain robust statistical results. Additionally, in Chapters II and

<sup>&</sup>lt;sup>6</sup> For more information on the LAPOP's surveys see <u>www.lapopsurveys.org</u>

III, the LAPOP data is combined with aggregated data at the country and municipal levels from the United Nations Development Program (UNDP), Centro Centroamericano de Población at the Universidad de Costa Rica, and census data for Costa Rica.

In Chapter IV, data from the 2008 round of surveys from the AmericasBarometer by LAPOP for twenty Latin American and Caribbean countries and Canada and the United States were employed. In 2008, computer based or web surveys were carryout in Canada and the United States with a sample size of 2,032 and 1,500 individual cases, respectively. The 2008 dataset includes over 36,000 individual cases. In the 2008 round of surveys, a series of questions asking citizens about their views on the role of the state in different policy issues were included for the first time in the questionnaire, including an item on support for income redistribution.

#### References

Acemoglu, Daron, and James A. Robinson. *Economic Origins of Dictatorship and Democracy*. Cambridge ; New York: Cambridge University Press, 2006.

——. "The Role of Institutions in Growth and Development, Working Paper N. 10." Commission on Growth and Development, 2008.

- Almond, Gabriel A., and Sidney Verba. *The Civic Culture: Political Attitudes and Democracy in Five Nations.* Princeton: Princeton University Press, 1963.
- Aristotle, Ernest Barker, and R. F. Stalley. *Politics*. Oxford ; New York: Oxford University Press, 1998.
- Banfield, Edward. The Moral Basis of a Backward Society. Chicago: The Free Press, 1958.
- Barros, Ricardo Paes de, Francisco H.G. Ferreira, José R. Molinas Vega, and Jaime Saavedra Chanduvi. *Measuring Inequality of Opportunities in Latin America and the Caribbean*. Edited by The World Bank, *Latin American Development Forum*, 2008.
- Bermeo, Nancy. "Review: Rethinking Regime Change." Comparative Politics 22, no. 3 (1990): 359-77.
- Birdsall, Nancy, David Ross, and Richard Sabot. "Inequality and Growth Reconsidered: Lessons from East Asia." *The World Bank Economic Review* 9, no. 3 (1995): 477-508.
- Boix, Carles. *Democracy and Redistribution, Cambridge studies in comparative politics*. Cambridge, UK ; New York: Cambridge University Press, 2003.
- Boix, Carles, and Susan C. Stokes. "Endogenous Democratization " *World Politics* 55, no. 4 (2003): 517-49.
- Cook, Karen S., Russell Hardin, and Margaret Levi. *Cooperation without Trust?*, *The Russell Sage Foundation series on trust ; v. 9.* New York: Russell Sage Foundation, 2005.
- Dahl, Robert. *Polyarchy: Participation and Opposition*. New Haven, CT: Yale University Press, 1971.
- De Ferranti, David M. Inequality in Latin America: Breaking with History? World Bank Latin American and Caribbean studies. Viewpoints. Washington, DC: The World Bank, 2004.
- Eckstein, H "Case Studies and Theory in Political Science." In Handbook of Political Science. Political science: Scope and Theory (Vol. 7, pp. 94-137), edited by F. I. Greenstein and N. W. Polsby: MA: Addison-Wesley, 1975.
- ECLAC. "Social Cohesion, Inclusion and a Sense of Belonging in Latin America and the Caribbean." 2007.
- Franseze, Robert J. Jr. "Context Matters: The Challenge of Multicausality, Context-Conditionality and Endogeneity for Empirical Evaluation of Positive Theory in Comparative Politics." In *The Oxford handbook of comparative politics* edited by Carles Boix and Susan Carol Stokes. Oxford; New York: Oxford University Press, 2007.
- Geddes, Barbara. "What Causes Democratization." In *The Oxford Handbook of Comparative Politics*, edited by Carles Boix and Susan Carol Stokes, xi, 1021 p. Oxford; New York: Oxford University Press, 2007.
- Geddes, Barbara "What do We Know about Democratization after 20 Years?" *Annual Review of Political Science* 2 (1999): 115-44.
- Gibson, James L. "Enigmas of Intolerance: Fifty Years after Stouffer's Communism, Conformity, and Civil Liberties "*Perspectives on Politics* vol. 4 no.1 (2006): pp. 21-34
- Gurr, Ted Robert. *Why Men Rebel*. Edited by Woodrow Wilson School of Public and International Affairs. Center of International Studies. Princeton, N.J.,: Published for the

Center of International Studies, Princeton University [by] Princeton University Press, 1970.

- Hardin, Russell. *Trust and Trustworthiness, The Russell Sage Foundation series on trust ; v. 4.* New York: Russell Sage Foundation, 2002.
- . Trust, Key Concepts in Social Science: Polity Press, 2006.
- Harrison, Lawrence E. Underdevelopment Is a State of Mind: The Latin American Case. Boston, MA: Center for International Affairs, Harvard University and University Press of America, 1985.
- Huckfeldt, R. Robert. "Political Participation and the Neighborhood Social Context." *American Journal of Political Science* 23, no. 3 (1979): 579-92.
- Huckfeldt, R. Robert, and John D. Sprague. *Citizens, Politics, and Social Communication: Information and Influence in an Election Campaign, Cambridge studies in political psychology and public opinion.* Cambridge [England]; New York: Cambridge University Press, 1995.
- IADB. The Millennium Development Goals in Latin America and the Caribbean: Progress, Priorities and IDB Support for Their Implementation 2005 [cited June 17 2008]. Available from http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=591088.
- Karl, Lynn Terry. "Dilemmas of Democratization in Latin America." *Comparative Politics* 23, no. 1 (1990): 1-21.
- King, Gary. A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data. Princeton: Princeton University Press, 1997.
- Knack, Stephen, and Martha E. Kropf. "For Shame! The Effect of Community Cooperative Context on the Probability of Voting." *Political Psychology* 19, no. 3 (1998): 585-99.
- Krishna, Anirudh. *Poverty, Participation, and Democracy: a Global Perspective*. New York: Cambridge University Press, 2008.
- Landman, Todd. Issues and Methods in Comparative Politics: An Introduction. London; New York: Routledge, 2000.
- Lijphart, Arend "Comparative Politics and the Comparative Method." *The American Political Science Review* 65, no. 3 (1971): 682-93.
- Lipset, Seymour Martin. *Political Man: The Social Basis of Politics*. 1981 (expanded edition) ed. Baltimore, MD.: Johns Hopkins University Press, 1961.
- Londoño, Juan Luis, and Miguel Székely. "Persistent Poverty and Excess Inequality: Latin America, 1970-1995." *Journal of Applied Economics* 3, no. 1 (2000): 93-134.
- MacKuen, Michael, and Courtney Brown. "Political Context and Attitude Change." *The American Political Science Review* 81, no. 2 (1987): 471-90.
- Márquez, Gustavo, Alberto Chong, Suzanne Duryea, Jacqueline Mazza, and Hugo Nopo. Outsiders?: The Changing Patterns of Exclusion in Latin America and the Caribbean, Economic and Social Progress in Latin America, 2008 report. Washington, DC Cambridge, MA: Inter-American Development Bank; David Rockefeller Center for Latin American Studies, Harvard University, 2008.
- Midlarsky, Manus I. Inequality and Contemporary Revolutions, Monograph Series in World affairs. Denver, Colo.: Graduate School of International Studies, University of Denver, 1986.
- Moore, Barrington. Social origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World. Boston,: Beacon Press, 1966.

- Muller, Edward N., and Mitchell A. Seligson. "Insurgency and Inequality." *American Political Science Review* 81 (1987): 425-51.
- Newton, Kenneth. "Trust, Social Capital, Civil Society, and Democracy." *International Political Science Review* 22, no. 2 (2001): 201-14.
- Portes, Alejandro, and Kelly Hoffman. "Latin American Class Structures: Their Composition and Change during the Neoliberal Era." *Latin American Research Review* 38, no. 1 (2003): 42-77.
- Przeworski, Adam, and Henry Tenue. *The Logic of Comparative Social Inquiry*. New York: Wiley-Interscience, 1970.
- Putnam, Robert D. "Political Attitudes and the Local Community." *The American Political Science Review* 60, no. 3 (1966): 640-54.
- Raudenbush, S. W., A. S. Bryk, Y. Cheong, and R. T. Congdon. *HLM 5: Hierarchical Linear and Nonlinear Modeling*. Chicago: Scientific Software International, 2000.
- Raudenbush, Stephen W., and Anthony S. Bryk. *Hierarchical Linear Models: Applications and Data Analysis Methods.* 2nd ed, *Advanced Quantitative Techniques in the Social Sciences.* Thousand Oaks: Sage Publications, 2002.
- Robinson, W. S. "Ecological Correlations and the Behavior of Individuals." *American* Sociological Review 15, no. 3 (1950): 351-57.
- Sáinz, Pedro "Equity in Latin America since the 1990s " In *Flat World, Big Gaps: Economic Liberalization, Globalization, Poverty and Inequality* edited by Jomo K. Sundaram and Jacques Baudot. Third World Network, 2007.
- Seligson, Mitchell A. "The Renaissance of Political Culture or the Renaissance of Ecological Fallacy." *Comparative Politics* 34 (2002): 273-92.
- Snyder, Richard. "Scaling Down: The Subnational Comparative Method" Studies in Comparative International Development 36, no. 1 (2001): 93-110.
- Teichman, Judith. "Redistributive Conflict and Social Policy in Latin America." *World Development* 36, no. 3 (2008): 446-60.
- UN Millennium Project. The Millennium Development Goals: A Latin American and Caribbean Perspective. Santiago, Chile: United Nations, 2005.
- Uslaner, Eric M. The Moral Foundations of Trust. New York: Cambridge University Press, 2002.

#### **CHAPTER II**

#### THE ECONOMIC BASIS OF INTERPERSONAL TRUST IN THE AMERICAS

#### Introduction

Lack of trust in others has often been cited as a primary cause of Latin America's most prominent troubles. According to Harrison (1985 7), the region's socio-economic underdevelopment has been attributed to the narrow "radius of identification and trust" among its population. Similarly, Latin America's long history of political instability and government inefficiency has also been credited to the prevalence of "distrust and hatred for other groups in society" (Huntington 1968 28). Recent empirical evidence continues to confirm Latin America's low levels of interpersonal trust when compared to the developed world (Klesner 2007; Córdova 2008). Moreover, other empirical studies show that the very ingredient that is in short supply in Latin America, namely interpersonal trust, is at the same time the most important component of social capital for strengthening democracy around the world as opposed, for example, to participation in voluntary organizations alone (Uslaner 2002; Armony 2004; Inglehart and Welzel 2005).

Evidence from Latin America supports these global findings. At the individual level, higher levels of interpersonal trust within the region as a whole have been associated with increased willingness to tolerate the political participation of opposition and minority groups and a higher support for democracy as the best form of government (Córdova 2008). In contrast, the evidence

also shows that participation in civic organizations produces mixed results (Armony 2004; Córdova 2008). Thus, interpersonal trust has also been found to have a significant political payoff in the Latin American context as it fosters core democratic values among citizens, presumably promoting democratic stability.

Although the third wave of democratization in Latin America opened up channels for citizen involvement in civic and political activities at the national and local levels, it is puzzling that interpersonal trust levels are stagnant, if not declining, and remain exceptionally low even after several years and in some cases even decades of experience with procedural democracy in most Latin American countries.<sup>7</sup> This fact challenges the notion that interpersonal trust and civic and political participation go hand in hand (Putnam 1993), and also the finding that as time goes by democracies are more likely to build interpersonal trust (Muller and Seligson 1994).

Mexico and Argentina are good examples of the failure of democracy to bring about interpersonal trust in Latin America. Almond and Verba (1963) in their seminal work *The Civic Culture* noted the extremely low levels of interpersonal trust in Mexico relative to other developed nations, one of them its neighbor the United States. Data from the last two decades reveal that interpersonal trust in Mexico is still very low when compared to the United States, in spite of the sharp decline in interpersonal trust experienced in the U.S. in recent years (Putnam 1995; Putnam 2000). Moreover, the data show that in Mexico interpersonal trust is now at an even lower point than during the years of one party rule. Data for Argentina show a similar

<sup>&</sup>lt;sup>7</sup> Data from the World Values Surveys, the longest overtime data series available, show that interpersonal trust in those Latin American countries included in the sample remains low relative to Canada and the United States, in some cases showing a declining trend. The LAPOP data for the last three rounds of surveys (2004, 2006, and 2008), using different question wording, show that there have not been statistically significant changes in interpersonal trust in most countries overtime.

pattern. Since the end of the military regime in 1983, interpersonal trust shows a declining trend. 8

In effect, despite the implementation of drastic political and economic reforms in recent decades, the so-called "dual transition" (Bermeo 1994; Encarnación 1996; Weyland 2002), social life in Latin America is still very similar to that described by Huntington forty years ago, even before the Third Wave of democratization began (Huntington 1991). Distrust and hatred have prevailed in Latin America. In light of this evidence, this research asks, what has gone wrong? Why, in spite of national and international efforts to fortify civil society, have Latin American democracies failed to strengthen social capital and therefore build more harmonious and trusting societies? What explains Latin America's low levels of interpersonal trust compared to its neighboring developed countries, namely Canada and the United States? Who are more likely to distrust others? Can interpersonal trust be promoted in order to deepen the democratization process undergone by most Latin American countries and make their governments work more efficiently?

This research argues that the major obstacles in the building of a strong civil society in Latin America are the endurance of high poverty levels and extreme economic inequality in the region. Democratic governments in Latin America have not been able to outperform authoritarian regimes in these two areas (Smith 2005), and this has had important implications for democratic stability. Just as citizens' disenchantment with democratic governments' overall economic performance seems to have translated into lower levels of political trust or trust in the political system and its institutions (Carlin 2006), this disenchantment is also likely to be preventing the rise of social trust in the region.

<sup>&</sup>lt;sup>8</sup> These observations are based on the World Values Survey data.

Latin Americas' economic underdevelopment and highly unequal distribution of economic resources, I argue in this dissertation, are placing at risk the social fabric on which democracy rests. Unequal economic development is a conflict-ridden force that breeds mistrust, resulting in an overall negative effect on democracy. The general argument this chapter lays out is that, by inhibiting the formation of interpersonal trust, economic underdevelopment along with economic inequality are hindering democratic stability in Latin America.

Relatively high civic participation in an environment characterized by low interpersonal trust, as is the case in Latin America (Córdova 2008), is likely to be less helpful for democracy and may even translate into negative social capital (Armony 2004). Membership in civic organizations may well be associated with "particularized" rather than "generalized" trust, suggesting that trust materializes within but not across civic groups (Stolle 1998; Putnam 2000; Uslaner 2000; Uslaner 2002). Moreover, in economically polarized societies, this type of "particularized" trust is likely to take place among individuals with similar socio-economic status, resulting in societies organized along ever more insular and self-protecting economic class lines. As a result, participation in voluntary groups in Latin America is likely to be "bonding" the less well off strata of society within a network of civic organizations quite distinct from the groups in which the rich participate. The result is that the key form of social capital, what Putnam calls "bridging" social capital, does not arise. (Putnam 2000). As Putnam (2000 22) explains, "bonding social capital, by creating strong in-group loyalty, may also create strong outgroup antagonism," putting at risk the stability of democracy.

Recent empirical evidence from Mexico shows that in urban areas members of voluntary organizations, whether religious or secular, are likely to share similar socio-economic characteristics. The results of the Mexico's 2006 National Social Capital Survey for Urban Areas indicates that about 65 per cent of the individuals who participate in civic groups reported that the members in the main civic group in which they participate have a level of income or wealth similar to their own.<sup>9</sup> The survey also finds differences in socioeconomic status to be the most frequently reported cause of divisions among individuals in their communities; more than 45 per cent of respondents identified socio-economic status as a dividing force in their place of residence. These results point to economic contextual factors, particularly class divisions at the local level, as salient for citizens; moreover, they suggest that economic inequality is likely to erode social trust in the Latin American context and therefore make civic participation less effective for the establishment of stable democracy.

One of the newest and most controversial topics in the current social capital literature is the effect of "the composition of people's social networks and society overall" on civic engagement and interpersonal trust (Stolle and Howard 2008 4). Most research in this area begins with assumption that "the more homogeneous a society, the more trust a (randomly selected) principal will place in a (randomly selected) agent"(Knack 2001 177). In other terms, "trust seems easier to develop when we are familiar with the people around us, and particularly when they appear similar to ourselves"(Stolle, Soroka and Johnston 2008 59). Thus, the composition of a society and where a person stands in society (i.e., whether one is part of a majority or minority or advantaged or disadvantaged group) becomes crucial for understanding his or her views toward others and, in turn, for shaping one's political identity, interests, and attitudes, especially trust.

Contextual and individual characteristics have recently become critical in explaining people's reservoirs of interpersonal trust. Given Latin America's extreme economic heterogeneity in

<sup>&</sup>lt;sup>9</sup> For more information about this survey and access to the dataset visit the United Nations Development Program website for Mexico: http://www.undp.org.mx/desarrollohumano/competividad/index.html

comparison to the United States and Canada and its marked economic disparities across Latin American countries, the Americas, as a region, constitutes a perfect laboratory for investigating the underpinnings of interpersonal trust formation and consequently for theorizing about the mechanisms through which contextual factors such as poverty and economic inequality may affect democratic attitudes and the role that one's socio-economic status may play in this process. This chapter asserts that the relatively low levels of interpersonal trust in Latin America vis-à-vis the most politically and economically developed countries in the Americas, namely Canada and the United States, have at their core an economic explanation.

In addition to its theoretical relevance, the focus of this research has important policy implications. Although the strengthening of civil society has been at the core of democratization programs for the region (Ottaway and Carothers 2000; Campbell 2003; Seligson 2006), this research claims that civic participation by itself is unlikely to foster democracy unless it forms part of a broader agenda that includes policies that foment the building of generalized interpersonal trust, such as economic policies designed to ameliorate both poverty and inequality.

This dissertation argues that by dismantling economic exclusion, social capital can be made to work in Latin America in a fashion consistent with the predictions of the bulk of the social capital literature, namely that generalized interpersonal trust and civic participation go together and reinforce each other (Putnam 1993), resulting in a more democratic political culture. Therefore, in attempting to identify the determinants of interpersonal trust in order to strengthen social capital and democracy in Latin America, this study departs from previous works that have considered interpersonal trust to be an enduring characteristic, above all a cultural trait passed from generation to generation rather than a social phenomenon that can be shaped through public policy. Instead, this dissertation rests on the assumption that levels of interpersonal trust are a reaction to context, and when context changes, so will interpersonal trust.

The remainder of this chapter is structured as follows. First, it briefly reviews the literature that directly or indirectly has treated economic structural factors as an important determinant of interpersonal trust. Secondly, it presents the hypotheses and the specification of the multilevel models considered in this research. Third, it presents the empirical results of a multilevel statistical analysis. Then, the underlying mechanisms that explain the results obtained are explored. The last section discusses the implications of this chapter's findings for the achievement of stable democracies in Latin America.

#### The Economic Origins of Interpersonal Trust Exposed: A Review of the Literature

Some societies seem more prone to creating interpersonal trust than others, and economic conditions, in particular, appear to play an important role. The literature suggests that both absolute economic wellbeing and relative economic wellbeing are important determinants of interpersonal trust. The following discussion draws primarily from two main theoretical approaches in political science that suggest that economic structural factors shape individuals' political attitudes, the modernization and relative deprivation theories.

Those who see absolute economic well-being or economic development as an antecedent factor for the formation of interpersonal trust are largely inspired by the modernization theory. In a nutshell, proponents of the modernization theory argue that as nations prosper economically, key values for the stability of democracy, such as interpersonal trust and political tolerance, are also likely to emerge (Lipset 1959; Lipset 1961). According to the modernization theory, environments characterized by economic security are likely to show higher levels of

interpersonal trust given that economic development reduces competition for scarce resources, and in turn minimizes the chances of social conflict. In contrast, economic underdevelopment, according to this account, sets the basis for a perfect zero-sum game in society, in which the economic gains of some are correctly perceived as the losses of others, creating a world of mistrust and constant conflict, and in turn an atmosphere not appropriate for the sustainability of democracy. This thesis was best articulated by Foster (1965). Herein, this explanation will be termed the "scarcity hypothesis."

Following this logic, Inglehart and Welzel (2005), for example, explain the world's distribution of fundamental values among the citizenry for the stability of democracy, or what they call "self-expression values," including interpersonal trust, as an immediate consequence of cross-country differences in levels of economic development. They find that countries with robust democracies exhibit high levels of interpersonal trust and economic development. Largely inspired by the modernization theory, Welzel and Inglehart (2007 307) state that self-expression values are "rooted in social configurations that lower existential pressures and bring more permissive living conditions, giving people a stronger sense of security and autonomy." Similarly, Przeworksi (2000; 2008), citing Lipset, argues that economic development makes compliance with democratic rules and consequently the maintenance of social and political order more likely as (on average) individuals in developed nations already have relatively comfortable lives (i.e., their survival is not at stake), and demonstrate a greater willingness to trust and tolerate those who do not share their economic interests. This explains why for citizens in well-off nations democracy becomes "the only game in town" (Przeworski 1991 26).

Just as at the macro-level economic development has been regarded as an important determinant of interpersonal trust and democratic stability, at the micro or individual level one's
economic position in society has also been found to be important for the formation of interpersonal trust. Generally speaking, the literature finds that the higher an individuals' socioeconomic status, the higher her level of interpersonal trust, ceteris paribus. The reason why individuals of lower socio-economic status show lower levels of interpersonal trust has been attributed by some to the poor's greater exposure to negative life experiences, particularly experiences with marginalization and discrimination (Newton 1999; Whiteley 1999; Putnam 2000; Paxton 2007). As Putnam (2000, 138) notes, "in virtually all societies "have nots" are less trusting than "haves", probably because haves are treated by others with more honesty and respect...it is reasonable to assume that in each case these patterns reflect actual experience rather than different psychic predisposition to distrust."

In contrast, the scarcity hypothesis suggests that, given their smaller share of the pie, "have nots" are more likely to distrust others because of the higher opportunity cost they are likely to incur if they mistakenly believe that others are trustworthy; this is especially true in contexts of limited economic resources. In other words, according to the scarcity hypothesis low socio-economic status individuals have more to lose in relative terms if they are betrayed by others, particularly in poor countries because resources are more limited. Subsequently, the poor are likely to almost always be "on guard" and suspicious of others, regardless of whether they have been treated with "honesty and respect" or not. This account suggests that the poor's low level of interpersonal trust is just one of the many manifestations of a more general pattern among uneducated and lower class individuals, namely an authoritarian predisposition developed early in life (Adorno 1950; Lipset 1961). For example, Lipset (1961 106) states,

<sup>&</sup>quot;No less important factor predisposing the lower classes toward authoritarianism is a relative lack of economic and psychological security. The lower one goes on the socioeconomic ladder, the greater economic uncertainty one finds...such insecurity will of course affect the individual's politics and attitudes. High states of tension require immediate alleviation, and this is frequently

found in the venting of hostility against a scapegoat and the search for a short-term solution by support of extremist groups."

Lipset's views were largely inspired by Adorno's (1950) seminal work, "*The Authoritarian Personality*," in which Adorno (1950 411) discusses "*distrust and suspicion* of others" as one of the many authoritarian predispositions. Even though the F-scale developed by Adorno has been subject to much criticism on methodological grounds, his view that the authoritarians see the "world as a jungle," or "a world in which one has to destroy others to prevent them from destroying oneself" is often widely accepted today as an accurate portrayal of authoritarian individuals. In Lipset's view, these authoritarian traits are more likely to be held by low socio-economic status individuals.

The literature also suggests that besides a country's macroeconomic development and one's personal socio-economic status, relative economic well-being or economic inequality is also an important determinant of interpersonal trust, notwithstanding national or individual absolute economic well-being. Thus, according to this view, even in contexts where individuals' basic needs are satisfied and economic resources abound, economic conditions can still play a role in the formation of interpersonal trust. In short, economic inequality in and of itself is said to have an independent negative effect on interpersonal trust.

This observation is not new in philosophy or the social sciences. The notion that economic inequality erodes interpersonal trust can be traced back at least to Aristotle, who wrote that where economic inequality is keen, "arises a city, not of freemen, but of masters and slaves, the one despising, the other envying; and nothing can be more fatal to friendship and good fellowship in states than this...the rich and the poor will never consent to rule in turn, because

they mistrust one another."<sup>10</sup> Aristotle saw economic inequality as a powerful destabilizing factor that would ultimately bring down democratic governments.

Nevertheless, as with macroeconomic development, the underlying mechanisms that link economic inequality and the individual's level of interpersonal trust are far from clear in the literature. Along with Aristotle, some scholars have suggested that economic inequality is likely to instill conflict and consequently erode interpersonal trust with the same intensity across both rich and poor. For example, Boix and Posner (1998 688) state that,

"Co-operation among unequals is problematic because there will always be incentives for the poor, who will naturally be dissatisfied with the existing distribution of assets, to defect from co-operative arrangements that perpetuate the status quo. Moreover, to maintain their political and economic privileges, the rich will maneuver to undermine any collective efforts that the poor may undertake to better their lot."

This account suggests that economic inequality is likely to lower the overall level of interpersonal trust in a society given that individuals, no matter whether rich or poor, are likely to *equally* distrust those belonging to a different economic class; that is, in places characterized by high economic inequality rich and poor contribute to the overall decline of interpersonal trust in a similar magnitude. Consequently, the rich and poor in this case both become latent sources of mistrust and in turn discontent and political conflict.

A slightly different mechanism is suggested by the relative deprivation (RD) theory (Gurr 1970), in which "relative deprivation" is defined as "a perceived discrepancy between men's value expectations and their value capabilities" (Gurr 1970 13). In other words, relative deprivation refers to the gap between the ideal and the real, what individuals would like to achieve and what they can actually achieve. Thus, the concept of RD alludes to feelings of dissatisfaction with the status quo among the economically disadvantaged, regardless of their actual absolute level of socio-economic well-being. Although the focus of this theory is not

<sup>&</sup>lt;sup>10</sup> Politics, IV, 11

interpersonal trust per se, but to explain the occurrence of revolutions, the concept of relative deprivation does suggest that by promoting social conflict economic inequality is likely to produce distrust toward dissimilar others especially among economically unprivileged individuals.

Consequently, according to the RD theory, low socio-economic status individuals' perceived disadvantaged position in society triggers discontent and resentment toward those perceived to be better off, to the point of activating the relatively poor's potential for political action and even revolution. The RD hypothesis, then, suggests that economic inequality is likely to erode the average level of interpersonal trust through a "bottom-up" mechanism, with those at the bottom of the economic ladder suffering the mistrust syndrome the most. In this case, the relatively poor are more likely to disproportionally contribute to the overall decline of interpersonal trust in a society.

In general, the limited number of studies that have assessed empirically the effect of economic inequality on interpersonal trust reveal that economic inequality indeed lowers the average level of interpersonal trust in a given society, but are silent about the underlying mechanisms that explain this result. For example, in a recent article, Krishna (2007), based on an analysis of 61 villages in India, concludes that towns divided by differences in wealth have a more difficult time building social capital, including interpersonal trust, than those towns with more similar wealth distributions. Preliminary evidence from the Philippines, based on survey data of poor villages, also suggests that economic inequality diminishes interpersonal trust (Labonne,Biller and Chase 2007). Furthermore, state level evidence for the United States also corroborates these results (Alesina and La Ferrara 2002; Uslaner and Brown 2005). Moreover, cross-country research supports this conclusion. Countries with high economic inequality show

lower levels of interpersonal trust (Knack and Keefer 1997; Uslaner 2002; You 2006; Bjornskov 2007).

Despite the fact that empirical work evidences the negative effect of economic inequality on building harmonious and trusting societies, as was mentioned before, the mechanisms through which this takes place, however, remain largely unexplored. The relevance of examining the mechanisms through which economic inequality and economic development influence how much individuals trust each other goes beyond simple intellectual curiosity; it has important theoretical and policy implications.

Low socio-economic status individuals have typically been blamed for the misfortunes of democratic systems as they have been said to lack the kind of political attitudes and practices necessary to achieve stable democracies,<sup>11</sup> including the attitudes needed to build a strong civil society. Lipset (1959 489,96), for example, states that the characteristics of the poor, including "low education, low participation in political organizations or in voluntary organizations of any type, little reading, isolated occupations, economic insecurity, and authoritarian family patterns" contribute to the development of authoritarian predispositions among them, which translate into "a tendency to view politics, as well as personal relationships, in black-and-white terms." Thus, by examining the mechanisms through which inequality and underdevelopment erode interpersonal trust, this research seeks to answer the question whether the poor are unambiguously blame for the weak social foundations on which Latin American democracies rests, as both the scarcity and RD hypotheses suggest. Indeed, ever since the work of Lipset, the characterization of the poor as being a threat to democracy has been widespread. It was Lipset who popularized the notion of "working class authoritarianism" and linked it closely to the rise of the Nazis in Germany.

<sup>&</sup>lt;sup>11</sup> For a review of the literature that touches on this topic see Krishna (2008).

Additionally, the answer to the question of whom are most distrustful in a given economic context can have important implications for the present and future performance of Latin American democracies. As interpersonal trust works as a "lubricant of the social system" (Arrow 1974), it encourages core democratic principles such as political and social tolerance and also solidarity. Thus, the level of interpersonal trust in a society is a likely determinant of the kind of public policies implemented or to be implemented in practice. In particular, generalized interpersonal trust among economically better-off individuals is likely to encourage them to support redistributive policies even though the relatively rich would be more likely to oppose such policies as they are more likely to suffer the fiscal burden.<sup>12</sup>

Widespread support for public policies obviously decreases the probability of political deadlocks in society, in the case of Latin America increasing the likelihood that governments will implement serious policies to improve the lives of the poor and reduce economic inequality through fiscal reform. Sympathy and trust toward the poor and compromise among the relatively rich is crucial for minimizing redistributive conflicts that characterize poor and unequal societies and, in turn, for making governments more efficient and responsive to the interests of the majority of their citizens.

Conversely, if economically better-off individuals in poor countries show low levels of interpersonal trust and tolerance toward the poor, they will also likely show low support for the implementation of redistributive public policies or for policies from which their economic class does not benefit directly. If this is the case, this would suggest that poor Latin American countries are trapped in a vicious circle, where poverty and inequality are likely to wear away interpersonal trust and at the same time low interpersonal trust, especially among the relatively

<sup>&</sup>lt;sup>12</sup> The impact of interpersonal trust on citizens' support for redistributive policies in the Latin American context is examined in chapter IV of this dissertation.

well-off, leads to low support for redistribution, creating a situation in which a substantial decline in poverty and improvement in the distribution of economic resources are less likely in the near future.

The existing empirical literature about the determinants of interpersonal trust is indeed limited because it does not examine the causal mechanisms that lead to the conclusions that are reached. A major factor in explaining this shortcoming is the almost non-existent multilevel research in the social capital literature. Most studies consist of statistical analyses at either the aggregate or individual level, and therefore do not take into account how both contextual and individual characteristics affect interpersonal trust and the likely interplay between levels of analysis, constraining our knowledge about the processes through which interpersonal trust is formed. In other words, given that most studies do not evaluate simultaneously the likely independent impact of country or community characteristics *and* individual level traits on interpersonal trust, they cannot account for the likely interaction between contextual characteristics and individual level factors. This constraint is in fact a prevalent characteristic of comparative public opinion research and empirical accounts of the attitudinal and behavioral basis of democracy in general.

For example, to empirically test the scarcity and relative deprivation hypotheses outlined above clearly requires the use of multilevel analysis. Economic development and inequality are both contextual variables that are likely to influence the extent of an individual's interpersonal trust. Moreover, both hypotheses suggest a likely interaction between levels of analysis. The RD hypothesis implies that economic inequality has a greater negative impact on interpersonal trust among disadvantaged individuals. Similarly, the scarcity hypothesis suggests that economic underdevelopment is likely to produce mistrust particularly among the relatively poor, since underdevelopment is obviously more costly for them.

Evidently, a multilevel analysis is critical in investigating the mechanism through which economic contextual factors impact individual levels of interpersonal trust. Taken together, the scarcity and RD hypotheses suggest that poor individuals living in poor and unequal countries, two characteristics shared by most Latin American countries, are less likely to trust their fellow citizens and hold the requisite values for democracy than poor individuals living in relatively rich and egalitarian countries. However, this literature also suggests that in both scenarios, the poor are less likely to demonstrate appropriate attitudes and behaviors for deepening democracy than the rich (Lipset 1959).<sup>13</sup> These propositions can only be tested using multilevel modeling.

Another related limitation of the current literature is that most works focus on the effect of either economic development or inequality on the formation of interpersonal trust and other democratic attitudes. The few works that do take into account both variables in a single model fail to recognize the likely reinforcing impact that economic underdevelopment and inequality might have. Given that most works base their analysis on averaged or aggregate figures and ignore the nested nature of the data and the likely interaction between individual and contextual factors, they are only able to examine the likely independent negative impact of economic underdevelopment and/or inequality on averaged interpersonal trust or other democratic attitudes. They do not take into account the mechanisms through which economic underdevelopment and inequality might reinforce each other, shape individuals' attitudes, and jointly create a state of generalized mistrust.

<sup>&</sup>lt;sup>13</sup> Lipset (1959, 484) makes a similar point when he states that "the lower class in any given country may be more authoritarian than the upper class, but on an "absolute" scale, all the classes in that country may be less authoritarian than any class in another country."

Figure II.1 helps explain the mechanisms through which absolute and relative economic well-being are hypothesized to jointly affect the level of interpersonal trust in a society. It depicts four possible scenarios: places characterized by high poverty and high inequality, high poverty and low inequality, low poverty and high inequality, and low poverty and low inequality. The horizontal line in each graph represents the poverty line, the y-axes show individuals' share of total wealth, and the x-axes depict the proportion of the population ordered from poor (first quintile) to rich (fifth quintile). Hence, the steeper the tail of the curve at the fifth quintile, the higher the level of economic inequality.



Figure II-1. Hypothetical Cases: Absolute and Relative Well-Being as Reinforcing Factors

Cases 1 and 2 show two hypothetical environments (i.e. countries or towns) that have the same level of poverty; however, in both scenarios, high proportions of the population live in

poverty.<sup>14</sup> Moreover, it can be observed that the rich have a greater share of total wealth in case 1, as depicted by the steep tail of the curve at the fifth quintile; therefore, case 1 shows greater economic inequality relative to case 2. Given its higher level of inequality, based on the findings of previous works, we would predict the average level of interpersonal trust to be lower in case 1. At the same time, because of the substantial differences in standards of living and personal traits between the majority (the poor) and rest of the population (the rich), it is also likely that the high level of poverty in both cases works to further reduce the level of trust toward unlike others among the rich minority. Indeed, considering that it is more difficult to trust others who are different from ourselves (Stolle, *et al.* 2008), in places where poverty reigns, the relatively rich may demonstrate lower levels of interpersonal trust.

These two hypothetical cases suggest that in sharp contrast to what the scarcity hypothesis predicts, my priors are that in places where poverty is high, better-off individuals are likely to show little trust toward others, as their neighbors are likely to be poor and have a very different set of individual traits, such as lower levels of education and poor health. Research in sociology points toward this situation as the cause of spatial segregation in the United States (Harris 1999); the well-off often opt to move away from places where there is a high proportion of poor people and therefore do not share their interests and characteristics.<sup>15</sup>

Furthermore, when poverty is accompanied by high economic inequality, as in case 1, the economic and social gap between relatively rich and poor widens, sharpening the differences

<sup>&</sup>lt;sup>14</sup> Specifically, cases 1 and 2 depict two hypothetical extreme situations, where exactly 80 per cent of the population is below the poverty line. The curves in each case cross the horizontal line, the poverty line, at exactly the fourth quintile represented by the fourth vertical dashed line. <sup>15</sup> Most research in sociology on segregation patterns has focused on the United States; in this context, neighborhood

<sup>&</sup>lt;sup>15</sup> Most research in sociology on segregation patterns has focused on the United States; in this context, neighborhood preferences seem to be a function of both the racial and socio-economic composition of neighborhoods, two factors that are often difficult to disentangle.

between them and further decreasing the level of generalized interpersonal trust. In sum, it is the thesis of this study that economic inequality works to reinforce distrust between relatively rich and poor in high poverty areas.

In contrast, in places characterized by low poverty, as in hypothetical cases 3 and 4, better off individuals are likely to show higher levels of generalized interpersonal trust vis-à-vis better off individuals living in places similar to cases 1 and 2, because the differences between those at the bottom of the economic ladder and those at the top are not as great. Nevertheless, even though the entire population resides above the poverty line in cases 3 and 4, the level of interpersonal trust is expected to be lower in case 3 because of its higher level of economic inequality. If the empirical evidence supports this conclusion, it would confirm the importance of relative economic well-being even when poverty is low.

Clearly, case 1 constitutes the worse-case scenario and case 4 the best environment for the formation of generalized interpersonal trust. The four cases exemplify the importance of context and the likely interaction between contextual and individual level variables in the formation of interpersonal trust as well as the likely reinforcing effect of economic development and inequality. Considering that our level of interpersonal trust is likely to be conditioned on contextual characteristics, it is easy to see that one's level of interpersonal trust is contingent upon who we are and who others around us are.

Indeed, the levels of cooperation and generalized interpersonal trust in a society have been regarded as products of both contextual and individual characteristics, and not so much as products of isolated individual feelings or preferences, as most political psychologists contend.<sup>16</sup> As Rothstein (2005 13) asserts,

<sup>&</sup>lt;sup>16</sup> For an overview of psychological approaches to the study of social capital, including interpersonal trust, see the special issue on this topic in Political Psychology, specially the introduction by Mondak (1998).

"For the individual, whether or not an action is rational cannot...be determined solely by reference to one's individual preferences, but is rather determined by the social context. It may certainly be rational to choose non-cooperation if one has reason to believe that the others are not going to participate. But if one has reason to trust that others are going to contribute (i.e. that they are actually trustworthy), it may be rational to cooperate."

Therefore, the characteristics of "others" become important when deciding who and how much we trust. The greater the disparities between oneself and those around us, the lower the propensity to trust and cooperate, especially when conflicting economic interests are at stake.

When high poverty and inequality converge, as they do in Latin America, the end result is a society composed of a majority of poor and economically dissatisfied individuals and a minority of very rich citizens. In a scenario like this, how much we trust others is likely to depend on who we are and where we are on the economic ladder. If we are part of the rich minority, then we might be less inclined to trust those dissimilar to us, the relatively economically dissatisfied and poor majority, especially when the differences between haves and have nots are sharp. Therefore, as the most recent social capital literature suggests, the composition of society matters for the formation of interpersonal trust.

In sum, this chapter tests the scarcity and relative deprivation hypotheses using multilevel modeling as well as the alternative hypothesis that in low socio-economic development environments better off individuals are likely to show lower levels of interpersonal trust relative to the rich living in places with higher socio-economic development. This chapter also explores the possibility that economic inequality might work to further deepen social mistrust between haves and have nots.

I expect that when inequality and poverty are high, as is the case in most Latin American countries, the rich will be less likely to trust others as they are part of a social environment where the relatively poor have large presence and the economic distance between poor and rich is substantial. Under these circumstances, conflicts between rich and poor are likely to be deeper, the overall level of interpersonal trust lower, and the rich may even show lower levels of interpersonal trust than the poor.

Besides its general theoretical relevance, this research is particularly important for understanding the constraints that Latin American democracies face and their prospects of deepening democracy. Despite Latin America's high poverty rates and economic inequality, we still know little about their effects on democratization. Cross-country studies include only a handful of Latin American countries in their samples, and little research has been carried out about the effects of economic development and inequality on interpersonal trust in the Latin American context. This study hopes to shed light on how the social foundations of democracy can be built in Latin America.

This chapter builds upon Cordova's (2008) multilevel cross-country analysis of the determinants of interpersonal trust, offering an in-depth analysis of the economic origins of interpersonal trust formation at the country and individual levels, and an examination of the interplay between contextual economic characteristics and individual socioeconomic status for the creation of interpersonal trust. Moreover, taking advantage of the richness of the Latin American Public Opinion (LAPOP) data, I further explore the sources of mistrust among the relatively rich and poor in Latin American countries.

#### **Modeling Interpersonal Trust: Hypotheses and Model Specification**

In this section, I present the hypotheses of this research and the general specification of the multilevel model estimated in this chapter. The main independent variables consist of economic development and inequality. As discussed before, one can find in the literature two prominent

approaches to the study of the impact of economic factors on interpersonal trust, and political culture in general. On one hand, the role of absolute economic well-being for the formation of interpersonal trust is emphasized (the scarcity hypothesis), and on the other, the role of relative economic well-being is prioritized (the relative deprivation hypothesis). Conversely, I argue that it is also likely that each of these two variables have a distinct but reinforcing impact on social trust in a rather different way than the hypothesized mechanisms suggested by these two major approaches. This chapter tests the following hypotheses at each level of analysis:

H1: Individual level : Low socio-economic status individuals are less likely to trust others

## **Scarcity Hypothesis:**

**H2:** <u>Aggregate level</u>: All other things being equal, on average individuals residing in places with low socio-economic development are more likely to show lower levels of interpersonal trust

**H3:** <u>Interaction between levels of analysis:</u> All other things being equal, low socio-economic status individuals residing in places with low socio-economic development are more likely to show lower levels of interpersonal trust

# **Relative Deprivation Hypothesis:**

**H4:** <u>Aggregate level</u>: All other things being equal, on average, individuals residing in places characterized by high economic inequality are more likely to show lower levels of interpersonal trust.

**H5**: <u>Interaction between levels of analysis</u>: *All other things being equal, low socio-economic status individuals residing in places characterized by high economic inequality are more likely to show lower levels of interpersonal trust* 

# Alternative Hypothesis (absolute and relative well-being as reinforcing factors)

**H6**: While economic inequality works to decrease the overall level of interpersonal trust (as suggested by H4), economic underdevelopment decreases the likelihood that better off individuals will show high levels of interpersonal trust so that in highly economically unequal and underdeveloped places the relatively rich may not show higher levels of interpersonal trust in comparison to the poor.

I argue that although, on average, at the individual level low socio-economic status individuals are likely to show lower levels of interpersonal trust, as H1 states, the strength of this individual level relationship is contingent upon the environment where individuals reside such that in places characterized by high poverty and economic inequality, the rich rather than the poor are more likely to show low levels of interpersonal trust. *In sum, I expect to find empirical support for the individual level (H1) and alternative hypothesis (H6) hypotheses, and consequently reject the scarcity and relative deprivation propositions.* 

The conceptual multilevel model of the determinants of interpersonal trust considered here is displayed in Figure II.2. The diagram depicts the hierarchical structure of the model as it takes into account the fact that individuals are nested within groups (i.e. countries or municipalities) with certain characteristics. As can be observed, the economic determinants of interpersonal trust are examined at the individual and aggregate levels of analysis while other factors are simultaneously controlled for. The solid arrows correspond to the expected direct links between contextual and individual level factors and interpersonal trust. The solid arrows that go from the personal "level of income/wealth" variable and from socio-economic development and economic inequality to interpersonal trust correspond to the individual and aggregate level hypotheses, accordingly. Examining the aggregate level determinants of interpersonal trust is equivalent to modeling the intercepts of the multilevel equation and therefore to allow the intercepts of the equations for each group to flow randomly.

The dashed arrows depict the indirect impact of contextual factors on interpersonal trust. Thus, the dashed arrows represent the hypotheses related to the interaction between levels of analysis, specifically the possibility that the strength of the relationship between socio-economic

43

status and interpersonal trust at the individual level is conditional on the economic characteristics of the environment where individuals live. Formally, this is equivalent to allowing the slope of this relationship to vary randomly across economic groups and then exploring the determinants of this variation.





The decision of what control variables to include in the model, especially at level-2 or aggregate level, was made based following the widely cited works in multilevel analysis (Raudenbush and Bryk 2002) and political methodology (King,Keohane and Verba 1994). The advice they provide is to control only for those factors that are related to both the independent variable(s) of interest and the dependent variable, since the main objective of "control" is to rule out the possibility that the observed relationship between two variables is spurious. This is an important point since as discussed in the previous chapter in small-N multilevel analysis the number of variables one can include at the aggregate level is limited and therefore only relevant controls should be accounted for.

At the aggregate level, I have identified seven control variables that satisfy this recommendation: the extent of and experience with democracy, cultural heritage, the level of violence and crime, ethnic diversity, the importance of international migration, and population density. All these variables have been identified in the literature as likely confounding factors between economic development and/or inequality and interpersonal trust.

However, given the small sample size at level-2, twenty-two countries in total, and the corresponding lack of degrees of freedom, it is not possible to deploy all these factors at once in the cross-country multilevel analysis estimated here. Consequently, as discussed in chapter I, to test the robustness of the cross-country multilevel results, multilevel analysis at the local level within a single country is undertaken. Such a strategy allows increasing the number of cases at level-2 while at the same time having the singular advantage of holding constant other confounding factors, such as cultural heritage and the extent of and years of experience with democracy. The next section presents the results of the cross-country multilevel model taking

into account three variables at the country level, economic development, inequality, and the level of democracy. The individual level determinants of interpersonal trust are also discussed.

#### The Determinants of Interpersonal Trust in the Americas: A Multi-level Analysis

The data used in the multilevel analysis presented in this section come from face-to-face interviews in twenty Latin American and Caribbean countries, drawn from the AmericasBarometer surveys of 2006-2007 and 2008 carried out by LAPOP, and phone survey data gathered also by AmericasBarometer in 2006 in Canada and the United States.<sup>17</sup> In total, the database includes over 34,000 individual interviews. The 2006-07 round of surveys facilitated comparisons between two clusters of nations with dissimilar levels of social trust and political and economic development. Specifically, these data make it possible to examine why Latin American and Caribbean countries have lower levels of social trust than Canada and the United States. Thus, at the aggregate level or level-2, "countries" constitute the units of analysis.

The aggregate data on economic inequality and socio-economic development come from the Human Development Report 2007, published by the United Nations Development Program (UNDP). Using the most recent figures available, the Gini coefficient and the income share of the richest 20 percent of the population were used as measures of economic inequality. <sup>18</sup> The socioeconomic development variable corresponds to the UNDP Human Development Index for

<sup>&</sup>lt;sup>17</sup> Except for Argentina and Brazil, all the data correspond to the 2006 round of the AmericasBarometer survey by LAPOP. For these two countries the data correspond to the 2008 round. Argentina was included for the first time in 2008. In the case of Brazil, the wording of the interpersonal trust variable in the 2006 survey was not equivalent to the rest of countries; however, the wording of the interpersonal trust item in the questionnaire for Brazil was compatible with the rest of countries in the 2008 survey.

<sup>&</sup>lt;sup>18</sup> The Gini coefficient can have a value between zero and one; it measures the extent of income inequality in a country. A larger Gini indicates a greater degree of income inequality.

2005, also the most recent estimate available.<sup>19</sup> The level of democracy variable is the inverted total score for political rights and civil liberties by Freedom House in 2006.<sup>20</sup>

The following item in the AmericasBarometer survey measures individuals' level of interpersonal trust, the dependent variable explored in this and the next chapter of this dissertation:

Now, speaking of the people from around here, would you say that people in this community are generally very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy?

Interpersonal trust, in this study, then, refers to how confident individuals feel about people outside their immediate family circle. As mentioned before, the type of trust that is likely to enhance democracy is the one that makes individuals sympathetic to people who may have different beliefs, ideologies, or backgrounds than one's own, and consequently this type of trust ought to contribute to the establishment of more harmonious and, ultimately more stable democracies, namely *generalized* interpersonal trust.

Figure II.3 shows that as expected, based on this measure of interpersonal trust, in the Americas there are significant differences in the level of interpersonal trust across countries.<sup>21</sup> The average value of interpersonal trust ranges from 42.1 to 82.8. The most economically and politically developed countries in the Americas, Canada and the United States, as the literature predicts show much higher levels of interpersonal trust than other countries in the hemisphere. In sharp contrast, countries like Bolivia, Peru, and Haiti show the lowest levels of interpersonal

<sup>&</sup>lt;sup>19</sup> The Human Development Indicator (HDI) is a composite measure of the level of socioeconomic development in a country. It encompasses three measures of socioeconomic well-being: economic resources (GDP per capita at purchasing power parity), an index of education, and a health indicator, as measured by life expectancy at birth. The HDI ranges between zero and one, with a higher value denoting a higher level of development.

<sup>&</sup>lt;sup>20</sup> The formula used was the following: level of democracy=[14-(score for political rights+ score for civil liberties)]

<sup>&</sup>lt;sup>21</sup> The interpersonal trust item from the LAPOP survey was recoded into a 0-100 scale. A value of 0 corresponds to the category "very untrustworthy," 33 "somewhat untrustworthy," 66 "somewhat trustworthy," and 100 "very trustworthy."

trust. Within Latin America, the countries with the highest average levels of interpersonal trust area Honduras, Costa Rica, Paraguay, Colombia, and Uruguay.



Figure II-3. Average Interpersonal Trust in the Americas

The first model examines the factors that explain such varying average levels of interpersonal trust across countries once individual level factors are accounted for. The multilevel model that tests the individual and aggregate level hypotheses of this chapter taking "countries" as level-2 units of analysis examines the effect of economic development and inequality on interpersonal trust while holding constant the level of democracy in each country.

The first model is formally specified as follows:

#### Model 1: Intercept as an outcome model (Random intercept):

 $\beta_{0j} = \gamma_{00} + \gamma_{01}$  (Economic inequality)<sub>j</sub> +  $\gamma_{02}$  (Economic Development)<sub>j</sub> +  $\gamma_{03}$  (Level of Democracy)<sub>j</sub> +  $u_{0j}$ 

Where, j stands for country j; and i for person i

#### Model in Combined Form (Contextual and Individual level variables):

Interpersonal Trust<sub>ij</sub> =  $\gamma_{00} + \gamma_{01}$  (Economic inequality)<sub>j</sub> +  $\gamma_{02}$  (Economic Development)<sub>j</sub> +  $\gamma_{03}$  (Level of Democracy)<sub>j</sub> +  $\beta_1$  (Income Level)<sub>i</sub> +  $\beta_2$  (Corruption Victimization)<sub>i</sub> + $\beta_3$  (Crime Victimization)<sub>i</sub> +  $\beta_4$ (Participation in Civic Groups)<sub>i</sub> + $\beta_5$  (Education)<sub>i</sub> +  $\beta_6$  (Age)<sub>i</sub> +  $\beta_7$  (Age Squared)<sub>i</sub>+  $\beta_8$  (Sex)<sub>i</sub> +  $u_{0j}$ +  $r_{ji}$ 

For all the interpersonal trust models estimated in this chapter and the next, I use a hierarchical non-linear procedure, also called hierarchical generalized models (HGLM), which takes into account the nested nature of the data (i.e. individuals within countries) and the non-linear nature of the dependent variable.<sup>22</sup> Given that the dependent variable, interpersonal trust, is an ordinal variable, the most appropriate method of estimation is a non-linear model or an ordered logit multilevel model,<sup>23</sup> although similar results are obtained if a linear function is assumed.

The properties of multilevel models make it possible to assess how both individual traits and contextual factors affect the dependent variable. For example, multilevel models allow us to explore why, once individual characteristics are controlled for, an individual living in a Latin American country shows on average a lower level of interpersonal trust than an individual with similar characteristics living in Canada or the United States; that is how contextual

<sup>&</sup>lt;sup>22</sup> All multilevel models in this research were estimated using the software HLM version 6.06.

<sup>&</sup>lt;sup>23</sup> Ordered categorical models, in general, are appropriate when the dependent variable "can be ranked from low to high, but the distances between adjacent categories are unknown" (Long 1997 114), that is when the dependent variable is an ordinal variable. For further explanation concerning the estimation of hierarchical models using ordinal dependent variables see Raudenbush and Bryk (2002), chapter 10, pages 371-325.

characteristics determine the average level of interpersonal trust in a country. As the aggregate level hypotheses indicate, this chapter claims that economic structural factors explain, at least in part, the lower average levels of interpersonal trust in Latin American countries.

At the individual level, eight variables are included in the model: income level, corruption victimization, crime victimization, participation in civic groups, years of schooling, age, age squared, and gender. The exact wording and description of these variables in the LAPOP surveys are shown in the appendix at the end of this chapter. All these variables have been found to be correlated with interpersonal trust in the literature.

Among the factors that have been found to foster interpersonal trust is participation in civic groups. According to the literature, civic participation and interpersonal trust form a "virtuous circle" and consequently those who participate in voluntary groups are expected to show higher trust in others (Putnam 1993).

On the other hand, large scale studies suggest that countries characterized by high corruption show lower levels of interpersonal trust (Rothstein and Uslaner 2005; You 2006). Given the high levels of corruption in the region, a similar relationship is expected to hold at the individual level in Latin America (Seligson 2002a ; Seligson and Zephyr 2008). Individuals who have been asked for a bribe by a public official are expected to show lower interpersonal trust as they are likely to perceive that others are often looking for ways to take advantage of them, and also because corruption itself becomes as a sign of the fragility of the rule of law and consequently of the vulnerability that individuals face in their daily interactions in a given social context (Rothstein 2000). High crime rates have also been found to be negatively related with interpersonal trust in cross-country studies (Lederman,Norman and Menendez 2002), and personal experience with crime to erode interpersonal trust in the Latin American context

(Córdova 2008; Cruz 2008). In sum, experience with corruption and/or crime is expected to lessen interpersonal trust at the individual level.

As mentioned above, the bulk of the empirical literature shows that at the individual level higher socioeconomic status, either measured by income/wealth or education, is linked with higher levels of interpersonal trust. There is also evidence that men and middle aged persons tend to be more trusting (Newton 2001). Besides these individual level factors, other characteristics have also been found to be correlated with interpersonal trust, such as life satisfaction, size of place, and religion. These variables were not considered in the cross-country analysis as they were not included in the surveys for Canada and the United States. However, these factors are taken into account in the sub-national multilevel analysis in the next chapter.

Table II.1 presents the results for the first model. The results of the one way ANOVA model with random effects confirmed that there is statistically significant variation in average interpersonal trust across countries, as depicted by p-value of the variance component for the intercept in Table II.1. The decomposition of the total variance revealed that 10 per cent of the variation in interpersonal trust can be attributed to country or contextual characteristics while the remaining 90 per cent is due to individual level differences. Although the country level effects are seemingly low, as Anderson and Singer (2008) note in their comparative study for European countries, this is not surprising in regional multilevel or small-N level 2 analyses as most countries share a similar set of characteristics and the bulk of the data are measured at the individual level.<sup>24</sup> In addition, the reliability indexes, shown in Table II.1, indicate that on

<sup>&</sup>lt;sup>24</sup> In this study, Anderson and Singer (2008) investigate the individual and country level determinants of political legitimacy. Using survey data from a sample of 20 European countries, Anderson and Singer find that the proportion of the total variance in this variable explained by country level characteristics is 12 per cent, whereas the proportion of the total variance due to individual characteristics is 88 per cent.

average the estimates for the random intercepts in each country have a high degree of precision  $(\lambda > 0.90)$ .<sup>25</sup>

Also from Table II.1, it can be observed that all individual level variables are statistically significant and have the expected sign, except for the age variables. As suggested by previous studies, personal experience with crime and corruption erodes interpersonal trust, while higher socio-economic status, measured by income and years of schooling, is linked with greater levels of interpersonal trust. Thus, the results lend support to the individual level hypothesis (H1) of this research. However, as depicted by the size of standardized coefficients for the income and education variables, individual income is a more powerful determinant of interpersonal trust than education. Economically disadvantaged individuals in the Americas suffer the most from the mistrust syndrome. In terms of the demographic variables, males do show a higher propensity to trust others, as the literature suggest. On the other hand, on average no age effects are observed.

It is also noteworthy that the estimated "thresholds" or the difference in the log odds of category two (*somewhat trustworthy*) versus one (*very trustworthy*) and category three (*not very trustworthy*) versus two (*somewhat trustworthy*) of the dependent variable are statistically significant, holding constant individual and country level explanatory variables. This last point suggests that individuals in higher categories of the dependent variable show unambiguously higher levels of interpersonal trust, confirming the "ordinal" or incremental nature of the interpersonal trust variable.

Additionally, as Table II.1 shows, the total number of observations at the individual level used for the estimation of the multilevel models is approximately 29,500 cases; about 14 per cent

<sup>&</sup>lt;sup>25</sup> Reliability estimates for the intercept greater than 0.70 are generally considered good (Raudenbush, *et al.* 2000). Reliability indexes answer the question of how confident we can be about the accuracy of each level-2 unit intercept and slope estimates. As Raudenbush and Bryk (2002, 79) explain, "these indices depend on two factors: the degree to which the true underlying parameters vary from [level-2 unit to level-2 unit] and the precision with which each [level-2 unit]'s regression equation is estimated."

of this total in the original dataset was dropped due to missing data. This relatively large number of missing cases is explained by the high none-response rate (about 12%) associated with the personal income variable. This problem is overcome in this study, discussed further on, by using an alternative measure of personal economic status in the analysis that follows, restricted to Latin American countries. Specifically, an index of wealth based on household assets and access to basic services indicators included in the LAPOP surveys is estimated using Principal Component Analysis (PCA). Given that information on household assets and services is not available for Canada and the United States, the multilevel models presented in this chapter use personal income instead. However, given the large overall sample size at the individual level for the cross-country analysis presented here, it is unlikely that the relatively high proportion of missing data is biasing the results.

The country-level results of the multilevel model in Table II.1 produce important conclusions. First, contrary to common expectations, socio-economic development or absolute economic well-being is not a strong predictor of observed differences in the average level of interpersonal trust across countries in the Americas. When entered by itself, the socio-economic variable (HDI) is statistically significant, but once economic inequality and democracy are taken into account its effect vanishes. Similarly, the statistically significant positive impact of democracy disappears once economic inequality is included in the model.<sup>26</sup> Second, and most important for the thesis of this dissertation, is that in contrast, economic inequality, either measured using the Gini coefficient (see equation 1 in Table II.1) or the income share of the highest 20 per cent (see equation 2), was unambiguously found to be a statistically significant and negative predictor of interpersonal trust.

<sup>&</sup>lt;sup>26</sup> Appendix 2 shows the effect of each level-2 variable when entered alone in the model.

Yet, because of the small sample size at the country level, the statistical significance of this relationship is somewhat uncertain. Table II.1 compares the model-based standard errors to the estimated robust standard errors, showing that depending on whether one picks one or the other, the statistical significance of the economic inequality coefficient varies substantially. For example, in the case of the Gini coefficient(see equation 1 in Table II.1), if the model based standard errors are chosen, the statistical significance for this variable is about 7 per cent. In contrast, if one picks robust standard errors, the statistical significance for this variable is less than 2 per cent. Furthermore, given the small sample size, twenty two countries, the output from HLM v.6 yields the following warning "the robust standard errors are appropriate for datasets having a moderate to large number of level 2 units. These data do not meet this criterion." Thus, between the two, robust or model based standard errors, there is no way to determine what reported statistical significance level is more accurate.

However, it is worth mentioning that both reported p-values are within the standard accepted levels, signifying that economic inequality is the most important explanatory factor of the observed variations in average interpersonal trust once individual level factors and countries' economic development and level of democracy are taken into account. Moreover, the results show that the country level variables included in the model explain a relatively high proportion of the total variance in average interpersonal trust across countries, above 42 percent.

Table II-1. Results Multilevel Model: Intercept as an outcome model   (Standardized coefficients)										
	(Standardized coefficients)				Equation 2					
Fixed Effects:	Coef.	Model S. Err.	P- Value	Robust S. Err.	P- Value*	Coef.	Model S. Err.	P- Value	Robust S. Err.	P- Value*
Contextual Variables (Random Intercept)										
Intercept, $\gamma_{00}$	-1.181	0.101	0.000	0.118	0.000	-1.180	0.100	0.000	0.117	0.000
Economic Inequality [GINI], $\gamma_{01}$	-0.253	0.129	0.065	0.094	0.015					
Economic Inequality [Share Highest 20%], $\gamma_{01}$						-0.262	0.131	0.057	0.095	0.013
Economic Development, $\gamma_{02}$	0.118	0.202	0.566	0.171	0.500	0.112	0.202	0.601	0.175	0.547
Level of Democracy, $\gamma_{03}$	0.068	0.182	0.713	0.153	0.662	0.071	0.181	0.700	0.163	0.668
Individual Level Variables										
Income Level, $\beta_1$	0.101	0.014	0.000	0.027	0.000	0.101	0.014	0.000	0.026	0.000
Corruption victim, $\beta_2$	-0.083	0.011	0.000	0.015	0.000	-0.083	0.011	0.000	0.015	0.000
Crime victim, $\beta_3$	-0.138	0.011	0.000	0.009	0.000	-0.138	0.012	0.000	0.009	0.000
Participation in Civic Groups, $\beta_4$	0.065	0.011	0.000	0.014	0.000	0.065	0.011	0.000	0.014	0.000
Education, $\beta_5$	0.043	0.013	0.001	0.023	0.056	0.043	0.013	0.001	0.023	0.056
Age, $\beta_6$	0.059	0.058	0.312	0.070	0.412	0.059	0.058	0.311	0.071	0.411
Age squared, $\beta_7$	0.103	0.058	0.077	0.070	0.143	0.103	0.058	0.077	0.070	0.143
Sex (Male=1; Female=0), $\beta_8$	0.099	0.011	0.000	0.012	0.000	0.099	0.011	0.000	0.012	0.000
Threshold 2,	1.759	0.015	0.000	0.079	0.000	1.759	0.015	0.000	0.080	0.000
Threshold 3	3.587	0.023	0.000	0.104	0.000	3.589	0.023	0.000	0.104	0.000
Random Effects:										
Intercept, u <sub>0</sub> (Variance Component) Percent Explained, Intercept, u <sub>0</sub> Reliability Intercept	0.219 42.23% 0.987		0.000			0.216 42.90% 0.987		0.000		
N. Obs Country Level			22					22		
N. Obs Individual Level			29563					29563		
*P-value based on robust standard error										

Figure II.4 graphically presents the fitted values of the intercepts derived from a HLM model that simultaneously accounts for the effect of economic inequality and the individual level characteristics discussed above.<sup>27</sup> Specifically, Figure II.4 shows the average predicted values of interpersonal trust at different levels of economic inequality across countries while holding constant individual level characteristics at their mean value; that is, it shows graphically the estimated level of interpersonal trust that an average individual in the Americas would have if he or she were to move from a country with a relatively low level of economic inequality to another with a higher level, or vice versa. From Figure II.4, two points are noteworthy. First, there is a strong negative relationship between economic inequality and interpersonal trust levels across countries. Depending on the level of economic inequality in the country where one lives, an average citizen in the Americas can show a level of interpersonal trust ranging between 52 and 74 points, ceteris paribus.

Secondly, when comparing Figure II.3 and Figure II.4, it can be observed that the Latin American countries that were at the top in terms of interpersonal trust in Figure II.3, such as Honduras, Costa Rica, and Paraguay, are located in a much lower position in Figure II.4, suggesting that while individual characteristics favor the creation of interpersonal trust in these countries vis-à-vis other countries in Latin America, once individual level factors and their relatively high levels of economic inequality are taken into account, they are situated in a much lower position. This finding reflects the importance of taking into account contextual factors simultaneously with individual characteristics when comparing aggregate data across countries. In this case, the results suggest that the extent of economic inequality in a country matters for the

<sup>&</sup>lt;sup>27</sup> The fitted values for the intercepts were estimated assuming a linear function, and therefore a normally distributed dependent variable, rather than using a nonlinear function or ordered logit regression, in order to facilitate the interpretation of the estimated intercepts. An ordered logit multilevel procedure should be considered more appropriate in this case because of the nature of the dependent variable, but a linear multilevel model yielded similar results.

formation of interpersonal trust, implying that if an average Latin America citizen, all other things being equal, migrates from his or her country of origin to Canada or the United States, he or she would become far more trusting of others, given these two countries relatively lower levels of inequality. On the other hand, the extreme economic inequality in Haiti and Bolivia would make the same individual more distrusting of the others.



Figure II-4. Predicted Average Interpersonal Trust by Economic Inequality and Country

The second model, formally presented in the equations below, tests for the possibility that the effect of contextual economic factors on interpersonal trust are conditional on one's socioeconomic status; that is that contextual economic factors, either economic inequality or development, does not exert an equal effect across individuals belonging to different economic groups. Specifically, the second model tests the hypotheses that the characteristics of the economic context where individuals live determine the strength of the relationship between one's socio-economic status (i.e., household income) and interpersonal trust. For example, although on average higher socio-economic status individuals show higher levels of interpersonal trust, the "alternative" hypothesis (H6) suggests that this relationship may not hold in countries characterized by high levels of underdevelopment. Therefore, in this second model, the factors that explain possible variation in the slopes of the individual income variable across countries are also examined.

Formally, the second model is specified as follows:

### **Model 2:** Intercept and slope as outcomes model (Random intercepts and slopes) Modeling the intercept:

 $\beta_{0j} = \gamma_{00} + \gamma_{01}$  (Economic inequality)<sub>j</sub> +  $\gamma_{02}$  (Economic Development)<sub>j</sub> +  $\gamma_{03}$  (Level of Democracy)<sub>j+</sub>  $u_{0j}$ 

### Modeling the slope of the income variable:

 $\beta_{1j} = \gamma_{10} + \gamma_{11}$  (Economic inequality)<sub>j</sub> +  $\gamma_{12}$  (Economic Development)<sub>j</sub> +  $u_{1j}$ 

Where, j stands for country j; and i for person i

### Model in Combined Form (Contextual and Individual level variables):

Interpersonal Trust<sub>ij</sub> =  $\gamma_{00} + \gamma_{01}$  (Economic inequality)<sub>j</sub> + $\gamma_{02}$  (Economic Development)<sub>j</sub> + $\gamma_{03}$  (Level of Democracy)<sub>j</sub> +  $\gamma_{10}$  (Income)<sub>ij</sub> + $\gamma_{11}$ (Economic Inequality)<sub>j</sub>\*(Income)<sub>ij</sub> +  $\gamma_{12}$ (Economic Development)<sub>j</sub>\*(Income)<sub>ij</sub> +  $\beta_2$  (Corruption Victimization)<sub>i</sub> + $\beta_3$  (Crime Victimization)<sub>i</sub> +  $\beta_4$  (Participation in Civic Groups) +  $\beta_5$  (Education)<sub>i</sub> +  $\beta_6$  (Age)<sub>i</sub> +  $\beta_7$  (Age Squared)<sub>i</sub>+  $\beta_8$  (Sex)<sub>i</sub> +  $(u_{0j}+u_{1j}$  (Income)<sub>ij</sub> +  $r_{ji}$ )

The results are presented in Table II.2. Economic inequality continues to be the main predictor of the differences across countries in interpersonal trust, indicating that this result is stable. Once again this result holds whether the Gini coefficient or the income share of the highest 20 percent is employed as a measured of economic inequality and controlling for countries' economic development and level of democracy. However, Table II.2 further illustrates

the methodological perils of working with small samples in multilevel modeling given that it is not possible to obtain appropriate robust standard errors. In this case, if model-based standard errors are used, the associated error or statistical significance is about 8 or 10 per cent, depending whether economic inequality is measured using the Gini or the 20 per cent share, accordingly. In contrast, if robust standard errors are used, although inappropriate for this sample size, then the associated error is about 2 or 3 per cent.

The results of the second model also show that the variance component for the slopes of the income variable is statistically significant (p<0.001), indicating that there are significant variations in the strength of the relationship between individual income and interpersonal trust across countries.<sup>28</sup> The results of the model suggest that the strength of this relationship is conditioned on countries' level of socio-economic development, with richer individuals showing lower levels of interpersonal trust in countries with relatively low socio-economic development, even after controlling for economic inequality. This result is statistically significant at five percent (p<0.05), irrespective of the use of model-based or robust standard errors. The percentage of the total variance in the slopes explained by the model is about 22 per cent.

<sup>&</sup>lt;sup>28</sup> While statistically significant variation in the slope of the individual income variable was found across countries, the slope of the education variable, another indicator of socio-economic status, was found to be constant. This suggests that, unlike income, the effect of education on interpersonal trust is not conditional on the characteristics of the place of residence. The level of interpersonal trust across income groups, on the other hand, varies from country to country.

Table II-2. Results Multilevel Model: Intercept and slope as outcomes model											
(Standardized Coefficients)											
		Equation 1				Equation 2					
Fixed Effects:	Coef.	Model S. Err.	P- Value	Robust S.Err.	P- Value*	Coef.	Model S. Err.	P- Value	Robust S.Err.	P- Value*	
Contextual Variables (Random Intercept)											
Intercept, $\gamma_{00}$	-1.184	0.107	0.000	0.124	0.000	-1.184	0.106	0.000	0.122	0.000	
Economic Inequality [GINI], $\gamma_{01}$	-0.245	0.136	0.088	0.099	0.023						
Economic Inequality [Share Highest 20%], $\gamma_{01}$						-0.261	0.137	0.072	0.100	0.018	
Economic Development, $\gamma_{02}$	0.150	0.211	0.486	0.186	0.429	0.134	0.210	0.532	0.188	0.486	
Level of Democracy, $\gamma_{03}$	0.109	0.188	0569	0.144	0.458	0.115	0.186	0.545	0.152	0.461	
Contextual Variables (Random Slope)											
Income Level, $\beta_1$											
Intercept, $\gamma_{10}$	0.117	0.036	0.009	0.025	0.000	0.117	0.036	0.004	0.025	0.000	
Economic Inequality [GINI], $\gamma_{11}$	0.021	0.047	0.649	0.047	0.655						
Economic Inequality [Share Highest 20%], $\gamma_{11}$						0.013	0.047	0.783	0.043	0.765	
Economic Development, $\gamma_{12}$	0.122	0.045	0.014	0.039	0.007	0.118	0.036	0.004	0.039	0.009	
Individual Level Variables											
Corruption victim, $\beta_2$	-0.081	0.011	0.000	0.015	0.000	-0.081	0.011	0.000	0.015	0.000	
Crime victim, $\beta_3$	-0.138	0.011	0.000	0.008	0.000	-0.138	0.011	0.000	0.008	0.000	
Participation in Civic Groups, $\beta_4$	0.067	0.011	0.000	0.013	0.000	0.067	0.011	0.000	0.013	0.000	
Education, $\beta_5$	0.035	0.013	0.009	0.018	0.056	0.035	0.013	0.009	0.018	0.056	
Age, $\beta_6$	0.050	0.058	0.443	0.044	0.544	0.044	0.058	0.445	0.073	0.546	
Age squared. $\beta_7$	0.120	0.058	0.039	0.073	0.097	0.121	0.058	0.039	0.073	0.096	
Sex (Male=1; Female=0), $\beta_{\circ}$	0.098	0.011	0.000	0.012	0.000	0.098	0.011	0.000	0.012	0.000	
Threshold 2.	1.764	0.015	0.000	0.080	0.000	1.764	0.015	0.000	0.079	0.000	
Threshold 3		0.023	0.000		0.000	3.598	0.023	0.000	0.104	0.000	
	3.560			0.104							
Random Effects:											
Intercept, u <sub>0</sub> (Variance Component)	0.244		0.000			0.241		0.000			
Quintiles, slope u <sub>1</sub> (Variance Component)	0.022		0.000			0.022		0.000			
Percent Explained, Intercept, u <sub>0</sub>	36.0%					36.82%					
Percent Explained, slope $u_1$	22.0%					22.07%					
Reliability Intercept	0.981					0.981					
Reliability Slope	0.825					0.826					
N. Obs Country Level			22					22			
N. Obs Individual Level			29,561					29,561			
*P-value base on robust standard errors											

Figure II.5 shows the fitted values of the coefficients or slopes associated with the individual income variable across countries ( $\gamma_{12j}$ ). Specifically, it depicts the strength of the relationship between interpersonal trust and individual income (the slope or estimated coefficient) across countries according to their level of socio-economic development. As shown, the higher the socio-economic development of a country, the strength of this relationship between individual income and interpersonal trust. Interestingly, the strength of this relationship varies substantially across countries in the Americas. The slopes or estimated coefficients range from -2.20 to 4.31 standardized units. At the very top, one finds, not surprisingly, Canada and the United States, suggesting that given these countries high level of socio-economic development, high income individuals show on average higher levels of interpersonal trust than those at those at the bottom of the income distribution, ceteris paribus.



Figure II-5. Predicted Value Slope of Income Variable by HDI and Country

In sharp contrast, in Haiti, the poorest country in the Americas, the relationship between income and interpersonal trust shows a reverse pattern. Contrary to what the bulk of the literature predicts, the overall low level of interpersonal trust in this country is mainly explained by the higher levels of *mist*rust among better off individuals. In other words, the higher an individual's income in Haiti, the lower his or her levels of interpersonal trust, all things being equal. In fact, Hatians who are better off show lower levels of interpersonal trust in comparison to the poor. On the other hand, in poor countries like Guatemala and Bolivia, the theorized positive relationship between income and interpersonal trust is almost nonexistent as the coefficient is positive but very close to zero, suggesting that the rich and poor have similar low levels of interpersonal trust in those countries. In other words, context sharply alters the impact of income on interpersonal trust, moving from positive, to neutral to negative.

Returning to the hypotheses of this chapter, the results lend support to the individual level hypothesis; on average, higher socio-economic status individuals show higher levels of interpersonal trust. However, taken together the results do not support either the scarcity or relative deprivation hypotheses. Moreover, the level of socio-economic development in a country does not uniformly predict its level of interpersonal trust. Rather, the findings demonstrate that a low level socio-economic environment does not nurture mistrust among the relatively poor but among the rich. Thus, a country's socio-economic development appears to mediate the relationship between individual socio-economic status and interpersonal trust, but the opposite of what the scarcity hypothesis predicts, since the coefficient of the HDI variable shows a positive rather than a negative sign. By the same token, although economic inequality lowers the average level of interpersonal trust in a country, contrary to what the relative deprivation hypothesis suggests, it produces a similar effect across economic groups. Economic inequality appears to erode the level of interpersonal trust of both rich and poor.

In sum, the results of the cross-country multilevel analysis give support to the alternative hypothesis presented in chapter. Economic inequality and underdevelopment show a reinforcing effect that works to decrease interpersonal trust. While low socio-economic environments reduce the effectiveness of individual income or socio-economic status to boost interpersonal trust, economically unequal environments further decreases the overall level of interpersonal trust between the rich and poor. While those at the bottom of the economic ladder are more prone to distrust as the distance between them and those at the top widens, the rich are also more likely to distrust unlike others in unequal environments but especially when underdevelopment and poverty are stark.
### **Explaining the Findings**

The previous analysis raises two questions: why *on average* at the individual level do the poor show lower levels of interpersonal trust, regardless of the characteristics of the environment in which they live? And why do the relatively rich show lower levels of interpersonal trust in environments characterized by low levels of socio-economic development?

### **Prejudice against the Poor?**

With regard to the first question, as discussed at the beginning of this chapter, research on this question is divided. Some authors attribute the poor's lower interpersonal trust to a general pattern of authoritarian predispositions that have their roots in child rearing practices; others, suggest that the poor are less likely to trust others because of their negative experiences in life, especially social discrimination. Until now, there have been few tests of these alternative conceptualizations, but the LAPOP data make it possible to test the hypothesis that experiences with discrimination lowers individuals' trust toward others, especially among the poor.

In order to test this hypothesis a "discrimination index" was computed based on the following two items in the LAPOP surveys using data for eighteen Latin American countries:<sup>29</sup>

Have you ever felt discriminated against or treated in an unjust manner because of your physical appearance or the way you talk in any of the following places? In meetings or social events? (yes or no) In public places? (yes or no)

The index takes the value of 1 if a respondent said "yes" to at least one of these two questions, or zero otherwise. Based on this index, on average in the Americas, more than 15 per cent of the total population stated that they felt that they had been victims of an act of

<sup>&</sup>lt;sup>29</sup> These items were only available in the eighteen countries included here.

discrimination. However, there are substantial differences across countries. Discrimination in Haiti is particularly alarming, with 52.5 percent of the population reporting having been victimized, followed by Bolivia with 25.1 per cent. In contrast, in Nicaragua and Panama this figure is less than six per cent.



Figure II-6. Per cent of Population Victims of Discrimination by Country

In this and the next sections of this chapter, individual socio-economic status is measured using an index of relative wealth rather than income level in order to minimize the number of missing values. As shown in the previous analysis in this chapter, the proportion of missing values due to non-response associated with the income variable is relatively high. As is fully explained in the appendix at the end of this chapter, a "quintiles of wealth" variable was computed using Principal Component Analysis (PCA) based on household assets and access to basic services indicators available in the LAPOP surveys for all countries except Canada and the United States. In the previous section "income level" rather than quintiles of wealth was used as a measure of economic status because Canada and the United States were included in the analysis. The PCA allows computing a measure of individual wealth in the absence of income or consumption data taking into account the distribution of wealth in a country or town.

The results of an ordered logit model including the discrimination index as a predictor of interpersonal trust are shown in Figure II.7. The model was estimated for seventeen Latin American countries. Given Haiti's extremely high discrimination rates, it was excluded from the analysis in order to avoid having this outlier country driving the results. The standardized coefficients associated with each variable entered in the model and their respective confidence intervals are displayed graphically. If the confidence intervals of the standardized coefficients coefficients as a non-significant result; on the contrary, a confidence interval to the left or right of the vertical line indicates a negative or positive effect at a 5 per cent statistical significance level, respectively.

As can be observed, being a victim of discrimination significantly and strongly reduces one's level of interpersonal trust, even after taking into account competing explanatory factors and country effects (not shown in model to simplify presentation). Indeed, Figure II.7 shows that the effect of discrimination on interpersonal trust is stronger than the effect of other negative experiences in life such as crime and corruption victimization.

67



Figure II-7. Effect of Discrimination on Interpersonal Trust

The next issue to examine is whether the poor are more likely to be victims of discrimination than the rich. The data also show strong evidence of discrimination against the poor. As shown in Figure II.8, in Latin America the poor, specifically those belonging to the poorest two quintiles of wealth are more likely to be victims of discrimination, regardless of their level of education, ethnicity, age, sex, area of residence, and country effects.<sup>30</sup> This suggests that even in ethnically homogenous countries discrimination can be high, especially in poor and highly unequal countries, as the case of Haiti suggests.

<sup>&</sup>lt;sup>30</sup> Economic status is here measured based on "wealth" rather than income, using first principal component analysis and household assets and access to basic services as explained in the appendix of this chapter. Wealth levels were used instead of income in order to minimize the proportion of missing values in the sample. However, similar results were obtained if income was used instead.



Figure II-8. Predictors of Discrimination

The results show that both ethnic diversity and economic heterogeneity work to elevate discrimination levels. Individuals self-identified as black, indigenous, or another ethnic group are more likely to be victims of discrimination than those self-identified as mestizo, the reference category in the regression analysis. On the other hand, individuals self-identified as whites show a lower probability of being victims of discrimination than mestizos. It is also notable that males and individuals in urban areas are more likely to be victims of discrimination, presumably because of their higher likelihood to interact with others outside their family and community circle.

Finally, Figure II.9 graphically presents the results of an ordered logit model that test the hypothesis that the effect of discrimination on interpersonal trust is conditional on one's economic position in society (i.e. the model interacts the discrimination index with the quintiles of wealth variable). Specifically, Figure II.9 indicates the probability of falling in each of the categories of the interpersonal trust variable depending whether or not an individual has been victim of discrimination by level of wealth.<sup>31</sup> As expected, the poor who have being victims of discrimination show much lower levels of interpersonal trust in comparison to better off individuals who have also being victims, explaining in part why on average at the individual level, regardless of country characteristics, the poor show lower levels of interpersonal trust.

<sup>&</sup>lt;sup>31</sup> The full output of the regression results can be found in appendix 4 at the end of this chapter. The statistical significance of the interaction term is p<0.005. For a detailed explanation about how to estimate and interpret models that include interaction terms see Kam and Franzese (2007).



Figure II-9. Impact of Discrimination on Interpersonal Trust by Quintiles of Wealth

Figure II.9 shows that for someone who has been a victim of discrimination, the probability of finding the people in their community "very untrustworthy" drops as individual wealth increases. Conversely, the probability of finding people in the community "very trustworthy" among those who have been victims of discrimination increases as individual socio-economic status improves. This implies that the burden of discrimination on interpersonal trust is deeper among lower socio-economic status individuals, which is likely to be explained by greater likelihood of their being treated unfairly.<sup>32</sup> This analysis demonstrates that discrimination obviously represents a threat to equality-one of the most important pillars of democracy. And

<sup>&</sup>lt;sup>32</sup> Moreover, the extent of the gap in Figure 9 between the line representing those who stated to have been victims of discrimination and those who did not reveal the significant negative impact of discrimination on interpersonal trust.

one of the channels in which discrimination particularly puts at risk democratic stability in Latin American countries is through the erosion of interpersonal trust among the poor.

### Fear of being a Victim of Crime?

The second question explored in this section is why the relatively rich show lower levels of interpersonal trust in low socio-economic environments. As this chapter has demonstrated in economically heterogeneous countries, in addition to the lower overall level of interpersonal trust, the rich are also likely to show lower levels of interpersonal trust when underdevelopment is high, to the point of having levels of interpersonal trust similar to that of the poor or even lower as the case of Haiti illustrates. A plausible hypothesis for explaining this phenomenon is that the rich in these contexts feel more exposed, more insecure, and in turn this erodes their social capital.

This hypothesis is indeed plausible. First, the incidence of violent crime in Latin America is unparalleled, positioning the region as having the highest rates of social violence and crime in the world outside of Sub-Saharan Africa (WHO 2002; Moser and McIlwaine 2006). Consequently, fear of crime among the population is to be expected, especially as violent crime has increased sharply during the democratization period in the region (Moser and McIlwaine 2006). Secondly, fear of crime has also been found to have pernicious effects on the consolidation of a democratic political culture in the region (Cruz 2008), regardless of whether one has been a victim of crime or not. Third, generally speaking, crime and violence in Latin America are not randomly distributed across neighborhoods but rather are mainly a characteristic of low-income neighborhoods, especially in urban areas (Moser,Winton and Moser 2003; McKilwaine and Moser 2007); therefore, contextual characteristics are important for

understanding crime and violence patterns and in turn for explaining the intensity of fear of crime. Lastly, as Moser, Winton and Moser (2003) point out "[high] poverty and inequality levels signify that the poor are frequently held responsible for much of the crime and violence perpetrated throughout cities," which as theorized might explain the low levels of interpersonal trust among the rich in highly unequal and poor contexts. This hypothesis is explored using the LAPOP data. Fear of crime is measured using the following item in the LAPOP survey:<sup>33</sup>

Speaking of the neighborhood where you live, and thinking of the possibility of being assaulted or robbed, do you feel very safe, somewhat safe, somewhat unsafe or very unsafe?

(1) Very safe (2) Somewhat safe (3) Somewhat unsafe (4) Very unsafe

As shown in Figure II.10, fear of crime is strikingly high in Latin American countries in comparison to the United States and Canada. While the average score for the Latin American region is 46.14 points, taken together the average for Canada and the United States is only 16.40 points. Figure II.10 also shows that there are sharp contrasts in the average fear of crime across Latin American countries. Fear of crime is more generalized in countries such as Peru, Argentina, Bolivia, and Haiti, and much lower in Honduras, Jamaica, Nicaragua, and Paraguay.

<sup>&</sup>lt;sup>33</sup> The original scale of this item was recoded into a 0-100 scale, with zero representing the lowest level of fear of crime ("very safe"), and 100 the highest level ("very unsafe").



Figure II-10. Average Fear of Crime by Country

Taking into account the high levels of fear in the region, three points are explored in order to test the above mentioned hypothesis. First, I explore the effect of fear of crime on interpersonal trust vis-à-vis crime victimization. Second, taking into account a country's level of socio-economic development, I explore whether fear of crime is randomly distributed across individuals or if it is mainly a characteristic of specific economic groups. Third, if higher levels of insecurity among the rich is an important characteristic of less developed countries, the next step is to examine whether a similar pattern is observed within countries, that is, whether the relatively rich living in poorer or less developed areas (i.e. rural areas) feel more insecure in spite of the fact that crime and violence rates are, generally speaking, higher in the cities.

Figure II.11 shows the standardized regression coefficient of the fear of crime variable in comparison to crime victimization as predictors of interpersonal trust, holding constant other variables and taking into account country effects. The results of the regression analysis demonstrate that fear of crime is a powerful depressant of interpersonal trust; in fact, it has by far a much larger negative impact on interpersonal trust than experience with crime per se.



Figure II-11. Impact of Fear of Crime on Interpersonal Trust

Moreover, an initial approximation to the question of whether the rich living in low socio-economic environments are more likely to manifest fear reveals that this seems to be the case. Table II.3 presents the results of a bivariate analysis that compares the mean difference in fear of crime between economic groups by country, ordered from high to low socio-economic development. Specifically, Table II.3 shows the difference in means in fear of crime between the richest and poorest 20 per cent of the population in each country ranked according to their level of socio-economic development based on the respective levels of HDI.

Table II-3. Difference in Mean Fear of Crime between the Richest 20% and Poorest 20%								
		Country			Difference			
		Average	Mean	Mean	[Mean Richest 20%			
HDI Ranking	Country		(Richest 20%)	(Poorest 20%)	- Mean Poorest 20%]	95%	C.I.	
1	CAN	15.323	11.314	19.439	-8.125	-15.815	-0.435	
2	USA	17.462	12.302	20.104	-7.802	-15.352	-0.252	
3	ARG	57.30	54.958	60.369	-5.411	-12.497	1.674	
4	CHIL	47.199	42.763	45.979	-3.216	-8.440	2.009	
5	URU	45.240	48.414	43.278	5.136	-1.043	11.316	
6	CR	47.506	46.329	46.882	-0.553	-6.116	5.010	
7	MEX	44.865	42.650	39.880	2.771	-2.269	7.810	
8	PAN	41.970	37.772	40.187	-2.414	-6.922	2.094	
9	BRA	41.25	46.286	36.975	9.310	4.256	14.365	
10	VEN	47.886	46.174	51.074	-4.900	-10.205	0.404	
11	COL	40.824	39.959	39.034	0.925	-4.388	6.239	
12	DOM	50.695	55.503	49.202	6.301	1.150	11.453	
13	PER	60.031	57.344	60.870	-3.526	-8.149	1.097	
14	ECU	44.901	47.122	43.955	3.167	-0.344	6.679	
15	PAR	40.610	35.300	36.731	-1.431	-7.016	4.155	
16	JAM	38.415	39.377	36.612	2.765	-1.657	7.187	
17	ELS	48.069	47.673	44.284	3.389	-1.809	8.587	
18	NIC	40.433	39.412	38.569	0.843	-3.492	5.177	
19	HON	37.435	42.640	30.740	11.900	7.022	16.778	
20	BOL	50.698	51.526	45.584	5.942	2.499	9.386	
21	GUA	42.639	46.481	37.462	9.020	4.317	13.722	
22	HAI	51.284	59.856	44.438	15.418	10.582	20.254	

Table II.3 shows that in the four least developed countries in the Americas the richest 20 per cent of the population show statistically significant higher average levels of fear of crime than the poorest 20 per cent. Indeed, in Haiti, Guatemala, Bolivia, and Honduras the rich appear to be more fearful of being victims of crime, precisely the countries where the well known positive relationship between individual wealth and interpersonal trust is weaker, or as in the case of Haiti, negative. Quite the opposite is the case in Canada and the United States, the two most developed countries in the Americas, the poor and not the rich show the highest levels of fear of crime, explaining in part why in these two countries the relationship between individual wealth and interpersonal trust is between individual wealth and interpersonal trust is between individual wealth and not the rich show the highest levels of fear of crime, explaining in part why in these two countries the relationship between individual wealth and interpersonal trust is between individual wealth and interpersonal trust is positive and much stronger.

Further analysis indicates that the wealthy in the poorest countries in the Americas do show higher levels of insecurity. Figure II.12 presents graphically the regression coefficient of the richest 40 per cent relative to the poorest 40 per cent predicting fear of crime by country, while holding constant individuals' level of education, age, and sex. The results of the multivariate analysis reveal that the richest forty per cent of the population feel consistently more insecure than the poorest 40 percent in the four poorest countries in the Americas, although Brazil shows a similar trend.



Figure II-12. Standardized Regression Coefficient of the Richest 40% relative to Poorest 40% as Predictor of Fear of Crime by Country

However, it is worth mentioning that the relationship between individual wealth and fear of crime becomes weaker when the area of residence (i.e., the level of urbanization) is taken into account (results not shown). This raises the question of whether a similar pattern observed at the country level is reproduced within countries. In other words, in a given country, fear of crime among the rich might be greater among those who live in lower socio-economic environments, specifically rural areas, explaining the lower levels of interpersonal trust among the rich in those areas. If this is the case, it will further confirm the country level finding that the composition of the place of residence and individual characteristics matter for the formation of interpersonal trust and also that in Latin America the rich show lower levels of interpersonal trust in low socioeconomic status environments because under these circumstances they are more fearful of being victims of crime. Moreover, given the larger size of rural areas in poor countries, this would imply that the results of multilevel analysis (at the country and individual levels) presented in this research are a reflection of within country dynamics.

With the purpose of testing the impact of place of residence on fear of crime, I ran an ordered logit regression with an interaction term between the quintiles of wealth variable (at the individual level) and a dummy variable indicating whether a person lives in urban or rural areas, taking into account relevant individual level variables and country effects. Figure II.13 shows the regression results based on the pooled dataset containing individual level variables.<sup>34</sup>

 $<sup>^{34}</sup>$  The full regression output can be found in appendix 5 at the end of this chapter. The interaction term is statistically significant at p<0.001.



Figure II-13. Impact of Area of Residence on Fear of Crime by Quintiles of Wealth

Figure II.13 presents the mean predicted probability of feeling very safe, somewhat safe, somewhat unsafe, or very unsafe in one's community taking into account the area of residence. There are two important points to notice in Figure II.13. First, fear of crime is much lower in rural areas regardless of individuals' wealth, which is consistent with the fact that crime rates are much higher in urban areas. Second, Figure II.13 also shows that in urban areas the rich have a higher probability of feeling secure relative to the poor, while conversely the rich who live in rural areas show a greater probability of feeling insecure. This begs the question of whether this result translates into lower levels of interpersonal trust among the rich living in rural areas. As expected, Figure II.14 suggests that this is exactly the case.<sup>35</sup>

 $<sup>^{35}</sup>$  Appendix 6 shows full regression output. Individual level variables and country effects are also taken into account. The interaction term is statistically significant at p<0.001.



Figure II-14. Impact of Area of Residence on Interpersonal Trust by Quintiles of Wealth

The probability of finding people in the community "very trustworthy" is conditioned on individual wealth and place of residence. Although the average level of interpersonal trust is lower in urban areas, the rich in urban areas are more likely to find those around them trustworthy. In contrast, in rural areas those at the top of the distribution of wealth are less likely to find people in their community trustworthy in comparison to those at the bottom. Taken together the findings suggest that the rich show lower levels of interpersonal trust in lowsocioeconomic environments because they are more fearful of being victims of crime. This result seems to hold at the country level and areas within countries.

### Conclusion

The democratization literature has identified interpersonal trust as a key component for the stability of democracy. An important question, then, is to explore how interpersonal trust can be promoted. The answer to this question is particularly relevant for Latin American democracies as the region's underdevelopment and political instability have in part been attributed to its enduring low levels of interpersonal trust. This chapter demonstrates that persistent and high levels of economic inequality and socio-economic underdevelopment are at the core of Latin America's social distrust. Thus, by improving the overall levels of absolute and relative economic wellbeing, cooperation among unlike individuals is likely to increase.

By employing multilevel modeling, this research has uncovered the mechanisms through which economic inequality and underdevelopment erode interpersonal trust, challenging the conventional wisdom in the social capital and democratization literature. Studies that rely on aggregate data predict lower levels of socio-economic development to be associated with lower average levels of interpersonal trust, regardless of relative economic wellbeing. Similarly, higher inequality is expected to be inversely related to average interpersonal trust, irrespective of socioeconomic development. Additionally, the literature suggests that these relationships at the macro level are explained by the much lower levels of interpersonal trust among the poor in contexts of high poverty or inequality. As a result, the poor have typically been blamed to a large degree for the misfortunes of democracy.

My findings in this paper differ sharply from the conventional wisdom. By bridging levels of analysis, this research demonstrates that the relationship between economic contextual factors, interpersonal trust, and individual socio-economic status is not as straightforward as the literature suggests. The multilevel results indicate that in the Americas economic inequality and underdevelopment have a uniquely negative reinforcing effect on interpersonal trust. While economic inequality lowers the average level of interpersonal trust across all economic groups, socio-economic underdevelopment lowers interpersonal trust only among the wealthy. Consequently, when underdevelopment and inequality are high, as is the case in most Latin American countries, the overall level of interpersonal trust is lower and the rich show little trust in others in comparison to places where development and equality are relatively high. Contrary to what the literature predicts, the evidence suggests that the rich can have about the same or even lower interpersonal trust than the poor in context of high poverty and inequality. Latin American countries' higher economic inequality and lower socio-economic development explain why lower levels of interpersonal trust and a weaker relationship between individual wealth and individual interpersonal trust are observed relative to Canada and the United States.

In Latin America, economic disparity creates a "perfect storm," the clash between economic classes, which in turn erodes mutual trust. The results of this chapter indicate that prejudice against the poor is eroding the poor's trust toward dissimilar others. On the other hand, economic diversity infuses a fear of being a victim of crime among well-off individuals. Indeed, higher levels of fear of crime among the relatively rich in environments of low-socio-economic development seem to explain their lower levels of interpersonal trust in these contexts. Interestingly, the empirical evidence indicates that some of the same patterns observed at the country level are reproduced at the sub-national level. In Latin America, higher fear of crime in underdeveloped areas (i.e. rural areas) among the well-off also translates into lower interpersonal trust. In sum, discrimination, fear of crime, and distrust are some of the manifestations of Latin America's unequal economic development. Thus, Latin American democracies rest on very shaky social foundations as cooperation among economically dissimilar individuals is highly unlikely.

# Appendix

Appendix. II-1. Wording of the Items from the LAPOP Survey Included as Independent Variables in the Multilevel Models					
Variable	Question/Description				
Civic Participation	A Civic Participation indicator variable was computed based on the following items in the LAPOP survey:				
	I am going to read a list of groups and organizations. Please tell me if you attend their meetings at least once a week, once or twice a month, once or twice a year, or never.				
	Meetings of a parents' association at school? Meetings of a committee or association for community improvement?				
	Meetings of an association of professionals, traders or farmers? Meetings of a political party or political movement?				
	This variable takes the value of one if a respondent stated to have participated in at least one secular civic organization, or zero otherwise.				
Corruption Victimization	The corruption victimization indicator variable corresponds to a dummy variable that takes the value of one if a person stated to have been victimized by at least one act of corruption in the last twelve months. This variable was generated based on the following items in the LAPOP surveys:				
	Has a police officer ask you for a bribe during the past? During the past year did any government employee ask you for a bribe?				
	During the past year did you have any official dealings in the municipality/local government?				
	Are you currently employed? At your workplace, have you been bribed within the past year?				
	During the past year, have you had any dealings with the courts?				
	Did you have to pay a bribe to the courts within the past year?				
	Have you use any public health services during the past year?				
	nast year did you have to pay a bribe?				
	Have you had a child in school during the past year?				
	Have you had to pay a bribe at school during the past year?				
Crime Victimization	Now changing the subject, have you been a victim of any type of crime in the past 12 months? (yes=1; 0=No)				
Years of Schooling	What was the last year of education you completed?				
Income Variable	Into which of the following income ranges does the total monthly				
	income of this household fit, including remittances from abroad and the income of all the working adults and children?				
	[10 deciles based on the currency and distribution of the country]				
Sex	Male=1; Female=0				

Appendix II-2 Multilevel Model: Intercept as an outcome model (Ordered logit; standardized coefficients)							
Fixed Effects: Contextual Variables (Random Intercept)	Coef.	Coef.	Coef.	Coef.	Coef.		
Economic Inequality [GINI], $\gamma_{01}$	-0.354 (0.003^; 0.001*)			-0.249 (0.06^; 0.011*)	-0.284 (0.022^; 0.004*)		
Economic Development, $\gamma_{02}$		0.324 (0.007^; 0.004*)		0.176 (0.176; 0.053*)			
Level of Democracy, $\gamma_{03}$			0.281 (0.017^; 0.023*)		0.150 (0.202^; 0.060*)		
^P-values based on model based standard errors; *P-values based on robust standard errors Controls for individual level variables included but not shown							

#### Appendix II-3. Methodological Note: Estimating Wealth Effects using Household Assets

A central question for this study was how to compute a wealth index that resulted in a lower proportion of missing data in comparison to the income variable, and at the same time that effectively discriminated between economically well-off and worse-off individuals. A relative wealth index was computed using the methodology described below based on the following items from the LAPOP survey:

To end, could you tell me if you have the following in your house: (read out all items)								
Television	(0) No	(1) Yes						
Refrigerator	(0) No	(1) Yes						
Conventional telephone (not	(0) No	(1) Yes						
cellular)								
Cellular telephone	(0) No	(1) Yes						
Vehicle	(0) No	(1) One (2) Two (3) Three						
Washing machine	(0) No	(1) Yes						
Microwave oven	(0) No	(1) Yes						
Indoor plumbing	(0) No	(1) Yes						
Indoor bathroom	(0) No	(1) Yes						
Computer	(0) No	(1) Yes						

One choice was to create a wealth index based on a "count" of household characteristics and assets. However, using this methodology can be misleading since two individuals with very different economic resources and therefore standards of living can obtain the same wealth score. For example, an individual owning a television would be assigned the same score as one owning a car. Obviously, using this methodology could result in large measurement error. A more appropriate methodology was instead implemented: one that weights more heavily the most uncommon household services and assets and assigns a lower weight to basic household characteristics.

This study develops a weighting system for constructing a wealth index relying on Principal Component Analysis (PCA). Filmer and Pritchett (2001) popularized the use of PCA for estimating wealth levels using household asset indicators in the absence of income or consumption data. Based on their analysis of household assets for India and the validation of their results using both household assets and consumption data for Indonesia, Pakistan, and Nepal, they concluded that PCA "provides plausible and defensible weights for an index of assets to serve as a proxy for wealth" (Filmer and Pritchett 2001 128).

After Filmer and Pritchett's analysis, many other studies, especially in the fields of economics and public policy, have implemented and recommend the use of PCA for estimating wealth effects (Minujin and Joon Hee 2002; McKenzie 2005; Seema and Kumaranayake 2006; Labonne, Biller and Chase 2007). In fact, estimates of wealth based on asset data using PCA has also been used for developing inequality measures at the state or municipality level when income or expenditures data is not available (McKenzie 2005). As it will be explain in chapter III, this study uses McKenzie's (2005) inequality index for estimating the degree of economic inequality in municipalities or cantones in Costa Rica.

The estimation of relative wealth using PCA is based on the first principal component of the observations. Formally, the wealth index for household i is the linear combination:

$$y_{i} = \alpha_{1}(\frac{x_{1} - \overline{x}_{1}}{s_{1}}) + \alpha_{2}(\frac{x_{2} - \overline{x}_{2}}{s_{2}}) + \dots + \alpha_{k}(\frac{x_{k} - \overline{x}_{k}}{s_{k}})$$

Where,  $\bar{x}_k$  and  $s_k$  are the mean and standard deviation of asset  $x_k$ , and  $\alpha$  represents the weight for each variable  $x_k$  for the first principal component.

By definition the first principal component variable across households or individuals has mean zero and variance  $\lambda$ , which corresponds to the largest eigenvalue of the correlation matrix of x. The first principal component y yields a wealth index that assigns a larger weight to assets that vary the most across households so

that an asset found in all households is given a weight of zero (McKenzie 2005). The first principal component or wealth index can take positive as well as negative values.

The wealth index here estimated using the ten items in the LAPOP survey listed above. All variables are dichotomized to indicate the ownership of each household asset (1=Yes, 0=No), except "number of vehicles." The first principal component was first computed for each country separately and then these results were used to generate a single pooled wealth variable. This means that the wealth index here computed takes into account the asset distribution for each country. In this sense, the wealth index used is context specific. Each asset receives a different weight across countries in order to reflect each country's socio-economic conditions. Moreover, the distribution of wealth for each country was portioned in quintiles and then the results were also used to generate a single pooled variable. Table 1 list the ten items included in the wealth index and shows the average asset ownership across quintiles using the pooled results.

Table 1. Internal Validity of the Wealth Index: Results based on the First Principal Component									
(Quintiles of Wealth)									
	1	2	3	4	5				
Housing Characteristics									
Indoor plumbing (drinkable water)	41.77%	71.44%	84.37%	91.28%	97.12%				
Indoor bathroom	28.51%	62.05%	75.48%	91.15%	97.30%				
Durable Assets									
Television	56.35%	88.32%	93.10%	94.94%	98.96%				
Refrigerator	30.85%	58.62%	79.65%	91.56%	98.73%				
Conventional telephone	5.52%	23.59%	46.80%	71.66%	92.95%				
Cellular telephone	25.47%	49.94%	63.73%	76.58%	93.02%				
Vehicle	4.58%	7.69%	15.82%	31.34%	63.64%				
Washing machine	10.75%	25.92%	35.17%	51.05%	74.45%				
Microwave oven	2.76%	10.21%	21.23%	45.16%	74.48%				
Computer	3.83%	6.34%	13.35%	35.24%	76.16%				
Average Wealth (Mean First	-2.42	-0.96	-0.02	1.05	2.79				
Principal Component by									
Quintiles)									
N. of Obs	6,483	6,438	5,917	6,123	5,588				
Data Source: AmericasBarometer 200	Data Source: AmericasBarometer 2006 by LAPOP								

As it can be observed, the wealth index used in this study discriminates well between the relatively rich and poor. For all assets, the percentage of ownership increases for higher quintiles. For example, while only about 42 per cent of individuals belonging to the first quintile have indoor plumbing or a source of drinkable water in their residences, about 97 per cent of them in the fifth quintile do. Moreover, the table also shows the mean value of the first principal component (mean wealth) by quintiles. Those at the bottom of the economic ladder have an average relative wealth of only -2.42 points, while those at the top an average wealth of 2.79 points. These figures clearly show the high degree of inequality in the region.

How much inequality is there within and across countries? In order to explore this point, the following figure shows the distribution of a single item, drinkable water, by country and quintiles of wealth. As expected, the figure shows that there are huge differences in access to water within and across countries. The degree of inequality in access to clean water within countries can be seen by steepness of the slope in each line graph. For example, the graph for Haiti shows huge inequalities in access to water in this country. While almost none of those in the first quintile have indoor plumbing, about 85 per cent of those at the very top do. On the contrary, the figure below also shows that in countries with higher development levels, like Costa Rica, Uruguay, Chile, and Argentina, not only a much higher proportion of the population has access to clean water (as it can be seen in the y axis of the graphs), but also this asset is more evenly distributed between the rich and poor (as it can be seen by the flatter line).



Appendix II-4 Impact of Discrimination on Interpersonal Trust by Quintiles								
(Ordered logit regression)								
	Coef.	Linearized Std. Err.	t	P>t	[95% Conf.	Interval]		
Victim of Discrimination	-0.605	0.086	-7.010	0.000	-0.774	-0.436		
Quintiles of Wealth x Discrimination	0.074	0.026	2.860	0.004	0.023	0.126		
Quintiles of Wealth	0.042	0.012	3.440	0.001	0.018	0.065		
Age	0.005	0.004	1.240	0.214	-0.003	0.013		
Age Squared	0.000	0.000	1.61	0.108	-0.000	0.000		
Education	0.023	0.004	6.210	0.000	0.015	0.030		
Urban	-0.419	0.042	-10.080	0.000	-0.500	-0.337		
Sex (1=Male; 0= Female)	0.196	0.025	7.950	0.000	0.148	0.245		
Civic participation	0.100	0.026	3.790	0.000	0.048	0.151		
Victim of Corruption	-0.002	0.000	-4.770	0.000	-0.002	-0.001		
Victim of Crime	-0.003	0.000	-9.250	0.000	-0.004	-0.002		
Mexico	0.288	0.090	3.190	0.001	0.111	0.465		
Guatemala	0.179	0.095	1.890	0.059	-0.007	0.365		
El Salvador	0.429	0.096	4.490	0.000	0.242	0.617		
Honduras	0.682	0.097	7.060	0.000	0.492	0.871		
Nicaragua	0.303	0.084	3.600	0.000	0.138	0.467		
Costa Rica	0.720	0.102	7.080	0.000	0.520	0.919		
Panama	-0.489	0.086	-5.700	0.000	-0.657	-0.321		
Colombia	0.436	0.099	4.410	0.000	0.242	0.629		
Bolivia	-0.499	0.097	-5.140	0.000	-0.689	-0.309		
Peru	-0.739	0.078	-9.540	0.000	-0.892	-0.587		
Paraguay	0.616	0.086	7.120	0.000	0.446	0.785		
Chile	0.208	0.110	1.890	0.059	-0.008	0.424		
Uruguay	0.440	0.097	4.520	0.000	0.249	0.631		
Brazil	-0.084	0.095	-0.880	0.377	-0.269	0.102		
Venezuela	0.013	0.104	0.120	0.903	-0.191	0.217		
Dominican Republic	0.314	0.086	3.640	0.000	0.145	0.483		
Excludes Haiti; N. Obs.=25827	F=55.13; S	tandard Errors t	ake into acco	ount design	effect			
Reference Country: Jamaica								

Appendix II-5 Impact of Area of Residence on Fear of Crime by Quintiles								
(Ordered logit regression)								
	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]		
Quintiles of Wealth	0.053	0.020	2.710	0.007	0.015	0.092		
Quintiles of Wealth x Urban	-0.114	0.024	-4.780	0.000	-0.161	-0.067		
Urban (0=Rural)	0.797	0.074	10.710	0.000	0.651	0.943		
Crime Victimization	0.007	0.000	23.490	0.000	0.007	0.008		
Corruption Victimization	0.002	0.002 0.000		0.000	0.002	0.003		
Civic Participation	0.039	0.026	1.490	0.136	-0.012	0.090		
Education	-0.008	0.003	-2.190	0.029	-0.014	-0.001		
Sex (1= Male; 0=Female)	-0.197	0.022	-8.770	0.000	-0.241	-0.153		
Age	0.014	0.004	3.730	0.000	0.006	0.021		
Age squared	0.000	0.000	-4.150	0.000	0.000	0.000		
Mexico	0.128	0.102	1.250	0.213	-0.073	0.328		
Guatemala	0.229	0.097	2.360	0.019	0.038	0.419		
El Salvador	0.509	0.102	4.980	0.000	0.308	0.709		
Honduras	-0.112	0.124	-0.900	0.368	-0.355	0.131		
Nicaragua	0.085	0.092	0.920	0.355	-0.095	0.264		
Costa Rica	0.456	0.122	3.720	0.000	0.216	0.696		
Panama	0.174	0.089	1.940	0.052	-0.002	0.349		
Colombia	0.031	0.115	0.270	0.789	-0.194	0.256		
Ecuador	0.346	0.099	3.490	0.001	0.151	0.541		
Bolivia	0.644	0.104	6.210	0.000	0.441	0.847		
Peru	1.031	0.088	11.680	0.000	0.858	1.204		
Paraguay	0.033	0.092	0.360	0.718	-0.147	0.214		
Chile	0.293	0.111	2.640	0.008	0.076	0.511		
Uruguay	0.173	0.124	1.400	0.163	-0.070	0.416		
Brazil	-0.041	0.117	-0.350	0.725	-0.270	0.188		
Venezuela	0.240	0.122	1.970	0.049	0.001	0.479		
Argentina	0.771	0.085	9.050	0.000	0.604	0.939		
Dominican Republic	0.574	0.097	5.890	0.000	0.383	0.765		
Excludes Haiti; N. Obs.=30830	F=54.83; Stand	ard Errors take in	to account d	lesign effec	t			
Reference Country: Jamaica								

Appendix II-6 Impact of Area of Residence on Interpersonal Trust by Quintiles								
(Ordered logit regression)								
Linearized Coef Std Err T Pot [050/ Conf Interval]								
	Coel.	Sta. EII.	1	P>t				
Quintiles	-0.055	0.019	-2.930	0.003	-0.092	-0.018		
Quintiles x Urban	0.160	0.023	7.000	0.000	0.115	0.205		
Urban	-0.853	0.074	-11.590	0.000	-0.997	-0.708		
Crime Victimization	-0.003	0.000	-10.540	0.000	-0.004	-0.003		
Corruption Victimization	-0.002	0.000	-5.430	0.000	-0.002	-0.001		
Civic Participation	0.089	0.025	3.590	0.000	0.040	0.137		
Education	0.022	0.003	6.330	0.000	0.015	0.028		
Education	0.188	0.024	7.890	0.000	0.141	0.235		
Sex (1= Male; 0=Female)	0.005	0.004	1.210	0.227	-0.003	0.012		
Age	0.000	0.000	1.820	0.068	0.000	0.000		
Mexico	0.250	0.093	2.690	0.007	0.068	0.433		
Guatemala	0.149	0.099	1.510	0.131	-0.045	0.343		
El Salvador	0.370	0.099	3.730	0.000	0.176	0.565		
Honduras	0.673	0.098	6.850	0.000	0.480	0.866		
Nicaragua	0.265	0.087	3.050	0.002	0.095	0.436		
Costa Rica	0.689	0.103	6.700	0.000	0.488	0.891		
Panama	-0.415	0.088	-4.730	0.000	-0.587	-0.243		
Colombia	0.403	0.102	3.960	0.000	0.204	0.603		
Ecuador	-0.147	0.082	-1.800	0.072	-0.308	0.013		
Bolivia	-0.612	0.098	-6.260	0.000	-0.804	-0.420		
Peru	-0.797	0.080	-9.990	0.000	-0.953	-0.640		
Paraguay	0.599	0.088	6.790	0.000	0.426	0.771		
Chile	0.179	0.111	1.610	0.108	-0.039	0.397		
Uruguay	0.425	0.100	4.260	0.000	0.229	0.621		
Brazil	-0.121	0.096	-1.260	0.208	-0.309	0.067		
Venezuela	0.008	0.107	0.070	0.941	-0.202	0.218		
Argentina	0.033	0.091	0.360	0.719	-0.146	0.212		
Dominican Republic	0.300	0.089	3.350	0.001	0.124	0.475		
Excludes Haiti; N. Obs.=30451 F=52.52; Standard Errors take into account design effect Reference Country: Jamaica								

### References

- Adorno, Theodor W. The Authoritarian Personality. 1st ed, Studies in Prejudice. New York,: Harper, 1950.
- Alesina, Alberto, and Eliana La Ferrara. "Who trusts others?" *Journal of Public Economics* 85, no. 2 (2002): 207-34.
- Almond, Gabriel A., and Sidney Verba. *The Civic Culture: Political Attitudes and Democracy in Five Nations.* Princeton: Princeton University Press, 1963.
- Anderson, Christopher J., and Matthew M. Singer. "The Sensitive Left and the Impervious Right: Multilevel Models and the Politics of Inequality, Ideology, and Legitimacy in Europe." *Comparative Political Studies* 41, no. 4-5 (2008): 564-99.
- Aristotle. Politics: Kessinger Publishing, 2004.
- Armony, Ariel. *The Dubious link : Civic Engagement and Democratization*. Palo Alto: Stanford University Press, 2004.
- Arrow, Kenneth Joseph. *The Limits of Organization*. [1st ed, *The Fels lectures on public policy analysis*. New York,: Norton, 1974.
- Bermeo, Nancy. "Sacrifice, Sequence, and Strength in Successful Dual Transitions: Lessons from Spain " *The Journal of Politics* 56, no. 3 (1994): 601-27.
- Bjornskov, Christian. "Determinants of Generalized Trust: A Cross-Country Comparison." *Public Choice* 130, no. 1-2 (2007): 1-21.
- Boix, Carles, and Daniel N. Posner. "Social capital: Explaining its Origins and Effects on Government Performance." *British Journal of Political Science* 28, no.4 (1998): 686-93.
- Campbell, Tim. *The Quiet Revolution : Decentralization and the Rise of Political Participation in Latin American Cities, Pitt Latin American series.* Pittsburgh, Pa.: University of Pittsburgh Press, 2003.
- Carlin, Ryan E. "The Socioeconomic Roots of Support for Democracy and the Quality in Latin America." *Rev. cienc. polit. (Santiago)* 26, no. 1 (2006): 48-66.
- Córdova, Abby B. "Social Trust, Economic Inequality, and Democracy in the Americas." In *Challenges to Democracy in Latin America and the Caribbean: Evidence from the AmericasBarometer 2006*, edited by Mitchell A. Seligson, 2008.
- Cruz, José Miguel. The Impact of Violent Crime on the Political Culture of Latin America: The Special Case of Central America. Edited by Mitchell A. Seligson, Challenges to Democracy in Latin America and the Caribbean: Evidence from the AmericasBarometer 2006-07: Vanderbilt University, 2008.
- Encarnación, Omar G. "The Politics of Dual Transition." *Comparative Politics* 28, no. 4 (1996): 477-92.
- Gurr, Ted Robert. *Why Men Rebel.* Princeton, N.J.: Published for the Center of International Studies, Princeton University [by] Princeton University Press, 1970.
- Harris, David R. "Property Values Drop When Blacks Move in, Because...": Racial and Socioeconomic Determinants of Neighborhood Desirability." *American Sociological Review* 64, no. 3 (1999): 461-79.
- Harrison, Lawrence E. Underdevelopment Is a State of Mind: The Latin American Case. Boston, MA: Center for International Affairs, Harvard University and University Press of America, 1985.

- Huntington, Samuel P. Political Order in Changing Societies. New Haven: Yale University Press, 1968.
  - —. The Third Wave: Democratization in the Late Twentieth Century, The Julian J. Rothbaum Distinguished Lecture Series. Norman: University of Oklahoma Press, 1991.
- Inglehart, Ronald, and Christian Welzel. *Modernization, Cultural Change, and Democracy : The Human Development Sequence.* Cambridge, UK ; New York: Cambridge University Press, 2005.
- Kam, Cindy D., and Robert J. Franzese. *Modeling and Interpreting Interactive Hypotheses in Regression Analysis*. Ann Arbor: University of Michigan Press, 2007.
- King, Gary, Robert O. Keohane, and Sidney Verba. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, N.J.: Princeton University Press, 1994.
- Klesner, Joseph L. "Social Capital and Political Participation in Latin America: Evidence from Argentina, Chile, Mexico, and Peru." *Latin American Research Review* 42, no. 2 (2007): 1(32).
- Knack, S. "Trust, Associational Life and Economic Performance." In *The Contribution of Human and Social Capital to Sustained Economic Growth and Well-Being*, edited by Helliwell JF. Quebec: Human Resources Development, Canada, 2001.
- Knack, Stephen, and Philip Keefer. "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation." *The Quarterly Journal of Economics* 112, no. 4 (1997): 1251-88.
- Krishna, Anirudh. "How Does Social Capital Grow? A Seven-Year Study of Villages in India." *Journal of Politics* 69, no. 4 (2007): 941-56.
  - ——. *Poverty, Participation, and Democracy: a Global Perspective*. New York: Cambridge University Press, 2008.
- Labonne, Julien, Dan Biller, and Rob Chase. "Inequality and Relative Wealth: Do They Matter for Trust? Evidence from Poor Communities in the Philippines." In *Social Development Papers, Community Driven Development, The World Bank*, 2007.
- Lederman, Daniel, Loayza Norman, and Ana Maria Menendez. "Violent Crime: Does Social Capital Matter?" *Economic Development and Cultural Change* 50, no. 3 (2002): 509-39.
- Lipset, Seymour Martin. "Democracy and Working-Class Authoritarianism." *American Sociological Review* 24, no. 4 (1959): 482-501.
  - ———. Political Man: The Social Basis of Politics. 1981 (expanded edition) ed. Baltimore, MD.: Johns Hopkins University Press, 1961.
- Long, J. Scott. *Regression Models for Categorical and Limited Dependent Variables, Advanced Quantitative Techniques in the Social Sciences*. Thousand Oaks: Sage Publications, 1997.
- McKilwaine, Cathy, and Caroline Moser. "Living in Fear: How the Urban Poor Perceive Violence, Fear, and Insecurity." In *Social Exclusion, Urban Violence and Contested Spaces in Latin America*, edited by Kees Koonings and Dirk Kruijt. London: Zed Books, 2007.
- Mondak, Jeffery J. "Editors' Introduction." Political Psychology 19, no. 3 (1998): 433-39.
- Moser, Caroline O. N., and Cathy McIlwaine. "Latin American Urban Violence as a Development Concern: Towards a Framework for Violence Reduction." *World Development* 34, no. 1 (2006): 89-112.
- Moser, Caroline, Ailsa Winton, and Annalise Moser, eds. *Violence, Fear and Insecurity and the Urban Poor in Latin America*. Edited by World Bank, *World Bank report on Urban Poverty in Latin America*. Washington DC: World Bank, 2003.

- Muller, Edward N., and Mitchell A. Seligson. "Civic Culture and Democracy: The Question of the Causal Relationships." *American Political Science Review* 88 (1994): 635-54.
- Newton, Kenneth. "Social and Political Trust in Established Democracies." In *Critical Citizens: Global Support for Democratic Government*, edited by Pippa Norris editor, 169-87. Oxford: Oxford University Press, 1999.
  - ——. "Trust, Social Capital, Civil Society, and Democracy." *International Political Science Review* 22, no. 2 (2001): 201-14.
- Ottaway, Marina, and Thomas Carothers. *Funding Virtue:Civil Society, Aid, and Democracy Promotion.* Washington, D.C.: Carnegie Endowment for International Peace, 2000.
- Paxton, Pamela. "Association, Memberships and Generalized Trust: A Multilevel Model Across 31 Countries." *Social Forces* 86, no. 1 (2007): 47-76.
- Power, Timothy J. and Jamison, Giselle D "Desconfiança política na América Latina." *OPINIÃO PÚBLICA* 11, no. 1 (2005): 64-93.
- Przeworski, Adam. Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America, Studies in rationality and social change. Cambridge; New York: Cambridge University Press, 1991.
- ———. Democracy and Development : Political Institutions and Well-being in the World, 1950-1990. Cambridge: Cambridge University Press, 2000.
  - ——. "The Poor and the Viability of Democracy." In *Poverty, Participation, and Democracy: a Global Perspective*, edited by Anirudh Krishna, xiv, 189 p. New York: Cambridge University Press, 2008.
- Putnam, Robert D. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press, 1993.
- ———. "Tuning in, tuning out: The Strange Disappearance of Social Capital in America." *PS, Political Science & Politics* 28, no. 4 (1995): 664-83.
  - ——. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster, 2000.
- Raudenbush, S. W., A. S. Bryk, Y. Cheong, and R. T. Congdon. *HLM 5: Hierarchical Linear and Nonlinear Modeling*. Chicago: Scientific Software International, 2000.
- Raudenbush, Stephen W., and Anthony S. Bryk. *Hierarchical Linear Models: Applications and Data Analysis Methods*. 2nd ed, *Advanced Quantitative Techniques in the Social Sciences*. Thousand Oaks: Sage Publications, 2002.
- Rothstein, Bo. "Trust, Social Dilemmas and Collective Memories." Journal of Theoretical Politics 12, no. 4 (2000): 477-501.
- Rothstein, Bo, and Eric M. Uslaner. "ALL FOR ALL: Equality, Corruption, and Social Trust." *World Politics* 58, no. 1 (2005): 41-72.
- Seligson, Mitchell A. "The Impact of Corruption on Regime Legitimacy: A Comparative Study of Four Latin American Countries." *Journal of Politics* 64 (2002): 408-33.
- Seligson, Mitchell A., and Dominique Zephyr. "The AmericasBarometer 2006: Report on Corruption." In *Global Corruption Report 2008: Corruption in the Water Sector*, edited by Transparency International: Cambridge University Press, 2008.

- Smith, Peter H. *Democracy in Latin America : Political Change in Comparative Perspective.* New York, N.Y.: Oxford University Press, 2005.
- Stolle, Dietlind. "Why Do Bowling and Singing Matter? Group Characteristics, Membership, and Generalized Trust." *Political Psychology* 19, no. 3 (1998): 497-525.
- Stolle, Dietlind, and Marc Morje Howard. "Civic Engagement and Civic Attitudes in Cross-National Perspective: Introduction to the Symposium." *Political Studies* 56, no. 1 (2008): 1-11.
- Stolle, Dietlind, Stuart Soroka, and Richard Johnston. "When Does Diversity Erode Trust? Neighborhood Diversity, Interpersonal Trust and the Mediating Effect of Social Interactions." *Political Studies* 56, no. 1 (2008): 57-75.
- Uslaner, Eric M. "Producing and Consuming Trust." *Political Science Quarterly* 115, no. 4 (2000): 569-90.
  - —. The Moral Foundations of Trust. New York: Cambridge University Press, 2002.
- Uslaner, Eric M., and Mitchell Brown. "Inequality, Trust, and Civic Engagement." *American Politics Research* 33, no. 6 (2005): 868-94.
- Weyland, Kurt *The Politics of Market Reform in Fragile Democracies: Argentina, Brazil, Peru, and Venezuela*. Edited by New Jersey: Princeton University Press, 2002.
- Whiteley, Paul F. "The Origins of Social Capital." edited by Paul F. Whiteley, Marco Maraffi Jan Van Deth and Kenneth Newton, 25-44: Routledge, 1999.
- WHO. "World Report on Violence and Health." edited by WHO [World Health Organisation]. Geneva 2002.
- You, Jong-Sung. "A Study of Corruption, Inequality, and Social Trust: Why Inequality and Corruption Inhibit Development?" Ph.D., Harvard University, 2006.

### **CHAPTER III**

## CULTURE OR ECONOMIC STRUCTURE? A SUB-NATIONAL MULTILEVEL ANALYSIS OF THE DETERMINANTS OF INTERPERSONAL TRUST IN COSTA RICA

### Introduction

Cost Rica, "the Switzerland of Central America," as popularly called for its long-standing democracy and admirable social equality and economic development in comparison to its neighboring countries is, however, a nation full of surprises and contradictions. Although Costa Rica's democracy is the oldest and one of the strongest in Latin America, and as a whole has far better socioeconomic indicators than most countries in the region, glimpses of a more complicated society come to light once one looks behind this façade. Inside Costa Rica, one finds that a number of places have more in common with Central American and other poor Latin American nations than is often thought (Booth 1998 262, 63). Costa Rica's virtues are not distributed evenly across the full breadth of its national territory. This small country, about the size of the state of West Virginia in the U.S. with an estimated population of 4.4 millions inhabitants, has been historically marked by profound economic regional disparities, with most of its economic activity and production, concentrated in the central valley region (known as the "meseta central") while much of the rest of the country has lagged behind and been marked by poverty.

Regional disparities are a relatively natural phenomenon in any country, because initial conditions such as natural resources and population density favor investment in certain regions more than in others. Nonetheless, it is noteworthy that in Costa Rica, as happens in the majority of Latin American countries, regional inequalities in well-being have been much more pronounced than in the developed world (Hall 1984). Certainly, anyone who has visited Latin America has witnessed that, across regions within a single nation, citizens live in worlds apart, and Costa Rica is no exception.

Costa Rica's unequal regional economic development has been well documented since at least the end of the nineteen century when European travelers to the country began recording such disparities. As one German visitor observed in 1899, "given that most travelers and even the majority of Costa Ricans only know the central valley, Costa Rica has the fame of being the most civilized among Central American countries; however, in its isolated areas is equally underdeveloped as the great majority of other Latin American countries" (Zeledón Cartín 1997 63). Since then, despite the nation's spectacular political transformations and socio-economic progress in the twentieth century, particularly between the 1950s and 1970s, deep-seated spatial economic inequalities are still present in Costa Rica today. Heightened social investment during this period and the country's relatively steady economic growth in the last fifty years have not been able to close the gap between regions.<sup>36</sup>

As well as having profound spatial disparities in socio-economic well-being, for analytical purposes, Costa Rica has the virtue of having a homogenous culture, devoid of any but the most minimal subcultural differences. Indeed, Costa Rica is one of the most culturally homogenous countries in the Americas, defined in terms of its ethnic, linguistic, and religious

<sup>&</sup>lt;sup>36</sup> The average annual economic growth in Costa Rica in the 1950's was 6 per cent. During the period 1965-70, the economy grew at 6.99 per cent; and, between 1970-75, 1975-80, and 1983-2005 at 6.04, 5.34, and 5 per cent, respectively (Céspedes, *et al.* 1983; Vargas 2007).

composition (Alesina, *et al.* 2003). These factors make this country a perfect laboratory to test two of the most contentious theoretical approaches in comparative politics—cultural and economic institutional accounts-to explain the formation of individuals' democratic attitudes, specifically interpersonal trust.

Data for the region offer solid evidence of Costa Rica's relatively uniform culture. In Costa Rica, approximately 87 per cent of the population is white, 98 per cent speak Spanish, and about 86 per cent is Roman Catholic (Alesina, *et al.* 2003). Costa Rica's ethnic composition, in particular, contrasts starkly with those of other former Spanish colonies in Latin America. For instance, according to the same data source, in Bolivia, approximately 11 per cent of the population is white, 31 per cent is Aymara, 31 per cent is Quechua, and 25 per cent is Mestizo. Cultural homogeneity in contrast predominates in Costa Rica, a fact that has been pointed out by many authors who have written about its culture and social life (Biesanz and Biesanz 1944; Biesanz, Biesanz and Biesanz 1982; Harrison 1985).

Given its national profile, Costa Rica is also an ideal place to examine the origin of citizens' attitudes, since the causes of its "exceptionality" relative to other Latin American countries have been widely debated in the literature. Costa Rica's high level of political and socio-economic development and their correlates, namely, citizens' democratic attitudes and behaviors, have generally been attributed to the "superior" culture of this country (i.e.Harrison 1985) or to the "egalitarian" economic institutions established in the country during the colonial era (Acemoglu and Robinson 2002). In terms of citizens' political attitudes and behaviors, compared to other Central Americans, Costa Ricans have been depicted as exceptionally peaceful (Seligson 2007), committed to democratic rule (Seligson 2001), and more trusting of others (Harrison 1985), characteristics considered products of culture or economic structure. Yet,

we still know little about the empirical validity of either explanation, largely because of data limitations.

However, the cultural and institutional accounts of Costa Rican exceptionalism have one point in common. In general, both accounts have overlooked the internal disparities in development that exist within and across sub-national units. As this chapter will demonstrate, this shortcoming in the literature can lead to overestimation or underestimation of the exceptionality of a nation's political culture. By exploring the origins of interpersonal trust formation at the sub-national level, this chapter offers a first empirical assessment of the role that culture vis-à-vis economic institutions play in shaping democratic attitudes in the Costa Rican context. Thus, the aim of this study is to shed light on to the origins of Costa Rica's sub-national disparities in one fundamental factor that has been found key for economic development and democratic stability, namely interpersonal trust.

The direction of the causal relationship between interpersonal trust, economic development, and democratic stability is, however, far from clear and has been subject of intense research. In this dissertation, and in this chapter in particular, rather than deal with the chicken and egg question, the focus is to explore the soundness of cultural and economic institutional arguments. In addition, by using a multilevel strategy, the importance of economic contextual factors will be assessed vis-à-vis individual experiences and characteristics for interpersonal trust creation at the local level, while holding constant a nation's cultural background and level of and years of experience with democracy.

In order to test the validity of these two theoretical arguments, I proceed as follows. First, by exploring the extent of variation in interpersonal trust across sub-national units in a relatively homogenous country, I test the explanatory power of the cultural approach.

99

Specifically, if marked differences in interpersonal trust are found at the local level in Costa Rica, this would obviously weaken the explanatory power of cultural explanations, especially, if it is found that, in some regions in Costa Rica, interpersonal trust levels are similar to those found in Latin American countries with a long history of political violence and instability, such as Costa Rica's Central American neighbors.

Likewise, if it is found that in some places in Costa Rica interpersonal trust levels are similar to that of the most politically developed countries in the Americas, namely Canada and the United States, this would also constitute evidence against the cultural explanation, since as in the case of the rest of Latin American countries, Costa Rica and these two nations have markedly different cultural backgrounds. The former has its cultural history deeply rooted in the Hispanic Catholic tradition while the latter in the so called Protestant ethic (Weber and Parsons 1930).

The second step is to assess the explanatory power of economic structural accounts. The following questions need to be answered in turn, "are there statistically significant differences in interpersonal trust across sub-national units in Costa Rica?" And if so, "Do economic structural factors explain in part such variations?" Do individuals exposed to the same economic environment show similar levels of interpersonal trust, or is the effect of economic contextual factors conditioned on individual socio-economic status, as the country and individual level results in this study suggest?

Besides assessing the validity of these two major theoretical approaches in comparative politics, by using local governments' geographical delimiting units, which in Costa Rica are called "cantones" equivalent to a U.S. county or "municipio" in most other Latin American countries, this chapter also hopes to contribute to the debate regarding the factors facilitating or constraining the success of decentralization programs in the region, which include, among
others, the construction of social capital at the local level (Seligson 2005). The decentralization of political power and functions from the national to local governments involves an active role of citizens at the local level as well as high levels of social integration. At the heart of decentralization programs in Latin America is the notion that democracy must be built from the bottom up, beginning at the grassroots level. This enterprise undoubtedly requires high levels of social cohesion and therefore interpresonal trust in communities.

A key question that remains unanswered is whether decentralization programs can successfully build a strong civil society and therefore stable democracy in contexts of economic marginalization. Specifically, do poverty and economic inequality at the local level constrain the building of interpersonal trust in municipalities? If local economic structural factors such as poverty and inequality are impeding the consolidation of a robust civil society at the local level, then obviously the impact that decentralization programs can have on deepening democracy will vary from one municipality to another, with already well off municipalities being more likely to succeed in their decentralization efforts, thus widening the gap between municipality haves and have nots in the future.

Despite the increasing importance of local politics in the region (Daughters and Harper 2007), and certainly in Costa Rica (Córdova Macías,Rojas Bolaños and Valverde Castro 1996; Programa Estado de la Nación 2008), this is one of the least investigated areas in Latin American studies. Moreover, because of the complete absence of multilevel research at the municipal level in the Latin American context, we simply do not know whether and how the characteristics of municipalities influence citizens' attitudes and behaviors. For example, it may be that country level characteristics are what matter the most for shaping individuals' political culture, regardless of the local context. To my knowledge, no published study has empirically explored, in the

context of decentralization, the role played by economic structural factors at the local level in the achievement of a strong civil society in Latin American countries.

This chapter is organized in the following manner. In the first section, the cultural and institutional arguments are briefly described. The second section explores the origins as well as the present state of sub-national economic disparities in Costa Rica. The third section examines empirically the strength of cultural arguments, contrasting the levels of interpersonal trust in Costa Rican municipalities included in the sample to those found in other countries in the Americas. The following section presents the levels of poverty and wealth inequality in the municipalities included in the sample. Then, taking into account the theoretical discussion of the previous chapter and the particularities of the Costa Rican case, a sub-national multilevel model of the economic determinants of interpersonal trust is estimated. The last section presents conclusions.

## Culture and Economic Structure as Contextual Determinants of Interpersonal Trust: A Review of the Literature

Why does interpersonal trust flourish more in some environments than in others? The comparative politics literature on the contextual determinants of interpersonal trust, and citizens' political attitudes in general, can be divided into two camps, those who argue that cultural factors better explain differences in interpersonal trust across contexts and those who claim that institutional explanations, mainly economic institutions or structural factors, better account for observed patterns. "Institutions" are generally defined as "humanly devised constraints that shape human interaction" (North 1990). Likewise, as Acemoglu and Robinson (2008) point out,

institutional factors are the products of policy making and therefore contrast with aspects outside of human control, such as one's cultural background.

In turn, Acemoglu and Robinson (2008 v) define "economic" institutions as "collective choices that are the outcome of a political process," and add, "economic institutions of a society depend on the nature of political institutions and the distribution of political power in society." This section lays out the main arguments of cultural and institutional explanations for the formation of democratic attitudes, and discusses the limitations of the existing empirical literature.

Proponents of cultural explanations argue that interpersonal trust originated in the historical legacy of nations, especially in their religious backgrounds, and therefore in values transmitted from generation to generation. According to the culturalist view, following Max Weber's seminal ideas, Western Protestant values are considered more compatible with democratic attitudes, and with democracy per se, than other value systems. Hence, Latin America's relatively low levels of interpersonal trust as well as its political and economic underdevelopment are ultimately attributed to this region's Catholic tradition.

While Protestantism in the United States, for example, is said to have brought "religious and political pluralism," the Roman Catholic Church in Latin America is said to have infused "absolutism and authoritarianism"(Wiarda and Kline 2007), value systems that are reflected in citizens' political attitudes. Ebel and Taras (2003 60), for example, report that "the dominant value system of Latin America has been, and continues to be, what has been called political monism...resistance to political competition, differences of opinion, and thus to change."

Similarly, Harrison (1985) evaluates the causes of Latin America's relative underdevelopment and concludes that Catholic values and traditions imbedded in Hispanic

103

culture impede prosperity and the emergence of stable democracy in Latin American countries. He states that "human development is frustrated in most Hispanic-American countries and most Third World countries by a way of seeing the world that impedes the achievement of political pluralism, social equity, and dynamic economic progress" (Harrison 1985 168).

On the other hand, Harrison also observes that within Latin America, some countries have made more progress than others and attributes these differences to variation in the degree of exposure to orthodox Catholic traditions during colonial times. For example, he explains Costa Rica's exceptionality relative to other Latin American countries, including likely higher levels of interpersonal trust, to the fact that the Spanish conquistadors who settled in this country held more liberal values. As a consequence, Harrison (1985) argues, Costa Rica had a lower degree of exposure to the authoritarian Hispanic culture.

In terms of interpersonal trust, in his comparative analysis of Costa Rica and Nicaragua, Harrison (1985 55) points out that "one factor that distinguishes Costa Ricans from Nicaraguans (and indeed from most other Hispanic Americans) is the Costa Rican's identification with other Costa Ricans...the sense of family is doubtlessly reinforced by Costa Rica's relative racial homogeneity." However, only a handful of studies have attempted to test the validity of cultural arguments in the Latin America context. Most empirical works use cross-country data from around the world with only few Latin American countries included in the sample.

Inglehart's multiple cross-country statistical analyses using data from the World Values Surveys offer the most comprehensive empirical examination of the validity of the cultural argument; however, it only takes into account a few Latin American countries. Based on this data, Inglehart has concluded that cultural heritage rooted in religious traditions offer the most powerful explanation for observed differences in political attitudes and economic and political development across nations around the world (Inglehart 1988; Inglehart 1990; Inglehart 1999; Inglehart and Welzel 2005).

Yet, Inglehart's empirical analysis has relied almost entirely on aggregated figures at the country level, causing authors to wonder whether patterns at the country level are also observed at the individual level (Seligson 2002b), and, in the case of this research, whether within a single culturally homogenous country marked regional differences in political attitudes exist. As Jackman and Miller (1998 52) strongly argue, one key limitation of the empirical literature that claims that culture plays a powerful role in shaping political attitudes is that it has generally looked at "aggregate properties of societies," neglecting possible variations in political attitudes across individuals and regions within relatively culturally homogenous countries.

Inglehart suggests that even if there are differences in interpersonal trust across individuals and regions in a given country, on average these varying levels of interpersonal trust would continue to reflect the nation's cultural tradition. As Inglehart and Welzel (2005 69) put it, in a society, "the persistence of distinctive value systems seems to reflect the fact that culture is path dependent" and, in old democracies in particular, "Protestant religious institutions helped shape the Protestant ethic, relatively high levels of interpersonal trust, and a high degree of social pluralism." Inglehart and Welzel claim that societies "in a given cultural zone," regardless of individual characteristics, show distinct values.

In terms of possible individual effects across different socio-economic groups within societies, based on data at the country level for five countries,<sup>37</sup> Inglehart and Welzel (2005) argue that, on average, even individuals at the top of the income distribution (who according to advocates of the modernization theory are more likely to hold democratic attitudes), show very

<sup>&</sup>lt;sup>37</sup> They analyzed three high income countries, Switzerland, Germany, and the United States, and two low income countries, India and Nigeria.

different sets of "self-expression values" or political attitudes across nations. For instance, they argue that, the rich in the United States show political attitudes more suitable for democracy than the rich in India and Nigeria, and in fact that in these two countries, the poor and not the rich demonstrate slightly more democratic values. They end the discussion with the general conclusion that these observations confirm that a country's cultural background is ultimately what determines its political culture. Specifically, Inglehart and Welzel (2005 69) conclude that, a nation's culture binds "even the exceptionally rich and poor in this nation's cultural orbit," explaining why in countries with cultures supposedly less suitable for democracy even the rich show a lower quality set of political values.

As this example suggests, reliance on aggregated data at the country level is problematic. First, Inglehart and Welzel have not tested whether this "cultural orbit" also holds at the regional level within countries. Second, they are unable to empirically test whether the characteristics of context, other than culture, shape the political attitudes of the rich and poor differently, in other words, the possibility of an interaction between levels of analysis. Thus, notwithstanding Inglehart and Welzel's advantage of having a large-N to work with, and not having to deal with the small-N problem that characterizes multilevel regional studies, they fail to employ a multilevel strategy.

As the results of the previous chapter in this study suggest, the characteristics of both the context and individuals matter for the formation of democratic attitudes. In the case of the Americas, the results of this research suggest that differences in interpersonal trust across countries as well as across rich and poor individuals seem to be largely explained by the economic performance of nations in two important areas: the overall level of socio-economic well-being and the distribution of economic gains. Inglehart and Welzel's aggregate strategy

makes it impossible to test whether cultural or economic structural factors better explain the observed political attitudes across the poor and rich in the countries they analyzed.

By employing a multilevel sub-national empirical analysis in a culturally homogenous country, this research overcomes the two aforementioned constraints in the empirical literature and should demonstrate that neither individual nor aggregate country level approaches alone can fully answer fundamental questions in the field of comparative politics, such as why some environments are more prone to cultivate interpersonal trust than others and the role that culture and economic structures play. This last point is particularly important as Inglehart and Welzel have forcefully claimed that the most productive research strategy for explaining political attitudes is the one that relies on aggregated figures at the country level, since the ultimate dependent variable to be explained, the institution of democracy, is to be found at this level of analysis.<sup>38</sup>

Thus, just as in international relations, the field of comparative politics is caught up in the level of analysis question. However, recent multilevel empirical works have suggested that the most important question in comparative politics is not whether analyses at the country or individual level are the most appropriate for understanding democratization, but whether levels of analysis interact (Seligson,Cordova and Moreno 2007; Andersen and Fetner 2008; Anderson and Singer 2008; Solt 2008).

As this chapter will show, a multilevel approach proves to be a more productive research strategy. Such an approach empirically tests, for example, why two rich persons who live in dissimilar environments, show a different set of attitudes, all other individual characteristics

<sup>&</sup>lt;sup>38</sup> See chapter 10, "Individual-Level Values and System-Level Democracy: The Problem of Cross-Level Analysis," in Inglehart and Welzel (2005).

being equal, rather than assume, as Inglehart and Welzel do, that such differences can be automatically attributed to their religious or cultural backgrounds.

Besides these methodological shortcomings, culturalist arguments can also be criticized on the grounds of lack of face validity. Culturalists argue that although over time changes in political attitudes and interpersonal trust levels can occur (Inglehart and Baker 2000), they take place at a slow pace, since by their very nature cultural traits are enduring. However, in the last few decades the United States has experienced drastic declines in both interpersonal trust and civic participation (Putnam 1995; Putnam 2000), challenging one of the major implications of the cultural explanation. Putnam argues that the decline in interpersonal trust and civic activism in the United States is explained, in part, by the increased number of hours people spend watching television, which has also made people less trusting because television programs tend to overstate negative aspects and portray the world as a "mean" place (Putnam 1996) and at the same time deter individuals from interacting with others.

The Putnam thesis, however, has not gone unchallenged either. While many agree that there has been a decline in interpersonal trust in the United States, the explanation is not to be found in television viewing. Structural economic factors are said to have played a role. Uslaner, for example, rejects Putnam's explanations for the decline in social capital (Uslaner 1998; Uslaner and Brown 2005). Instead, he argues that the recent rise in economic inequality in the United States better explains the waning of interpersonal trust and adds that the decline in civic participation is the effect of the decline in interpersonal trust.

Other authors have also suggested that democratic attitudes, among them interpersonal trust, are not entirely cultural, but primarily the result of institutional or structural factors, including economic ones. Indeed, institutionalists suggest that the relationship between cultural heritage

and interpersonal trust might be a spurious one, since the institutions established during colonial times might, rather than religious background, better explain the extent to which people trust others. Contrary to the culturalist implication that people belonging to the same cultural group would show similar levels of interpersonal trust even if exposed to different institutional or structural constraints, Jackman and Miller, for example, contend that "the structure of the situation…creates incentives for individuals to be trustworthy" (Jackman and Miller 1998 53).

Indeed, the social capital literature in general and Putnam's (1993) well known cultural account of the different development patterns of Northern and Southern Italy, in particular, have been criticized for paying insufficient attention to the characteristics of the "structure" in which individuals interact with others as a way of explaining interpersonal trust, one of them being the extent of economic inequality. Boix and Posner (1998 689), for example, note that the role that inequality and polarization play in defining the degree of trust and cooperation is "almost invisible not only in Putnam's account of Italian history but in most theoretical accounts of the evolution of social co-operation."

In sum, according to structural accounts, democratic attitudes are more malleable than what some proponents of the culturalist view suggest. Structuralists argue that economic factors are important, and consequently interpersonal trust can be shaped by the products of public policies. This is the theoretical framework that has inspired this study. This research argues that the quality of social capital in Latin America can be improved if the appropriate set of public policies is implemented. Economic development and equality have been found to be important structural factors that affect the level of interpersonal trust in democratic nations, and their role in shaping social capital vis-à-vis culture and individual factors is investigated in this chapter at the sub-national level in the Costa Rican context.

## Does Culture Matter for the Formation of Interpersonal Trust? Evidence for Costa Rica

The sample design of the LAPOP surveys for Costa Rica allows carrying out a multilevel analysis at the municipal level. Costa Rica has a total of 81 municipalities; 29 were selected using the Probability Proportional to Size (PPS) procedure and included in the LAPOP surveys. Unlike the sample design for most LAPOP surveys, each Costa Rican municipality included in the sample has a sizable fixed number of observations or interviews. In each municipality, in a given year, 50 interviews are carried out, except in the municipality of San José, the capital city, where 100 individual cases are collected due the larger population this municipality. Cantones or municipalities are the primary sampling units (PSU), and census tracts or "segmentos censales" within municipalities were chosen using PPS within both urban and rural areas, with about 6 and 12 interviews in each rural and urban census tract, respectively.

Moreover, given that the sample design for Costa Rica has remained the same and the same municipalities have been used in each round of surveys, the pooled dataset for 2004, 2006, and 2008 is used with the objective of increasing the number of observations available in each municipality.<sup>39</sup>

In sum, the dataset used here consists of a total of 29 municipalities and 4,500 individual cases. For the capital city the sample size is 300 cases; for the remaining of municipalities, it is a total of 150 cases in each. With this sample size in each municipality, it is possible to observe general patterns within and across municipalities and to perform regression and difference in means analyses, as the descriptive statistics for the variable of interest, interpersonal trust, show relatively small standard errors at the municipal level in comparison to other variables included in the LAPOP surveys, such as corruption and crime victimization.

<sup>&</sup>lt;sup>39</sup> The LAPOP data for Costa Rica show that there are no statistically significant differences in the average of interpersonal trust from year to year, indicating that the datasets for 2004, 2006, and 2008 can be pooled.

To assess the validity of cultural arguments, the first step is to explore the levels of interpersonal trust at the municipal level in this relatively culturally homogenous country. Figure III.1 depicts the average level of interpersonal trust in Costa Rica by municipality. The vertical lines show the mean interpersonal trust value for Costa Rica and other selected countries. Figure III.1 demonstrates that despite Costa Rica's long democratic tradition and cultural homogeneity, at the local level, there are substantial differences in interpersonal trust. These differences are so marked that Costa Rica can actually be characterized as a country of multiple political subcultures, rather than having a unified political culture as predicted by culturalist scholars. This is the first major finding of this chapter, and it is hard to overstate it. Although in terms of average interpersonal trust, Costa Rica ranks high in comparison to most Latin American countries, Figure III.1 makes clear the need to go beyond national averages as these can mask important variations within countries.



Figure III-1. Mean Interpersonal Trust by Municipality Compared to the United States and Selected Latin American Countries

Looking solely at national averages can clearly under or overestimate the quality of democracy in some places in Costa Rica when measured by social capital levels. Within Costa Rica, cantones can be found with average interpersonal trust similar to the average for the United States, a country that has supposedly embraced the "right" culture for the formation of democratic attitudes. Moreover, interpersonal trust levels within Costa Rica are similar to those of some of the least politically developed countries in Central America, including Nicaragua and some of the most politically unstable countries in South America, such as Ecuador, some of the very countries that have been said to hold cultural traditions not apt for the creation of interpersonal trust.

Specifically, Figure III.1 indicates that on one hand, at the very top one finds municipalities, such as Turrialba and San Carlos, with average interpersonal trust similar to the United States, while on the other hand, at the very bottom municipalities like Desamparados and San José, with average interpersonal trust similar to the levels of weaker Latin American democracies. Moreover, these differences are statistically significant, as the confidence intervals for municipalities with high and low interpersonal trust levels do not overlap.<sup>40</sup> This first analysis shows that once sub-national variations are explored, cultural explanations are found wanting. Despite their geographical proximity (keep in mind that Costa Rica is no larger than West Virginia) and shared experience with democracy and Catholic tradition, striking variations in interpersonal trust levels across municipalities in Costa Rica are observable, suggesting that factors other than national cultural heritage better account for these differences.

The next step is to examine what actually explains such marked differences in interpersonal trust across municipalities in Costa Rica. Following the theoretical arguments and empirical evidence from Chapter II, this chapter hypothesizes that structural economic factors, specifically poverty and economic inequality, at the local level are detrimental for the formation of interpersonal trust despite this country's overall lower economic inequality rates and higher socio-economic development relative to most countries in the region. The next section discusses the historical origins of Costa Rica's regional inequalities, and assesses the extent of inequality across Costa Rica's regions at the present time.

<sup>&</sup>lt;sup>40</sup> Table I in the appendix of this chapter shows the mean values of interpersonal trust by municipality and their respective standard errors and confidence intervals.

## Explaining Costa Rica's Sub-National Economic Disparities: their Origin and Current State

Two major approaches to the study of Costa Rica's economic history can be found in the literature. One that focuses on the country as a "whole," and other that also accounts for its "parts" or sub-regions. Authors who focus on the nation as a whole, and therefore pay little attention to the subtleties and economic histories of its parts, tend to overestimate Costa Rica's exceptionality.

Those who look at Costa Rica as a compact unit, often explain its relatively high level of economic development as the result of the more favorable institutional or structural configurations that were established in this country as consequence of its unique colonial origins.<sup>41</sup> In that sense, these authors use an approach that economists Acemeglou and Robinson (2002), sociologists such as James Mahoney(2001) and political scientist Howard Wiarda (2007) have popularized in recent years, in which contemporary conditions are seen as having their origins hundreds of years in the past. In a nutshell, the story goes as follows: At the beginning of the colonial period, after realizing that "Costa Rica," a name that translates into English as "rich cost," was actually not rich in precious metals, Spanish conquerors lost interest in the country. For more than two hundred years, Costa Rica remained largely unexplored and a poorer relative to its neighboring countries. Key to the explanation of these colonial origins is that Costa Rica was characterized by a very low density indigenous population, denying an adequate labor force to the Spaniards for their colonization efforts (Stone 1975).

Costa Rica's initial scarce natural resources and short labor supply are said to have required the small settler group to have to resort to farming rather than to use indigenous labor to

<sup>&</sup>lt;sup>41</sup> For an overview of Costa Rica's economic and political development see (Booth 1998 ; Wiarda and Kline 2007 ; Booth 2008)

exploit mineral resources, a process that gave birth to a more egalitarian society, which in turn built the very institutional foundations of the country's subsequent economic development and democratization. Equality has been considered the engine of both economic and political development in Costa Rica; in contrast, inequality is viewed as a primary cause of most Latin American countries' economic and political decay. Thus, paradoxically, Costa Rica's initial state of poverty and despair promoted equality, which translated into future prosperity (Seligson 1980).

During the colonial period, relations between the labor force and land owners in Costa Rica were less exploitative because of the lack of labor supply and scarce resources. The colonizers themselves had to look after their land and crops, and a kind of "rural democracy" (Monge 1980) is said to have emerged as small landholdings predominated the system of land tenure. Labor was scarce, but land was abundant and for the most part peasants were the owners of the land they worked. Consequently, unlike most other Latin American countries, a high concentration of land in the hands of a few was not prevalent in Costa Rica, a factor which avoided the major political conflicts over economic gains and resources that marred the political landscape in neighboring countries, like El Salvador (Durham 1979). Costa Rica's lower propensity to social conflict is suggested to have contributed to the earlier emergence of democracy as a system of government (Booth 2008), undergirded by a more democratic political culture, including a far less conflict between the relatively rich and poor, thus facilitating the early emergence of a welfare state in the years to come.

While these accounts of Costa Rica's political and economic development are generally accepted as true, this abbreviated story corresponds primarily to the economic history of one region in the country, the Central Valley, until the mid nineteenth century. A closer look at Costa

Rica's history reveals that some of the very same economic institutions, greatly responsible for high poverty and economic inequality in many Latin American countries were also established across Costa Rica's territory.

Because of the favorable characteristics of its soil and the difficulty of accessing regions in the interior of the country, most of Costa Rica's population and economic activity was concentrated in the Central Valley, specifically in the towns of San José, Cartago, and Heredia, until the 1850's (Seligson 2007). By 1840, only five per cent of Costa Rica's territory had been settled, concentrated overwhelmingly in the Central Valley (Augelli 1987). This accident of nature and history gave the Central Valley an initial economic advantage. In the Valley, small landholdings called "chacras" predominated, the economic institution that promoted Costa Rica's more egalitarian economic system, and therefore indisputably avoided the high levels of political and social violence observed in neighboring countries. Thus, the Central Valley's initial advantage and earlier development explains in part the marked spatial inequalities we observe today in Costa Rica. But, the other side of the coin is that the rest of the country has not been able to catch up.

In addition to the historically more favorable economic environment in the Central Valley, Costa Rica's uneven spatial socioeconomic development can also be attributed to the various economic institutions established across its small territory *during and after* the colonial period, a fact that has been largely overlooked in institutional historical accounts and social science literature.

Although institutionalists have attributed Costa Rica's political stability and high socioeconomic development relative to other countries in the region to this country's patterns of colonization. In some areas of Costa Rica the very same patterns of colonization and therefore

116

the economic institutions that characterized other Central American and poor Latin American countries can also be found. This fact seems to continue having important implications for the standards of living of the populations residing in those areas.

A clear example of this pattern is the predominance of "haciendas" or large landholdings owned by a single family as a mode of land tenure in the northestern part of the country, specifically in the province of Guanacaste, during and after the colonization period. In his comprehensive study of the evolution and contemporary state of the hacienda in this region, Edelman (1992 27) states that "this province of 10,000 square kilometers appears almost another country, with a land tenure pattern resembling that of the rest of Central America's Pacific lowlands," and adds that as in other Latin American countries workers in the haciendas in Guanacaste were treated in an unfair and exploitative manner, especially in the 1930s, as consequence of the drop in international prices during the Great Depression, which contributed to the decline of wages and curtailment of labor benefits.

Indeed, as Guillen (1988, 27) points out, "the many times told account that small property predominated during the colony across all the Costa Rican territory seems unfounded, since in reality it coexisted with other forms of land tenure such as the plantación and the hacienda." Although haciendas were established mainly in Guanacaste during the colonial period, this mode of land tenure spread throughout Costa Rica's territories in the latter half of the nineteenth century as well as into the twentieth century, as a result of Costa Rica's profitable production and export of coffee and bananas to international markets, which increased the value of land and initiated a concentration of land process. The following makes this point clear:

<sup>&</sup>quot;Among the myths that currently cloud the outsider's impressions of this "Switzerland of Central America," none is as misleading as the belief that the country is a land of small farmers, unaffected by the evils of large landholdings. It may be true that the formative years of Costa Rican history were characterized by small holding land tenure, especially in the Central Valley,

but the size of landholdings, devoted to export crops, increased with the coming of coffee and banana production" (Augelli 1987 12).

Seligson (1980, 23) estimates that as a consequence of the coffee boom, "By 1864, nearly half the peasants were no longer yeomen," and about twenty years later, "71 percent of the agricultural population were landless laborers." What is more, evidence shows that even after governmental efforts to achieve a better distribution of land were implemented in the mid-twentieth century, land inequality continued to grow in Costa Rica, in part as a result of an abrupt increase in the number of haciendas across cantones. According to Seligson (1980), seventy nine per cent of the cantones experienced an increase in the concentration of land between 1963 and 1973. Seligson (1980 149) concludes that, during this period, "hardly any area of the country escaped increasing [land] concentration." Additionally, given their lack of technical assistance, many of the peasants who benefited from the land reform, during and after this period, have not been able to work the land efficiently, and as consequence are living today in extreme poverty (Baquero 1999).

Land concentration and its varying degrees across territories in Costa Rica, a core issue in this country even today, has most likely also contributed to varying levels of income and wealth inequality *within and across* cantones. Land for most of the poor in developing countries, concentrated mainly in rural areas, has been found to be the "main vehicle for investing, accumulating wealth, and transferring it between generations" (Deininger 2003). In sum, deep seated regional inequalities in Costa Rica are likely to explain in part the sharp differences observed in interpersonal trust across municipalities today.

In the 21st century, how deep is the economic gap between municipalities in Costa Rica? The answer to this question depends on how the gap is measured. Spatial inequalities are less pronounced if measured by standard of living indicators, such as life expectancy and education.

118

Yet, the gap is much sharper if assessed based on poverty rates (UNDP 2007). During the democratization period, and especially in the 1970s, Costa Rica constituted itself as a true welfare state (Segura-Ubiergo 2007), significantly improving the life of all Costa Ricans, which in turn positioned the country as one of the most developed in Latin America; nonetheless, high social investment did not translate automatically into better economic opportunities across populations and territories.

Thus, although the democratic era brought to Costa Rica an exceptional improvement in the standards of living of its population even in remote areas, through government expending in human capital, it neither guaranteed the dynamization of local economies nor a fairer distribution of economic gains. Indeed, in Costa Rica the distribution of economic gains significantly worsened over the last two decades (Jiménez and Céspedes 2007). Despite Costa Rica's overall relatively high socio-economic development, poverty in many of its municipalities is today similar to that of other less economically developed and recently democratized Latin American countries.

According to the most recent data available, the proportion of households living in poverty in Costa Rica is approximately 21.7 per cent. However, important disparities are found across municipalities.<sup>42</sup> The following map illustrates the contrasting standards of living across Costa Rica's eighty-one municipalities. The shading demonstrates the uneven nature of Costa Rica's development, with lighter shades indicating a lower proportion of households living in poverty. As can be observed, poverty rates in the Central Valley contrast with those in the rest of

<sup>&</sup>lt;sup>42</sup> Given the lack of income or consumption data reported at the municipal level in Costa Rica, poverty at this level of analysis is measured using a combination of two methods, the poverty line, which comes from annual household surveys representative at the province and national levels, and the Unsatisfied Basic Needs (NBI) approach, which uses data from the 2000 census, the most recent census conducted in the country. The poverty data presented in this chapter corresponds to estimates for 2004. The data were downloaded from the Centro Centroamericano de Población (CCP)'s website (http://ccp.ucr.ac.cr/). For a full description of the methodology used for estimating poverty rates at the municipal level in Costa Rica, see (Baquero and Bonilla 2007). The full article describing the methodology can be downloaded at http://ccp.ucr.ac.cr/byp/pdf/pobreza/barquero2.pdf

the country. Only in this region are poverty rates lower than 14 per cent, while in the northern an and southwestern and southeastern regions, poverty is widespread. The proportion of households living in poverty, for example, La Cruz in the Guanacaste province and Coto Brus in the Puntarenas is approximately 41.9 and 60.8 per cent respectively. In contrast, in cantones located in the central region, like Montes de Oca, the proportion of households living in poverty is less than ten per cent.



Figure III-2. Poverty Rates across Municipalities in Costa Rica

Given that about two thirds of the total population resides in the Central Valley, in absolute terms, the number of poor individuals is far greater in this region than in the rest of the country; the central region is home to about half of the poor in Costa Rica (World Bank 2007). Yet, the socio-economic composition of municipalities (i.e., the extent of poverty relative to its population) is likely to matter most for the creation of social capital at the local level and therefore for the functioning of local governments. Another related feature of Costa Rica's spatial inequality is that outside of the Central Valley, cantones are overwhelmingly rural. This might work to counterbalance the negative impact of poverty on interpersonal trust, as the literature consistently finds that urban settings are less suitable for building social capital.<sup>43</sup>

In sum, poverty rates across cantones clearly show that Costa Rica's fifty plus years old democracy has not been able to close the gap between regions and municipalities. The uneven performance of Costa Rica's democracy is likely to have translated into unequal opportunities for enjoying and exercising citizens' political rights, and therefore in what O'Donnell (1993) has called areas of "low intensity citizenship." As O'Donnell notes, "empirically, various forms of discrimination and extensive poverty and their correlate, extreme disparity in the distribution of (not only economic) resources, go hand in hand with low intensity citizenship."

In areas of low intensity citizenship even when the overall country's democracy score is relatively high, citizens live in a polity of a different kind, one in which the relationship between citizens and national and local governments as well as between citizens themselves is likely to be more tense and therefore conflict-prone. In municipalities of low intensity citizenship, as indicated by their lower standards of living, discord and consequently lower levels of interpersonal trust between the rich and poor are not unexpected.

<sup>&</sup>lt;sup>43</sup> Evidence for eight Latin American countries, including Costa Rica, using the LAPOP data shows that, at the individual level the size of the place matters for the formation of social capital. Individuals living in urban areas are found to have lower levels of interpersonal trust (Rosero Bixby 2006).

### Poverty and Inequality in the Municipalities Included in the Sample

Poverty rates at the cantón level were obtained from the Centro Centroamericano de Población at the Universidad de Costa Rica. The data correspond to estimates for 2004, the most recent year available and corresponds precisely to the first year of the survey data included in this study. Figure III.3 shows the proportion of households living in poverty in each municipality included in the LAPOP sample. As can be observed, poverty rates vary substantially across municipalities, from 8.9 to 41.9 per cent. The poorest municipality, La Cruz, in the province of Guanacaste, shows almost five times the poverty rate of the better off municipality, Montes de Oca, a cantón in the Central Valley and home to the main academic institutions of the country, including the Universidad de Costa Rica, and is characterized by elevated economic activity.



Figure III-3. Poverty Rates across Municipalities Included in the Sample

One of the main challenges of this study was to obtain reliable economic inequality measurements at the canton level. Given the lack of representative income or consumption data at the canton level, economic inequality figures at this level of analysis are not available. This challenge was overcome implementing the methodology developed by Mckenzie (2005). With this methodology, based on Principal Component Analysis, measures of wealth inequality are obtained using household assets and access to basic services indicators.<sup>44</sup>

Thus, McKenzie's methodology is useful for computing economic inequality measures at the subnational level in the absence of income or consumption data. Moreover, this methodology has the advantage that economic inequality can be computed over negative and zero values. Since the first principal component or wealth level,  $y_t$ , has a zero mean and can take negative values, it is not possible to compute conventional inequality measures such as the Gini coefficient, which requires dividing by the mean and only allows for positive values. McKenzie's economic inequality index overcomes this problem; the index makes it possible to estimate wealth inequality at the town level based on principal component analysis, while at the same time satisfying the basic axioms of inequality measures.<sup>45</sup> Wealth inequality is computed using the following formula:

<sup>&</sup>lt;sup>44</sup> For an explanation of the First Principal Component methodology and the computation of individual wealth based on household assets and services, see chapter II.

<sup>&</sup>lt;sup>45</sup> For a review of the main axioms of economic inequality measures see Sen and Foster (1998) and Ray (1998). Mckenzie's (2005) inequality measure satisfies the four main axioms: anonymity, scale independence, population independence, and Pigou-Dalton transfer property.

$$I_{e} = \frac{\sigma_{e}}{\sqrt{\lambda}}$$

Where,

 $\sigma_t$  is the sample standard deviation of the first principal component score,  $y_i$ , across households in town t.

 $\lambda$  is the variance of  $y_i$  over the whole sample or the largest eigenvalue corresponding to the first principal component.

As McKenzie (2005) notes,  $I_{z}$  is a measure of "relative" wealth inequality, since it compares the standard deviation of the first principal component in town t to the standard deviation of the first principal component over the whole sample. Consequently, if  $I_{z}$  is greater or lower than or equal to one, this indicates that town t shows greater, lower, or the same wealth inequality than the country as a whole, accordingly.

Although the most recent 2000 census in Costa Rica contains information on the possession of household assets and access to basic services, it was not possible to use this data source for the estimation of wealth inequality at the municipal level because in order to protect the identities of respondents, raw census data by law cannot be distributed by the statistics bureau in Costa Rica.<sup>46</sup> Alternatively, the LAPOP series on household assets and access to basic services is employed. Therefore, the relative wealth at the individual level is estimated via the First Principal Component analysis using household assets and basic services indicators based on

<sup>&</sup>lt;sup>46</sup> The Integrated Public Use Microdata Series (IPUMS) makes available to the public random samples of census data for many countries around the world, including a sample of the last census (2000) in Costa Rica. However, the IPUMS' census data for Costa Rica does not include observations for four municipalities surveyed by LAPOP: Belén, Sarapiqui, La Cruz, and Garabito. The use of the IPUMS data would have signified a loss of about 600 observations and four municipalities in my sample, which would reduce the variance in key variables across municipalities. For this reason, LAPOP's information on household assets and access to basic services was used instead.

the LAPOP data (described in chapter I). Then, the level of wealth inequality at the municipal level is estimated applying McKenzie's (2005) formula.<sup>47</sup>

Figure III.4 shows the computed economic inequality figures for each municipality using McKenzie's (2005) methodology. The municipality with the highest level of economic inequality in the sample is La Cruz. Wealth inequality for this municipality is equal to 1.56, meaning that La Cruz shows 56 per cent greater inequality than the country as a whole. As shown before, La Cruz is also the municipality with the highest poverty rate in the sample. In contrast, Tibás, located in the province of San José, shows the lowest level of inequality, with a score of 0.50, meaning that this municipality shows 50 per cent less inequality relative to the national average.

<sup>&</sup>lt;sup>47</sup> McKenzie (2005)'s methodology for the estimation of wealth inequality in the absence of income or consumption data has been widely implemented. For example, see Labonne, Biller and Chase (2007) . Labonne, Biller, and Chase's study, sponsored by the World Bank, looks at the effect of economic inequality on interpersonal trust in poor towns in the Philippines.



Figure III-4. Wealth Inequality across Municipalities Included in the Sample

In conclusion, taken together, Figures III.3 and III.4 show that there are sharp disparities *across* and *within* the municipalities included in the sample. These variations in standards of living and inequality allow for testing the hypotheses presented in Chapter II and exploring how interpersonal trust levels change across individuals and municipalities, depending on the characteristics of the context where individuals reside. Specifically, variation among interpersonal trust levels across individuals and municipalities, depending on whether one lives in a municipality characterized by low poverty and low inequality, low poverty and high inequality. Thus, as

hypothesized in Chapter II, the possibility of a reinforcing effect between poverty and inequality on interpersonal trust is examined. Figure III.5 shows the municipalities that fall in each of these four possible cases.



Figure III-5. Levels of Poverty and Inequality across Municipalities Included in the Sample

The vertical and horizontal lines correspond to the average national poverty rate and inequality, respectively. Municipalities above (below) the horizontal line present relatively high (low) levels of inequality, and those to the right (left) of the vertical line, relatively high (low) poverty rates. Thus, for example, La Cruz clearly shows high poverty and high inequality. Perez Zeledón, on the other hand, shows high poverty but low inequality. Limón falls in the category of relative low poverty and high inequality while Montes de Oca represents the best case scenario, a situation of low poverty and low inequality.

#### Is the Effect of Context Conditioned on Individual Wealth? A First Look at the Data

Relying on averaged figures, even at the sub-national level, makes it difficult to understand the underpinnings of interpersonal trust formation. In Costa Rica, the unique features of each cantón are likely to lead to a different process of interpersonal trust formation across individuals. In other words, interaction between levels of analysis might occur at the cantón level. Consequently, even if two cantones show a similar level of interpersonal trust, the mechanisms that generated it might be very different. Figure III.6 illustrates this point. It depicts the average level of interpersonal trust across quintiles of wealth in each municipality.



Figure III-6. Relationship between Interpersonal Trust and Individual Wealth by Municipality

For example, Turrialba and San Carlos show a similar average levels of interpersonal trust. However, Figure III.6 suggests that the average level of interpersonal trust in San Carlos

(see the third row of Figure III-6) seems to be similar across individuals belonging to different economic groups, while the poor show slightly higher levels of interpersonal trust in Turrialba (also on the third row). Interestingly, although these two municipalities show a relatively similar level of wealth inequality, the percentage of households living in poverty is higher in Turrialba.

Similarly, although Montes de Oca (see the second row of Figure III-6) and Puriscal (on the first row) show similar averaged levels of interpersonal trust, the rich in Montes de Oca show a higher level of interpersonal trust relative to the poor, while in Puriscal the opposite relationship between individual wealth and interpersonal trust is depicted. In this case, although both Montes de Oca and Puriscal show an inequality rate lower than the national average, in Puriscal a higher proportion of households live in poverty.

These observed differences in the average level of interpersonal trust and the strength and direction of the relationship between interpersonal trust and individual wealth across municipalities raise the following questions: can these patterns also be explained by economic contextual characteristics, and if so, can the results obtained at the country level in the previous chapter be extrapolated from the local environment? If this is the case, it would suggest that the features of the economic structure at the local level are powerful enough to shape citizens' democratic attitudes regardless of country level economic characteristics. This means that country and individual level patterns of interpersonal trust are likely to be a reflection of sub-national processes.

Because statistically significant differences in the average level of interpersonal trust and in the strength of the relationship between individual wealth and interpersonal trust across municipalities have been observed, Costa Rica offers the perfect setting for exploring the effect of economic contextual factors on interpersonal trust across municipalities and individuals. As determined in the previous chapter, there are statistically significant random effects in both the intercepts and slopes (P<0.001).<sup>48</sup> This finding allows for the use of the multilevel sub-national method and thus to expand the analysis of chapter 2 at the country and individual levels.

## Modeling Interpersonal Trust: Building a Sub-National Multilevel Model

In order to test the hypotheses laid out in the previous chapter, Costa Rica's unique characteristics must be taken into account. Although the comparative sub-national method allows for the efficient control of a country's cultural background, the level of democracy, and years of democratic rule, other factors are likely to be related to both the main independent variables, poverty and inequality, and the dependent variable, interpersonal trust, across municipalities. The following municipal characteristics are also taken into account: population density, ethnic composition, percentage of foreign born inhabitants, and level of crime and violence.

The literature suggests that the size of place matters for the formation of interpersonal trust. Places with high population density have been found to show lower levels of interpersonal trust. Since poverty and inequality are correlated with population density at the cantón level in Costa Rica, the latter must be considered in the multilevel model. In Costa Rica, poverty is concentrated mainly in rural areas (World Bank 2007 xv), although a similar extent of economic inequality, measured by the Gini coefficient, is observed in rural and urban areas at the national level (World Bank 2007 31). Wealth inequality appears to be higher in cantones with lower population density.

<sup>&</sup>lt;sup>48</sup> As expected, the total variance decomposition indicated that most of the variation in interpersonal trust is due to differences across individuals. Only five per cent of the total variance in interpersonal trust is due to differences across cantones. Nonetheless, the statistical significance of the random components for the intercept and slope indicates that it is appropriate to estimate the proposed multilevel model.

The other two factors likely to be correlated with both contextual economic variables and interpersonal trust are the cantón's ethnic composition and the percentage of foreign born population. Since individuals are more likely to trust those who are similar to themselves, ethnically mixed communities and those areas with a higher proportion of foreign born individuals are likely to show lower overall levels of interpersonal trust. In terms of ethnicity, according to the 2000 census, 94 per cent of the Costa Rican population self-identified as white or mestizo, and 5 per cent self-identified as part of one of the three main ethnic groups in the country: black (3%), Amerindian (1%), and Chinese (1%). One per cent stated that they belong to "other" ethnic groups.

The black population of Costa Rica is concentrated primarily in the North Atlantic region of the country. Black immigrants from Jamaica settled in the province of Limón at the end of the nineteenth century to work on the construction of the railroad. The flow of immigrants continued to rise in this region at the beginning of the twentieth century as the demand for labor in banana plantations grew (Mitchell and Pentzer 2008). The indigenous population is divided into eight indigenous groups distributed throughout 22 territories in the country (Putnam 2004). In contrast, the Chinese population is more spread out across the country, with important concentrations in the municipalities of Limón, Puntarenas, Nicoya, and San José.

Statistical analyses based on data from the 2000 census indicate important differences in standards of living between minority ethnic groups, particularly Afro-Costa Ricans and indigenous populations, and the rest of the population. Afro-Costa Ricans in the province of Limón constitute 74 per cent of the population and exhibit better socio-economic conditions than the rest of the population living in that province (Putnam 2004). In contrast, indigenous

populations show, in general, lower standards of living than the rest of the population (Solano Salazar 2004).

The marked socio-economic disparities between blacks and the rest of the population in the province of Limón might explain in part why the three municipalities belonging to this province included in the sample (Limón, Guacimo, and Pococí) show relatively high levels of wealth inequality. In Limón, Guacimo, and Pococí, ethnic minorities represent approximately 43, 7, and 3 per cent of the total population in these municipalities, respectively.

Moreover, prejudice and discrimination against Afro-Caribbeans and indigenous populations are still present in Costa Rica, a source of erosion of interpersonal trust in ethnically heterogeneous municipalities. According to one account,

"The stereotype of "white" Costa Rica is still apparent in advertising...and some of these same kinds of prejudices have also affected indigenous Costa Ricans. Black Costa Ricans did not become citizens until 1949. Indigenous peoples were not full citizens until 1991, when they were finally recognized as Costa Ricans by right of birth and received the identity cards (cédulas) that allowed them to vote and take advantage of state services" (Mitchell and Pentzer 2008 255).

The co-existence of foreigners and nationals can also decrease the level of interpersonal trust across municipalities. International immigration has increased considerably during the last three decades in Costa Rica. According to the latest census, foreign born individuals constitute 7.7 per cent of the population in Costa Rica; Nicaraguans represent 5.9 per cent. Important residential segregation of foreign born individuals, especially Nicaraguans, across cantones has been observed. According to one study, the highest levels of Nicaraguan residential segregation can be found in four cantones in the Central Region: San José, Alajuelita, Tibás, and Curridabat (Brenes Camacho 2003). The first three are included in the sample of this study.

The incidence of poverty has been found to be higher among foreign born individuals relative to nationals. Estimates based on census data for 2000 indicate that, while 10.2 per cent of

nationals have two or more Unsatisfied Basic Needs (NBI), this figure corresponds to 22.9 per cent among foreigners (Gutiérrez Saxe 2004).

Nicaraguans, the largest foreign born group in Costa Rica, are also victims of prejudice and discrimination. Mitchell an Pentzer (2008 262,63) note that,

"Nicaragua's tumultuous history has contributed to a popular perception that individual Nicaraguans are more prone to violence, and the generally darker tone of their skin has led them to be stereotyped as more "Indian." Costa Ricans call the immigrants "nicas," which also something Nicaraguans call themselves. Yet in this situation, it has taken a pejorative meaning and generally signifies to Costa Ricans not all people from Nicaragua, but only poor immigrants who came to Costa Rica looking for work."

This is a telling example of the intertwined relationship between nationality, ethnicity, and poverty in Costa Rica and their likely effects on Costa Ricans' political attitudes and interpersonal trust in heterogeneous communities.

Another factor associated with both economic contextual factors and interpersonal trust is the level of crime and violence in the place of residence. Previous cross-country empirical works have found that environments characterized by high economic inequality are more violent and crime prone (Fajnzylber,Lederman and Loayza 1998 ; Fajnzylber,Lederman and Loayza 2002 ; Moser, *et al.* 2003), and also that crime and violence are associated with lower levels of interpersonal trust (Lederman, *et al.* 2002).

In Costa Rica, as in other Central American countries (especially El Salvador, Honduras, and Guatemala), crime and violence has become the main problem of the country in the eyes of Costa Ricans in recent years.

The LAPOP data for 2008 show that 45.5 per cent of Costa Ricans consider issues related to lack of security as the main problems in the country, followed by the economy with 28.42 per cent. Moreover, 75.24 per cent of the Costa Rican population affirms that the level of crime in the country "very much" represents a threat to the country's future well-being. A recent report by

the UNDP shows that Costa Ricans live in constant fear of being victims of crime (UNDP 2006). Furthermore, although the level of crime and violence still remains well below the rates observed in other Central American and Latin American countries, that this fear is not unfounded as crime victimization has virtually doubled since the 1980's (UNDP 2006 92).

An important point considered in this research is that crime and violence rates in Costa Rica are not randomly distributed across municipalities. The UNDP has developed an index of public safety at the municipal level (Indice de Seguridad Cantonal, 2003), allowing the ranking of cantones according to levels of crime and violence based on three objective indicators: domestic violence, robbery, and homicide. Based on this index, the sample considered here includes six of nine cantones in the country with the lowest public safety scores: Tibás, La Cruz, Montes de Oca, Limón, Garabito, and San José (ordered from high to low). The sample also includes cantones with some of the highest public safety scores, such as Poás, Puriscal, Grecia, San Ramón, and Turrialba, and cantones with a "medium" level of public safety, such as Santa Ana, Guácimo, Desamparados, Alajuela, Escazú, and Heredia.

Table 1 shows the correlation matrix of the variables at the cantón level to be included in the multilevel model. Descriptive statistics and data sources are presented in table III.2 in the appendix to this chapter.

Table III-1. Correlation Matrix: Contextual Factors at the Municipal Level, Costa Rica   (Based on 29 municipalities)							
	Interpersonal Trust	Population Density	Public Safety	Poverty Rate	Wealth Inequality	Ethnical Diversity	Foreign Born Rate
Interpersonal Trust Population	1						
Density Public	-0.2708	1					
Safety	0.4726	-0.5248	1				
Poverty Rate Wealth	-0.0009	-0.1952	0.1038	1			
Inequality Ethnical	-0.3314	-0.3877	-0.1138	0.3902	1		
Diversity Foreign	-0.2508	-0.1003	-0.3146	0.0694	0.3925	1	
Born Rate	-0.3679	0.2653	-0.644	-0.0523	0.3129	0.0282	1

The correlation matrix indicates that the mean value of interpersonal trust is not associated with poverty at the cantón level. In contrast, wealth inequality, as expected, is negatively correlated with the average level of interpersonal trust (-0.33). Additionally, population density, the percentage of foreign born residents, and the extent of ethnic diversity (measured as the percentage of blacks, indigenous, and Chinese residents) show a relatively strong correlation with both interpersonal trust and inequality in the expected direction. This suggests the existence of factors that might confound the relationship between economic inequality and interpersonal trust. On the other hand, the UNDP's public safety indicator, although strongly correlated with interpersonal trust (0.47), is only weakly associated with poverty and wealth inequality at the cantón level. It is also noteworthy that wealth inequality maintains a relatively strong and positive relationship with poverty rates (0.39) at the municipal level, which increases confidence in the inequality measure here used.

## **Sub-National Multilevel Results**

The multilevel sub-national analysis presented in this study builds upon the multilevel model of interpersonal trust at the country and individual levels presented in the previous chapter. The multilevel sub-national analysis carried out here expands the country level analysis in three important ways. First, it seeks to further assess the empirical validity of the scarcity, relative deprivation, and alternative hypotheses outlined in chapter II, and therefore checks the robustness of the findings. Secondly, the larger number of cases at level-2 allows for the inclusion of additional contextual variables in the model. This, in turn, makes it possible to examine the impact of other contextual factors on the formation of interpersonal trust, and parcel out the effect of intertwined variables such as communities' ethnic composition and the extent of international immigration, crime and violence, poverty, and economic inequality at the local level. Lastly, a multilevel sub-national strategy in this case also permits the evaluation of the importance of structural economic factors while holding constant major competing explanations that are likely to confound the relationship between the economic context and interpersonal trust, specifically the country's cultural heritage and level of and experience with democracy. The results of the multilevel sub-national analysis are shown below.

# What explains the varying levels of interpersonal trust in Costa Rica? Individual and Municipal Level Factors

Table 2 presents the results of the effect of individual level variables and each contextual variable included in the analysis. All multilevel models were estimated based on a non-linear function, specifically an ordered logit model. The first point to note is that given the larger sample size at level-2, 29 municipalities, appropriate robust standard errors were obtained. Thus,
the statistical significance of all the results reported here are based on robust standard errors, increasing confidence that the estimated parameters and their effects resemble that of the true population values. In addition, Table 2 shows that the reliability estimates for the intercepts are high ( $\lambda$ >0.7), which also increases confidence in the robustness of the results.

The individual level variables included in the models are the following: quintiles of wealth, corruption and crime victimization, participation in civic groups, life satisfaction, religion, size of place, number of children, education, age, age squared, and sex. The results indicate that, as expected, individuals with a higher socio-economic status, as measured by the level of household wealth, are more likely to show higher levels of trust in the people in their communities. On the other hand, corruption and crime victimization are detrimental to interpersonal trust. Civic participation is not statistically significant linked to interpersonal trust, confirming the disconnection or weak link between civic participation and interpersonal trust in the Latin American context. Life satisfaction is statistically significant and strongly linked with interpersonal trust so that individuals who have higher levels of life satisfaction are also more likely to trust others, a result that supports the contention that life satisfaction and interpersonal trust go together (Inglehart and Baker 2000). Interestingly, the results show that in terms of religious denomination, Costa Rican Catholics have higher levels of interpersonal trust than Protestants and that there is no difference in interpersonal trust between Protestants and individuals of "other" denominations or individuals self-identified as nonreligious.

At the individual level, the size of place of residence, as expected, is an important determinant of interpersonal trust. All other things being equal, individuals living in high density population areas (i.e., urban areas), which typically are the most developed areas in any country, show lower levels of interpersonal trust. On the other hand, having children does not seem to

affect one's level of interpersonal trust. Individual education also does not have a statistically significant effect on interpersonal trust.

In contrast to the country-level results, in Costa Rica age affects are observed. Age maintains a curvilinear relationship with interpersonal trust, with younger and older individuals showing lower levels of interpersonal trust and middle aged persons, higher levels. Males are also more likely than females to trust others.

Table III-2. Results Multilevel Model: Intercept as outcomes model   (Standardized Coefficients with Robust Standard Errors)															
	Equation 1 Equation 2					KUDUSI SI	Equation 3 Equation 4			4	Equation 4				
Eined Effects	Cash	Odds	P-	Cash	Odds	P-	Carf	Odds	P-	Cash	Odds	D Value	Case	Odds	P-
Fixed Effects	Coel.	Ratio	Value	Coel.	Ratio	Value	Coel.	Ratio	Value	Coel.	Ratio	r-value	Coel.	Ratio	Value
Fixed Effects:															
Contextual Variables (Random															
Intercept, $\beta_0$	0.460	0.(25	0.000	0.460	0.000	0.000	0.4(0	0.000	0.000	0.460	0.000	0.000	0.460	0.(25	0.000
Intercept, $\gamma_{00}$	-0.469	0.625	0.000	-0.469	0.626	0.000	-0.469	0.626	0.000	-0.469	0.626	0.000	-0.469	0.625	0.000
Population Density, $\gamma_{01}$	-0.060	0.942	0.270	-0.015	0.985	0.728	0.021	1.022	0.616	-0.114	0.893	0.022	-0.056	0.946	0.309
Poverty, $\gamma_{02}$										0.174	0.941	0.002	-0.019	0.981	0.779
Weath inequality, $\gamma_{03}$ Dublic Safety of							0.142	1 1 5 2	0.023	-0.1/4	0.041	0.002			
Ethnical Diversity $\gamma_{04}$	-0.067	0.935	0.004				0.142	1.132	0.025						
Foreign Born $v_{06}$	0.007	0.755	0.001	-0.135	0 874	0.012									
Individual Level Variables				0.150	0.07.	0.012									
Ouintiles of Wealth. $\beta_1$	0.082	1.085	0.023	0.083	1.086	0.021	0.082	1.085	0.023	0.085	1.088	0.019	0.082	1.086	0.023
Corruption victim, $\beta_2$	-0.065	0.937	0.024	-0.065	0.937	0.025	-0.064	0.938	0.027	-0.065	0.937	0.024	-0.065	0.937	0.025
Crime victim, $\beta_3$	-0.051	0.950	0.150	-0.052	0.950	0.149	-0.051	0.950	0.151	-0.052	0.950	0.145	-0.051	0.950	0.150
Civic participation, $\beta_4$	-0.039	0.961	0.154	-0.040	0.960	0.145	-0.040	0.961	0.150	-0.039	0.962	0.161	-0.040	0.961	0.154
Life Satisfaction, $\beta_5$	0.313	1.367	0.000	0.312	1.367	0.000	0.313	1.367	0.000	0.311	1.365	0.000	0.313	1.368	0.000
Education, $\beta_6$	0.006	1.006	0.866	0.005	1.005	0.891	0.006	1.006	0.871	0.001	1.001	0.971	0.006	1.006	0.882
Age, $\beta_7$	0.829	2.291	0.000	0.832	2.297	0.000	0.829	2.290	0.000	0.828	2.289	0.000	0.831	2.296	0.000
Age squared, $\beta_8$	-0.545	0.580	0.000	0.549	0.577	0.000	-0.546	0.579	0.000	-0.548	0.578	0.000	-0.548	0.578	0.000
Sex (Male=1; Female=0), $\beta_9$	0.069	1.071	0.006	0.068	1.070	0.006	0.069	1.071	0.006	0.069	1.072	0.006	0.068	1.070	0.006
Area (Urban=1;Rural=0), $\beta_{10}$	-0.133	0.875	0.005	-0.138	0.871	0.003	-0.132	0.876	0.005	-0.143	0.866	0.002	-0.135	0.874	0.004
Number of Children, $\beta_{11}$	-0.007	0.992	0.854	-0.007	0.993	0.860	-0.007	0.993	0.857	-0.006	0.994	0.876	-0.008	0.992	0.849
Catholic (=1; 0=Protestant), $\beta_{12}$	0.078	1.081	0.028	0.079	1.082	0.029	0.079	1.082	0.027	0.077	1.080	0.033	0.079	1.082	0.028
No Religious (=1; 0=Protestant), $\beta_{13}$	-0.013	0.987	0.686	-0.013	0.987	0.718	-0.013	0.987	0.709	-0.012	0.988	0.723	-0.013	0.987	0.706
Other Religion (=1; 0=Protestant), $\beta_{14}$	-0.019	0.981	0.520	-0.018	0.982	0.521	-0.019	0.981	0.513	-0.019	0.981	0.512	-0.019	0.981	0.516
Threshold 2,	1.678	5.353	0.000	1.678	5.354	0.000	1.678	5.354	0.000	1.678	5.353	0.000	1.678	5.353	0.000
Threshold 3	3.198	24.495	0.000	3.198	24.484	0.000	3.198	24.491	0.000	3.198	24.490	0.000	3.198	24.492	0.000
Random Effects:															
Intercept, u <sub>0</sub>	0.11034		0.000	0.09690		0.000	0.099		0.000	0.08679		0.000	0.11454		0.000
Percent Explained, Intercept, u <sub>0</sub>	25.91%			34.57%			33.15%			41.39%			22.66%		
Reliability Intercept	0.821	• •		0.801	•		0.805	•		0.783	•		0.826		
N. Obs Municipal Level		29			29			29			29		29		
N. Obs Individual Level		2471			2471			2471			2471		2471		

Contextual factors at the cantonal (i.e., municipal) level also matter for the building of interpersonal trust. Given that the population size of the municipality is an important determinant of interpersonal trust, it was left as a control variable in all models in Table 2. Each model assesses the effect of a contextual variable while taking into account the population size in each municipality. As can be observed, ethnically heterogeneous municipalities are less likely to build interpersonal trust; specifically, the greater the percentage of blacks, indigenous, and Chinese populations, the lower the likelihood of an individual finding the people in their community trustworthy. Similarly, the greater the percentage of foreign born individuals, the lower the likelihood of trusting one's neighbors. Thus, it can be inferred that international migration, particularly of Nicaraguans, tends to decrease the overall level of interpersonal trust in high migration municipalities.

Additionally, municipalities with high violence and crime rates also show lower levels of interpersonal trust, as suggested by the statistically significant and positive sign of the "public safety" coefficient. Moreover, municipalities divided by disparities in wealth are also less likely to build interpersonal trust. In fact, the model that includes the wealth inequality variable shows a better goodness of fit, as indicated by the largest percentage of the total variance in the intercepts explained by this model. Specifically, wealth inequality jointly with population density explains 41.39 per cent of the total variance in interpersonal trust across cantones. Municipalities' overall absolute economic well-being (i.e., poverty), however, does not significantly explain the varying levels of interpersonal trust across municipalities.

The next section explores whether the effect of inequality remains strong even after taking into account simultaneously, in a single model, the effect of other contextual

140

characteristics at the municipal. Moreover, it explores whether contextual factors explain the observed differences in interpersonal trust across individuals from different economic groups.

# What are the main determinants of interpersonal trust at the municipal level? Do economic structural factors at the municipal level explain observed differences in interpersonal trust across economic groups?

Table 3 shows the results of the combined multilevel models. In contrast to the statistical analysis shown in Table 2, the multilevel models in Table 3 examine the municipal level determinants of the variations observed in both the intercept and slopes of the quintile of wealth variable across municipalities. Moreover, by including additional contextual variables at the municipal level in a single model, Table 3 test the robustness of the results presented in Table 2. As can be observed, when contextual variables are considered simultaneously, the negative effect of wealth inequality predominates. In other words, the inequality of wealth coefficient remains statistically significant at standard levels even after taking into account the effect of population density, ethnic diversity, international immigration rates, public safety, and poverty. Thus, although all these factors seem to explain in part why interpersonal trust is more likely to flourish in some municipalities rather than in others (except for the extent of poverty), inequality of wealth stands out as the most important determinant of interpersonal trust levels across municipalities in Costa Rica. In fact, most other factors, except wealth inequality, lose their statistical significance once they are considered simultaneously in a single model.<sup>49</sup> This finding is consistent with the results of the cross-country multilevel analysis presented in the previous chapter.

<sup>&</sup>lt;sup>49</sup> Because of evidence of multicolinearity, in Table 3, equation 4 considers simultaneously only the effects of five out of the six level-2 variables here taken into account. However, as shown, both ethnical diversity and the percentage of foreign born variables, in equations 3 and 4 accordingly, lose their statistical significance once they are entered in the model in combination with wealth inequality, indicating that the effect of inequality predominates over these two variables.

Table III-3. Results Multilevel Model: Intercept and Slope as Outcomes Model												
(Standardized Coefficients with Robust Standard Errors)												
	Equation 1		Equation 2		Equation 3			Equation 4				
Fixed Effects	Coef.	Odds Datia	P- Valees	Coef.	Odds Datia	P- Valesa	Coef.	Odds Datia	P- Value	Coef.	Odds Datia	P- Valera
Fixed Effects:		Katio	value		Katio	value		Katio	value		Katio	value
FIXED Effects. Contextual Variables (Pandom Intereant B)												
Intercent ve	-0.473	0.623	0.000	-0.473	0.623	0.000	-0.473	0.623	0.000	-0.473	0.623	0.000
Population Density you	-0.140	0.820	0.000	-0.087	0.917	0.000	-0.084	0.919	0.000	-0.084	0.920	0.000
Poverty, $\gamma_{02}$	0.051	1.052	0.393	0.040	1.041	0.510	0.041	1.041	0.504	0.036	1.037	0.556
Wealth Inequality, $\gamma_{03}$	-0.200	0.819	0.002	-0.166	0.847	0.029	-0.170	0.844	0.031	-0.152	0.859	0.072
Public Safety, $\gamma_{04}$				0.080	1.084	0.258	0.086	1.090	0.260	0.057	1.059	0.480
Ethnical Diversity, $\gamma_{05}$							0.014	1.014	0.679			
Foreign Born, $\gamma_{06}$										-0.042	0.959	0.617
Contextual Variables (Quintiles of wealth, $\beta_1$ )												
Intercept, $\gamma_{10}$	0.074	1.077	0.028	0.074	1.077	0.025	0.074	1.077	0.025	0.075	1.077	0.018
Population Density, $\gamma_{11}$	0.097	1.102	0.001	0.075	1.078	0.079	0.077	1.080	0.078	0.072	1.074	0.088
Poverty, $\gamma_{12}$	-0.076	0.927	0.009	-0.072	0.930	0.014	-0.072	0.931	0.014	-0.067	0.935	0.028
Wealth Inequality, $\gamma_{13}$	0.044	1.045	0.234	0.031	1.031	0.491	0.030	1.030	0.519	0.015	1.015	0.709
Public Safety, $\gamma_{14}$				-0.032	0.968	0.391	-0.031	0.970	0.450	-0.003	0.997	0.934
Ethnical Diversity, $\gamma_{15}$							0.004	1.004	0.846	0.052	1.052	0 1 1 7
Foreign Born, $\gamma_{16}$										0.032	1.055	0.117
Corruption victim B.	-0.069	0.933	0.017	-0.068	0.934	0.019	-0.068	0.934	0.019	-0.069	0.033	0.018
Crime victim, $\beta_2$	-0.007	0.952	0.017	-0.000	0.952	0.017	-0.000	0.953	0.017	-0.009	0.953	0.013
Civic participation B.	-0.040	0.952	0.174	-0.040	0.952	0.173	-0.040	0.961	0.170	-0.040	0.952	0.175
Life Satisfaction B.	0.310	1 363	0.105	0.310	1 363	0.000	0.310	1 363	0.000	0.309	1 363	0.150
Education B <sub>c</sub>	0.001	1.001	0.000	0.001	1.001	0.000	0.001	1.001	0.000	0.002	1.002	0.000
Age $\beta_{-}$	0.001	2 315	0.000	0.837	2 310	0.000	0.838	2 313	0.000	0.836	2 308	0.000
Age squared $\beta_{\alpha}$	-0.552	0.576	0.000	-0.551	0.577	0.000	-0.552	0.576	0.000	-0 549	0.578	0.000
Sex (Male=1: Female=0) $\beta_2$	0.071	1.073	0.000	0.071	1 074	0.006	0.071	1 074	0.006	0.072	1 074	0.000
Area (Urban=1:Rural=0), $\beta_{1}$	-0.116	0.891	0.007	-0.114	0.892	0.009	-0.114	0.892	0.011	-0.114	0.892	0.000
Number of Children B.	-0.011	0.091	0.007	-0.010	0.990	0.795	-0.010	0.990	0 794	-0.011	0.892	0.782
Catholic (=1: $0$ =Protestant) $\beta_{12}$	0.061	1.063	0.087	0.061	1.063	0.088	0.061	1.063	0.089	0.060	1.062	0.762
No Religious (=1: 0=Protestant), $\beta_{12}$	-0.021	0.980	0.558	-0.021	0.980	0.555	-0.021	0.980	0.555	-0.021	0.979	0.545
Other Religion (=1: $0$ =Protestant), $\beta_{1,3}$	-0.021	0.978	0.330	-0.022	0.978	0.333	-0.022	0.978	0.443	-0.021	0.978	0.343
Threshold 2	1 690	5 418	0.000	1 691	5 422	0.000	1 691	5 4 2 6	0.000	1 691	5 426	0.000
Threshold 3	3.220	25.032	0.000	3.221	25.056	0.000	3.222	25.080	0.000	3.222	25.080	0.000
Random Effects:												
Intercept, u <sub>0</sub> (Variance Component)	0.097	25	0.000	0.104	24	0.000	0.109	23	0.000	0.108	23	0.000
Quintiles, slope u <sub>1</sub> (Variance Component)	0.012	25	0.000	0.012	24	0.008	0.014	23	0.005	0.012	23	0.011
Percent Explained, Intercept, u <sub>0</sub>		34.46%			29.73%			26.35%			27.03%	
Percent Explained, Quintiles, slope u <sub>1</sub> 47.83%			47.83%			39.13%			47.83%			
Reliability Intercept												
Reliability Slope												
N. Obs Municipal Level		29			29			29			29	
N. Obs Individual Level		4263			4263			4263			4263	

On the other hand, the slope as an outcome portion of the model shows that the extent of poverty at the municipal level has a role to play in explaining interpersonal trust. The statistically significant and negative coefficient of the interaction between individual wealth (i.e., quintiles of wealth variable) and poverty rates at the municipal level indicates that the relatively rich show lower levels of interpersonal trust in low socio-economic environments. This result holds even after controlling for the other contextual variables considered in this chapter, including wealth inequality at the municipal level. This finding is also consistent with the results of the cross-country multilevel analysis. *Thus, while wealth inequality lowers the average level of interpersonal trust across municipalities, local environments characterized by high poverty inspire mistrust among better-off individuals.* 

In terms of goodness of fit, the model in Equation I in Table 3, the simplest model, performs best. This model explains 34.46 per cent of the variance in interpersonal trust across cantones and 47.83 per cent of the variance in the strength of the relationship between individual wealth and interpersonal trust across cantones.

In addition, the results of this chapter also suggest that better off individuals are more trusting of their neighbors in large or high population density municipalities; namely in more urban settings, as also found in the previous chapter. Hence, this finding suggests that even if poverty is relatively low, the rich are more trusting of others if they live in relatively modern environments, where the overall standard of living is higher and therefore, in terms of socioeconomic status, those with whom they are likely to interact are more like them. The following passage, from a book that describes Costa Ricans' social life and culture, illustrates how the characteristics of the place of residence, particularly its overall level of development, shapes the views of better off individuals toward unlike others, "Villagers refer to people in outlying hamlets as *gente de campo*, or country folk. (They in turn are lumped in that category by residents of larger towns). As rural communities have become less isolated and as land has become scarcer, class distinctions there have approached the urban pattern. Landowners may send their children to high school and even to a university or to work for a time in the United States, thus enhancing their own prestige in the community while weakening their identification with it. They are now also more likely to seek out friends or commercial amusements in a large town and less likely to share their wealth with poorer kin...a sixty-five-year-old small farmer in a nearby hamlet comments, "Both rich and poor greet each other when they pass. But each has his own friends." This comment encapsulates an old truth about social class in Costa Rica: Although one's class position has profound effects on lifestyle and opportunities, it is downplayed in most face-to-face interaction, where the desire to *quedar bien* is paramount."(Biesanz,Biesanz and Biesanz 1999 109)

These social patterns are in fact observed not only in Costa Rica but also more generally throughout the Latin American context.

As Biesanz, Biesanz, and Biesanz suggest, better off individuals' lower identification with the poor in their communities is likely to have important political implications as the relatively rich are probably less likely to support policies that seek to close the gap between rich and poor. This possibility is explored in the next chapter of this dissertation.

Taken together, the results of the sub-national multilevel analysis performed here give strong support to the alternative hypothesis laid out in chapter II, and consequently to the results of the cross country multilevel analysis. Economic inequality and socio-economic underdevelopment reinforce each other, contributing to an overall state of *mis*trust. Based on the results of the sub-national multilevel analysis, Figure III.7 exemplifies the dynamics of interpersonal trust formation in the Costa Rican context, and the role that these two structural economic factors play in the building of interpersonal trust across the relatively rich and poor.

Specifically, Figure III.7 shows the predicted average interpersonal trust across individuals from different economic classes in four municipalities with varying degrees of wealth inequality and poverty: La Cruz (a relatively high poverty and high inequality town), Pérez

Zeledón (a relatively high poverty and low inequality town), Limón (a relatively low poverty and high inequality town), and Montes de Oca (a relatively low poverty and low inequality town).<sup>50</sup>



Figure III-7. Dynamics of Interpersonal Trust Formation at the Local Level, an Illustration

Figure III.7 clearly shows that, in the two municipalities with high poverty rates, La Cruz and Pérez Zeledón, the relationship between individual wealth and interpersonal trust is negative, with a steep slope. Hence, the poor show much higher levels of interpersonal trust than the relatively rich. In addition, as predicted, given La Cruz's higher wealth inequality, the overall level of interpersonal trust is lower than in Pérez Zeledón, as depicted by the lower solid parallel line. In places with high wealth inequality both the poor and rich are more likely to be mistrusting, but mistrust is reinforced among the rich when inequality is accompanied by high levels of poverty; intolerance to difference rises among the rich in highly underdeveloped towns.

In contrast, in Montes de Oca, a town with low poverty, the relationship between individual wealth and interpersonal trust is positive, suggesting that better off individuals show

<sup>&</sup>lt;sup>50</sup> As shown in Figure III.5, towns included in the sample are classified in one of these four categories, taking as a reference point the average level of inequality and poverty in the country as a whole.

higher levels of interpersonal trust. In Limón, a town with a lower poverty rate than the national average, but greater than in Montes de Oca, this relationship is negative. Moreover, the lower intercept of the line that represents Limón indicates the higher level of wealth inequality in this town relative to Montes de Oca. It is also noteworthy that because of Limón's lower poverty rate, the relationship between individual wealth and interpersonal trust, although negative, is weaker than in La Cruz and Pérez Zeledón.

#### Conclusion

The findings of this chapter have important implications for the comparative politics literature in general, and Costa Rica's democratization in particular.

This research suggests that cultural arguments explaining political attitudes across nations have been overestimated. The sub-national analysis here performed rejects the notion that a country's cultural background prescribes its citizens' political attitudes. Within a culturally homogeneous country, with a culture rooted in the Roman Catholic tradition, extremely different sets of political attitudes are found. In Costa Rica, some municipalities present levels of interpersonal trust similar to the United States, a country with a Protestant cultural background, while other municipalities show levels of interpersonal trust similar to the ones found in Catholic Latin American countries characterized by political turmoil. The analysis presented in this chapter exemplifies the importance of engaging in sub-national research in comparative politics, and therefore going beyond the aggregate cross-country approach that has predominated in the field. Although at the country level, certain patterns are observed, these may be discredited once sub-national disparities are taken into account.

When compared to culture, economic structure matters most for the creation of interpersonal trust. Thus, this research finds institutional accounts, rather than culturalist arguments, more compelling. To be clear, it is not argued here that values do not matter; quite the contrary. But it does argue that institutional context has an important impact on values, and that variation in context produces sharply different values even when national context and cultural patterns and histories are identical, as they are in the case of this single-country (Costa Rica) analysis.

147

Congruent with the analysis presented in the previous chapter, in Costa Rica sub-national variations in interpersonal trust across municipalities are in great part explained by economic inequality within municipalities. *The wider the gap between haves and have nots at the local level, the lower the average level of interpersonal trust. Similarly, the effect of municipalities' economic composition on interpersonal trust is conditioned on citizens' economic status such that wealthy individuals living in municipalities characterized by underdevelopment and high poverty show lower levels of interpersonal trust.* In sum, when underdevelopment and inequality are high at the local level, interpersonal trust is lower, especially among the wealthy, in comparison to relatively rich and egalitarian local environments. This gives support to the hypothesis that socio-economic underdevelopment and economic inequality have a reinforcing negative effect on the creation of interpersonal trust. Of course, this is exactly the situation found in many Latin American countries.

Consequently, the analysis presented here, in addition to highlighting the importance of carrying out sub-national research to allow testing important theories in comparative politics, this research also demonstrates the relevance of further assessment of the likely effects of local contextual factors across individuals with distinctive traits. Indeed, a sub-national *multilevel* analysis allows disentangling the mechanisms through which democratic attitudes are formed.

Taken together, the results of this and the previous chapter suggest that cross-country patterns can be extrapolated from the intermixing of local contextual characteristics and individual traits, supporting the assertion that "all politics is local politics."<sup>51</sup> In the Latin American context, local politics have experienced unprecedented salience in the past two decades. Most countries are in the process of state reform, which includes the decentralization of resources and responsibilities from national to local governments (Lora and World Bank. 2007).

<sup>&</sup>lt;sup>51</sup> Cited in Huckfeldt and Sprague (1995).

One of the aims of decentralization is the empowerment of citizens through the installation of participatory democracies at the local level. However, for decentralized regimes to contribute to the deepening of democracy "from below," high levels of interpersonal trust in communities are required. In the case of Costa Rica, because of eroding interpersonal trust, deep seated economic inequalities within and across municipalities are threatening the potential of decentralization policies to fortify democracy at the grassroots level. This implies that decentralization may have a "regressive" effect on democracy, with citizens living in economically better off municipalities disproportionately benefiting from decentralization policies.

# Appendix

Appendix III-1. Descriptive Statistics: Mean Interpersonal Trust by Municipality from High to Low								
Municipality	Mean	Standard Error	95% Confide	nce Interval				
Turrialba	79.626	2.451	74.820	84.431				
San Carlos	79.577	1.917	75.818	83.336				
Poás	79.349	1.940	75.545	83.153				
Oreamuno	79.215	2.399	74.512	83.918				
Grecia	78.493	2.112	74.353	82.633				
Perez Zeledon	77.662	2.171	73.405	81.919				
Belén	73.731	2.374	69.077	78.385				
Cartago	73.074	2.278	68.608	77.540				
Montes de Oca	71.171	2.456	66.357	75.986				
Puriscal	71.166	2.339	66.580	75.751				
San Ramon	70.878	2.278	66.411	75.344				
Goicoechea	70.538	2.636	65.371	75.705				
Guácimo	69.311	2.602	64.210	74.412				
Escazú	69.293	2.415	64.558	74.027				
Garabito	69.293	2.436	64.517	74.068				
Sarapiquí	67.714	2.497	62.818	72.611				
Tibás	66.178	2.874	60.543	71.814				
Heredia	66.163	2.726	60.818	71.509				
Santa Ana	66.056	2.340	61.468	70.643				
Pococí	65.456	2.621	60.318	70.595				
Alajuela	65.419	2.333	60.844	69.994				
Aserrí	63.000	2.636	57.832	68.168				
Carrillo	62.712	2.736	57.349	68.076				
Puntarenas	62.196	2.885	56.540	67.851				
La Cruz	61.838	2.412	57.109	66.567				
Limón	60.373	2.788	54.907	65.839				
Alajuelita	60.138	2.692	54.860	65.416				
San Jose	59.497	1.953	55.668	63.326				
Desamparados	56.403	2.845	50.824	61.981				
Data Source: Americas Barometer 2004, 2006, 2008 by LAPOP								

Appendix III-2. Descriptive Statistics and Data Sources of the Municipal Data Employed in this Study										
Variable	Number of Obs. (Municipalities)	Mean	Standard Deviation	Minimum	Maximum	Description	Data Source			
Wealth Inequality	29	0.883	0.244	0.503	1.560	Computed based on Mackenzie's (2005) methodology	LAPOP's household assets and access to basic services series			
Population Density	29	4.069	1.689	1	7	Level of population concentration	UNDP's 2006 Report for Costa Rica, "Estado de la Nación"			
Public Safety	29	0.674	0.186	0.287	0.959	Based on official figures for the following three crimes: homicide, robbery, and domestic violence. The index rages from 0 to 1, where 0 represents high levels of crime	UNDP's 2006 Report for Costa Rica: Informe nacional de desarrollo Humano, 2005			
Poverty	29	20.424	8.475	8.9	41.9	Rates computed based on the combination of the Unsatisfied Basic Needs (NBI) and Poverty Line methodologies; figures based on Costa Rica's 2000 national census and household surveys	Centro Centroamericano de Población (CCP)			
Foreign Born	29	8.8	5.089	0.8	21.1	Figures based on Costa Rica's 2000 national census	Centro Centroamericano de Población (CCP)			
Ethnicity	29	3.274	7.826	0.35	43.09	Figures based on Costa Rica's 2000 national census	Centro Centroamericano de Población (CCP)			

## References

- Acemoglu, Daron Johnson Simon, and James A. Robinson. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." *The Quarterly Journal of Economics* 117, no. 4 (2002): 1231-94.
- Acemoglu, Daron, and James A. Robinson. "The Role of Institutions in Growth and Development, Working Paper N. 10." Commission on Growth and Development, 2008.
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. "Fractionalization." *Journal of Economic Growth* 8 (2003): 155-94.
- Anderson, Christopher J., and Matthew M. Singer. "The Sensitive Left and the Impervious Right: Multilevel Models and the Politics of Inequality, Ideology, and Legitimacy in Europe." *Comparative Political Studies* 41, no. 4-5 (2008): 564-99.
- Augelli, John P. "Costa Rica's Frontier Legacy." Geographical Review 77, no. 1 (1987): 1-16.
- Baquero, Jorge A., and Roger E. Bonilla. "Estimaciones de pobreza para áreas pequeñas en Costa Rica: una aplicación de los estimadores de contracción de James Stain." *Revista de Matemática: Teoría y Aplicaciones* 14, no. 2 (2007): 183-92.
- Baquero, Marvin S. "Deuda con campesinos." La Nación, Digital, Lunes 27 de diciembre 1999.
- Biesanz, John Berry, and Mavis Hiltunen Biensanz. Costa Rican Life. New York: Columbia University Press, 1944.
- Biesanz, Mavis Hiltunen, Richard Biesanz, and Karen Zubris Biesanz. *The Ticos: Culture and Social Change in Costa Rica*. Boulder, Colo.: Lynne Rienner Publishers, 1999.
- Biesanz, Richard, Karen Zubris Biesanz, and Mavis Hiltunen Biesanz. *The Costa Ricans*. Englewood Cliffs, N.J.: Prentice-Hall, 1982.
- Boix, Carles, and Daniel N. Posner. "Social capital: Explaining its Origins and Effects on Government Performance." *British Journal of Political Science* 28, no.4 (1998): 686-93.
- Booth, John A. Costa Rica : Quest for Democracy, Nations of the Modern World. Latin America. Boulder, Colo.: Westview Press, 1998.
- Brenes Camacho, Gilbert. "Segregación residencial de los immigrantes Nicaraguenses en Costa Rica en 2000." In *Población y Salud en Mesoamérica (<u>http://ccp.ucr.ac.cr/revista/</u>), 2003.*
- Céspedes, Victor Hugo, Claudio González, Ronulfo Jiménez, and Eduardo Lizano. *Costa Rica: Una economía en crisis*. Edited by Academía de Centroamerica. San José, Costa Rica, 1983.
- Córdova Macías, Ricardo, Manuel Rojas Bolaños, and Carlos Valverde Castro. *Centroamérica: Gobierno local y participación ciudadana, Costa Rica.* San Salvador, El Salvador: FLACSO Programa El Salvador, 1996.
- Daughters, Robert, and Leslie Harper. "Fiscal and Political Decentralization Reforms." In *The State of State Reform in Latin America*, edited by Eduardo Lora, xxi, 446 p. Stanford, CA Washington D.C.: Stanford University Press; World Bank, 2007.
- Deininger, Klaus. "Land Policies for Growth and Poverty Reduction." In *A World Bank Policy Research Report*, edited by World Bank: The World Bank, 2003.
- Ebel, Roland H., and Raymond Taras. "Politics and Social Change in Latin America: Still a Distinct Tradition?", edited by Howard J. Wiarda and Margaret MacLeish Mott, xiv, 309 p. Westport, Conn.: Praeger, 2003.

- Edelman, Marc. *The Logic of the Latifundio: The Large Estates of Northwestern Costa Rica since the Late Nineteenth Century*. Stanford, Calif.: Stanford University Press, 1992.
- Fajnzylber, Pablo, Lederman Daniel, and Loayza Norman. "Inequality and violent crime." *Journal of Law and Economics* 45, no. 1 (2002): 1-44.
- Fajnzylber, Pablo, Daniel Lederman, and Norman Loayza. Determinants of Crime Rates in Latin America and the World: an Empirical Assessment, World Bank Latin American and Caribbean studies. Viewpoints. Washington, D.C.: World Bank, 1998.
- Gutiérrez Saxe, Miguel. "Exploración de datos censales sobre pobreza approximada según necesidades básicas insatisfechas (NBI), en la Costa Rica actual." In *Costa Rica a la luz del censo del 2000*, edited by Luis. Rosero Bixby. San José, Cota Rica: Centro Centroamericano de Población de la Universidad de Costa Rica, 2004.
- Hall, Carolyn. "Regional Inequalities in Well-Being in Costa Rica." *Geographical Review* 74, no. 1 (1984): 48-62.
- Harrison, Lawrence E. Underdevelopment Is a State of Mind: The Latin American Case. Boston, MA: Center for International Affairs, Harvard University and University Press of America, 1985.
- Inglehart, Ronald. "The Renaissance of Political Culture." *American Political Science Review* 82, no. 4 (1988): 1203-30.
- ———. "Trust, Well-being and Democracy." In *Democracy and Trust*, edited by Mark E. Warren, 88-120. Cambridge: Cambridge University Press, 1999.
- Inglehart, Ronald, and Wayne E. Baker. "Modernization, Cultural Change, and the Persistence of Traditional Values." *American Sociological Review* 65, no. 1 (2000): 19-51.
- Inglehart, Ronald, and Christian Welzel. *Modernization, cultural change, and democracy : the human development sequence*. Cambridge, UK ; New York: Cambridge University Press, 2005.
- Jackman, Robert W., and Ross A. Miller. "Social Capital and Politics." *Annual Review of Political Science* 1, no. 1 (1998): 47-73.
- Jiménez, Ronulfo, and Victor Hugo Céspedes. "La desigualdad en la distribución del ingreso en Costa Rica: 1988-2004." In *Distribución del ingreso en Costa Rica: 1988-2004*, edited by Victor Hugo Céspedes and Ronulfo Jiménez. San José, Costa Rica. : Academia de Centroamérica, 2007.
- Labonne, Julien, Dan Biller, and Rob Chase. "Inequality and Relative Wealth: Do They Matter for Trust? Evidence from Poor Communities in the Philippines." In *Social Development Papers, Community Driven Development, The World Bank*, 2007.
- Lederman, Daniel, Loayza Norman, and Menendez Ana Maria. "Violent Crime: Does Social Capital Matter?" *Economic Development and Cultural Change* 50, no. 3 (2002): 509.
- McKenzie, David J. "Measuring inequality with asset indicators." Journal of Population Economics 18, no. 2 (2005): 229-60.
- Mitchell, Margaret T., and Scott Pentzer. Costa Rica : a Global Studies Handbook, Global Studies. Latin America & the Caribbean. Santa Barbara, Calif.: ABC-CLIO, 2008.
- Monge, Carlos. Historia de Costa Rica. 16 ed. San José, Costa Rica: Libreria Trejos, 1980.
- Moser, Caroline, Ailsa Winton, and Annalise Moser, eds. *Violence, Fear and Insecurity and the Urban Poor in Latin America*. Edited by World Bank, *World Bank report on Urban Poverty in Latin America*. Washington DC: World Bank, 2003.

- North, Douglass Cecil. Institutions, Institutional Change, and Economic Performance, The Political Economy of Institutions and Decisions. Cambridge ; New York: Cambridge University Press, 1990.
- Programa Estado de la Nación. "Estado de la región en desarrollo humano sostenible: un informe desde centroamérica y para centroamérica." edited by Programa Estado de la Nación, 2008.
- Putnam, Robert. "The Strange Death of Civic America." The Independent 1996, 13.
- Putnam, Robert D. "Tuning in, Tuning out: The Strange Disappearance of Social Capital in America." *PS, Political Science & Politics* 28, no. 4 (1995): 664-83.
- Putnam W., Lara Elizabeth. "La población afrocostarricense según los datos del censo de 2000." In Costa Rica a la luz del censo del 2000, edited by Luis. Rosero Bixby. San José, Cota Rica: Centro Centroamericano de Población de la Universidad de Costa Rica, 2004.
- Ray, Debraj. Development Economics. Princeton, N.J.: Princeton University Press, 1998.
- Rosero Bixby, Luis. "Social Capital, Urban Settings and Demographic Behavior in Latin America." *Population Review* 45, no. 2 (2006).
- Segura-Ubiergo, Alex. *The Political Economy of the Welfare State in Latin America: Globalization, Democracy, and Development.* Cambridge; New York: Cambridge University Press, 2007.
- Seligson, Mitchell, A. "Can Social Capital be Constructed? Decentralization and Social Capital Formation in Latin America." In *Developing cultures: Essays on Cultural Change*, edited by Lawrence Harrison and Jerome Kegan. New York: Routledge, 2005.
- Seligson, Mitchell A. *Peasants of Costa Rica and the Development of Agrarian Capitalism*. Madison: University of Wisconsin Press, 1980.
  - —. "Costa Rican Exceptionalism: Why the 'Ticos' are Different." In *Citizen Views of Democracy in Latin America*, edited by Roderic Ai Camp, viii, 294 p. Pittsburgh: University of Pittsburgh Press, 2001.
  - ———. "The Renaissance of Political Culture or the Renaissance of Ecological Fallacy." *Comparative Politics* 34 (2002): 273-92.
- Seligson, Mitchell A., Abby Cordova, and Daniel Moreno. "Education, Socioeconomic Development, and Political Tolerance: A Multilevel Analysis of 18 Countries in the Americas." Paper presented at the Meetings of the American Political Science Association, Chicago, IL 2007.
- Solano Salazar, Elizabeth. "La población indígena en Costa Rica según el censo 2000." In *Costa Rica a la luz del censo del 2000*, edited by Luis. Rosero Bixby. San José, Cota Rica: Centro Centroamericano de Población de la Universidad de Costa Rica, 2004.
- Solt, Frederick. "Economic Inequality and Democratic Political Engagement." *American Journal* of Political Science 52, no. 1 (2008): 48-60.
- UNDP. "Venciendo el temor: (In) seguridad ciudadana y desarrollo humano en Costa Rica, Informe nacional de desarrollo humano 2005." 2006.
- UNDP, and Universidad de Costa Rica. "Atlas del desarrollo humano cantonal de Costa Rica." edited by United Nations Development Program (UNDP) and Universidad de Costa Rica, 2007.
- Uslaner, Eric M. "Social Capital, Television, and the "Mean World": Trust, Optimism, and Civic Participation." *Political Psychology* 19, no. 3 (1998): 441-67.

- Uslaner, Eric M., and Mitchell Brown. "Inequality, Trust, and Civic Engagement." *American Politics Research* 33, no. 6 (2005): 868-94.
- Vargas, Thelmo. "Principales desarrollos de la economía Costarricense: 1988-2005." In *Distribución del ingreso en Costa Rica: 1988-2004*, edited by Victor Hugo Céspedes and Ronulfo Jiménez. San José, Costa Rica. : Academia de Centroamérica, 2007.
- Weber, Max, and Talcott Parsons. *The Protestant Ethic and the Spirit of Capitalism*. New York: Scribner, 1930. microform.
- Wiarda, Howard J., and Harvey F. Kline, eds. *Latin American Politics and Development*. Sixth Edition ed: Westview Press, 2007.
- World Bank. Costa Rica Poverty Assessment: Recapturing Momentum for Poverty Reduction. Vol. Report No. 35910-CR, 2007.
- Zeledón Cartín, Elías, ed. Viajes por la república de Costa Rica III. Seebach-Sapper. San José, Costa Rica, 1997.

#### **CHAPTER IV**

# OVERCOMING GRIDLOCK POLITICS BETWEEN HAVES AND HAVE NOTS: THE ROLE OF INTERPERSONAL TRUST IN CITIZENS' SUPPORT FOR REDISTRIBUTIVE POLICIES IN LATIN AMERICA

# Introduction

Does interpersonal trust lead to well-off citizens having higher support for redistributive policies? Faith in others is said to be the "chicken soup of social life" (Uslaner 2000 492) because it has been seen as a wellspring of a wide variety of positive social, political, and economic outcomes (Almond and Verba 1963 ; Coleman 1990 ; Putnam 1993 ; Fukuyama 1995 ; Inglehart 1999). In the political arena, trusting individuals have been found to be more likely to interact and sympathize with others who do not share their political interests, facilitating the generation of mutual respect among the citizenry for the political rights of minorities and underprivileged groups. Thus, the literature suggests that where interpersonal trust reigns, solidarity rather than conflict is more likely to prevail, fostering political stability and, in turn, democracy.

Surprisingly, despite the strong empirical link between interpersonal trust and a myriad of democratic attitudes, one of the least researched topics in the social capital and public opinion literature is the effect of generalized interpersonal trust on support for public policies, especially among citizens who are less likely to benefit directly from them. If interpersonal trust foments a wide array of desirable political attitudes, a fundamental component of this amalgam is citizens' willingness to support policies that benefit unlike others. If this were not the case, then the link

between interpersonal trust and democratic attitudes would be more rhetorical and not likely to have an impact on the lives of unprivileged groups or, as Uslaner (2004) puts it, interpersonal trust would be more of a "mixed blessing."

In terms of the focus of this research, for interpersonal trust to be truly an "elixir" for alleviating social illnesses and consequently for increasing the chances that democracy will survive, not only would it have to encourage citizens' *sympathy* towards the poor but also encourage citizens to support and demand government *action* in favor of economically disadvantaged populations, regardless of citizens' economic standing in society, ideological orientation, views about the political system, and other confounding factors. Moreover, interpersonal trust would have to promote support for policies to reduce inequality even among those who are less likely to support such policies, namely the wealthy. Thus, by exploring the impact of interpersonal trust vis-à-vis other relevant variables on citizens' support for redistributive policies, the social capital literature is here being put to a demanding test.

Rational choice theories for explaining the formation of individual preferences predict that high support from the rich for wealth redistribution is highly unlikely as "self-interest" is a critical determinant of citizens' support for public policies (Meltzer and Richard 1981; Persson and Tabellini 2000). For example, Meltzer and Richard's (1981 921) well known utility maximizing model on preferences for social protection, in the form of government spending, predicts that, "the higher one's income, the lower the preferred tax rate." Correspondingly, the higher one's income or wealth, the lower his or her support for government redistribution. Conversely, as Rehm (2007) points out, "disadvantaged individuals, that is, poor people, are in favor of income redistribution because they hope to gain from it." Generally speaking, the empirical literature gives support to the rational choice hypothesis (Iversen 2005; Edlund 2007;

Rehm 2007); individualistic interests largely guide one's preferences for government policies; deep pocket individuals are less likely to support redistribution.

However, recent empirical evidence for West European countries has challenged rational choice accounts, indicating that the degree of support for redistributive policies varies across individuals with similar income levels, even after holding constant other intervening variables (Kumlin and Svallfors 2007). Therefore, it would appear that the relationship between support for redistribution and individual socio-economic status is conditioned on factors overlooked by utility maximizing models. For example, Kumlin and Svallfors (2007) interpret variations in support for redistribution among the rich as likely "policy feedback" effects. They theorize that in countries with strong welfare states, the rich are likely to have been socialized by welfare state institutions, resulting in a higher likelihood of appreciating the value of equality. In turn, according to Kumlin and Svallfors (2007), smaller differences in the extent of support for redistribution across economic groups are observed in welfare states.<sup>52</sup>

The literature also points out that another explanatory factor overlooked by the rational choice approach is the role that individuals' views about the main beneficiaries of redistributive policies may play in determining their level of support for such policies. In general, the few works that have examined this issue find that individuals are more likely to support redistributive policies when they believe that the beneficiaries are similar to themselves (Mau and Veghte 2007). For instance, Luttmer (2001 500) finds that in the United States, "individuals' preferences for income redistribution are not only determined by financial self-interest but also affected by the characteristics of others around them." He concludes that "interpersonal preferences"

<sup>&</sup>lt;sup>52</sup>Following a similar argument, Edlund (1999 360) explains the higher level of support for government redistribution in Norway relative to the United States as a result of the former's long-standing welfare state tradition, concluding that "the results endorse arguments emphasizing that the design and scope of welfare policies shapes and determines its own legitimacy."

(preferences that depend on the characteristics of others) are an important determinant of citizens' support for redistribution. Surprisingly, despite the clear association between concepts such as interpersonal preferences and interpersonal trust, the impact of the latter on support for redistribution remains largely unexplored.

Moreover, largely absent in the theoretical and empirical literature is the likely mediating effect of interpersonal trust on the link between individual socio-economic status and support for redistribution. If generalized interpersonal trust, by definition, rests on equality and solidarity principles, as Seligman (1997) and Uslaner (2001) strongly argue, then, contrary to the rational choice theory, we would expect *trusting* well-off individuals to show higher support for government redistribution, even if this requires a sacrifice in the form of a higher tax rate.

The objectives of this chapter are threefold. First, it seeks to answer the question of how important are conflicts over redistributive policies between poor and well-off citizens in the Latin American context. Secondly, it assesses the effect of interpersonal trust vis-à-vis other competing factors, including individual socio-economic status, civic participation, political trust, and ideology, on support for redistribution. Finally, I explore the possibility that the relationship between individual socio-economic status and support for redistribution is conditional on interpersonal trust so that well-off individuals with high levels of interpersonal trust are more likely to support an active role of the government in improving the distribution of economic resources.

The research agenda outlined here seeks to complement the previous chapters by demonstrating the policy relevance of those results. Given Latin America's high poverty and inequality, I expect the results to translate into significant polarization between haves and have nots regarding their opinions about the role of the state in reducing economic inequality. As the

159

literature suggests, conflict over redistribution is expected to be deeper in poor and unequal democracies (Boix 2003 ; Acemoglu and Robinson 2006), putting at risk the stability of the political system. The problem is that prior work has not shown how this conflict emerges and why. In addition, this chapter is aimed at demonstrating the empirical validity of one of the fundamental premises of this research: interpersonal trust matters and therefore it is important to cultivate it. Above all, it is aimed at demonstrating that the gridlock politics that characterize poor and unequal democracies could be ameliorated by fostering interpersonal trust. How to do that is beyond the scope of this dissertation, but failing to do so, the findings here suggest, will leave unresolved one of the most basic flaws in Latin American society, politics and economics.

As reported in previous chapters, poverty and inequality are deterring the formation of interpersonal trust in Latin American countries, especially among the rich. Thus, taken together, the results of previous chapters and the hypotheses here laid out suggest that Latin America's low levels of interpersonal trust in comparison to the developed world, especially among the well-off, is preventing widespread citizen support for public policies aimed at shrinking the gap between the rich and poor. Lower levels of trust and sympathy toward low socio-economic status individuals among the well-off relative to the most developed countries in the Americas (i.e., Canada and the United States) are likely to result in little support among the wealthy for the very policies that might work to improve the distribution of economic resources and reduce poverty and, ultimately, create more conflict-free nations.

The core argument of this chapter is that I have identified a vicious circle involving Latin Americas' high poverty and economic inequality, low interpersonal trust, and low support for redistributive policies within certain segments of the population, especially the wealthy. This chapter argues that this dynamic might be in part responsible for the lack of substantial improvement in the distribution of economic resources in the region. Latin America's longstanding poverty and economic inequality explain in part the relatively low levels of interpersonal trust in the region; at the same time interpersonal distrust might account for the lower support for redistributive policies among those who do not benefit directly from them. In turn, the lack of consensus in Latin American societies about whether or not the state should implement firm policies to improve the distribution of economic resources seems to be at the core of Latin Americas' enduring poverty and inequality.

As the evidence for the United States suggests, citizens' preferences for public policy are taken into account by the government, but at the same time not all citizens' preferences are weighted equally, sometimes working to the advantage of the rich (Gilens 2005). Thus, it is not unexpected that in the United States regressive public policies, rather than market forces, are said to better explain the rising economic inequality in this country (Bartels 2008). In Latin America, a similar process might be at work. Despite the overwhelming levels of poverty and economic inequality, and therefore the predictably high support for redistributive policies by an important proportion of the population, the relatively unchanged distribution of economic resources in Latin America suggests that the well off might be influencing government policies the most. This suggests that despite the likely high support for redistributive policies by the majority of citizens, the lack of a significant progressive fiscal reform in Latin America might be explained, to a considerable extend by the lower support or even opposition by a relatively powerful economic minority.

As a recent World Bank report states, in Latin America "inequalities in influence lie behind many of the mechanisms that reproduce inequality...with disproportionate influence over the state by wealthy individuals" (De Ferranti 2004 5). The same report also concludes that given the

overall negative effects of economic inequality, "decisive action to tackle the range of mechanisms that reproduce inequality" is necessary (De Ferranti 2004 1). Nevertheless, "decisive action" is likely to take place only if solidarity and cooperation rather than egoism prevails, as suggested by the coexistence in Scandinavian countries of welfare states, relatively high levels of interpersonal trust, and low economic inequality (Rothstein and Stolle 2003 ; Kumlin and Rothstein 2005 ; Rothstein 2005).

Ironically, despite the increased emphasis of late by economists and political scientists alike concerning the negative effects of poverty and economic inequality on democratic stability in Latin America (e.g.De Ferranti 2004 ; Smith 2005 ; Carlin 2006 ; Birdsall 2007), and consequently on the urgent need to level the economic playing field, citizens' opinions on redistributive policies and their determinants are for the most part unknown. This paper aims to break new ground in the Latin American democratization literature by examining the three aforementioned points empirically.

This chapter is organized into four sections. In the first, the hypotheses of this chapter are presented. The second presents the data and assess the level of support for redistributive policies in Latin America in comparison to Canada and the United States. In addition, the relationship between individual socio-economic status and support for redistribution are explored. The third section presents the results of the multivariate statistical analysis that tests the hypotheses of this research. The last section presents conclusions.

## Hypotheses

Taking into account the discussion above, the following three main hypotheses are tested in this chapter:

**H1:** *More prosperous individuals are more likely to express lower levels of support for redistributive policies than less prosperous individuals* 

**H2:** Individuals with high levels of interpersonal trust are more likely to exhibit high support for redistributive policies, regardless of their personal economic situation

**H3:** Economically better off individuals with high levels of interpersonal trust are more likely to show high support for government redistribution

Each of these hypotheses is tested while controlling for other relevant characteristics at the individual level, including three major factors that have been cited in the public opinion literature as important determinants of citizens' support for redistributive policies: participation in voluntary organizations, ideology, and political trust.

Uslaner (2002, 2004) has overturned classical thinking in the social capital literature, demonstrating that the cornerstone of social capital is interpersonal trust rather than participation in civic organizations. Regarding citizens' support for redistributive policies, Uslaner (2004) also shows that, in the United States, what matters most is interpersonal trust, not civic participation. Specifically, Uslaner (2004) demonstrates that Hero (2003) mistakenly concludes that social capital is not important when it comes to support for public policies. Uslaner explains that Hero's conclusion is the result of insufficient consideration of the role of generalized interpersonal trust. In this chapter, the impact of interpersonal trust vis-à-vis participation in civic organizations on citizens' support for redistributive policies is tested within the Latin American context.

Besides interpersonal trust and civic participation, ideology is also likely to play a role in the extent of citizens' support for policies aimed at reducing the gap between rich and poor. By definition, individuals on the right of the ideology continuum are expected to be less likely to support government intervention while those on the left will be more likely to support an active role of the government in the economy. However, evidence for the United States suggests that "political trust" or trust in government, not ideology, is the main determinant of citizens' support for redistributive public policies (Hetherington 1998 ; Hetherington 2005). Hetherington argues that if citizens do not trust the government, they are less likely to support the implementation of public policies, especially when such policies do not benefit them directly. Thus, ideology and political trust are both also major competitors of interpersonal trust for citizens' support for government redistribution.

In sum, in this chapter I assess the role of interpersonal trust and individuals' objective economic well-being vis-à-vis civic participation, ideology, and political trust in citizens' support for redistributive public policies in the Latin American context, while also taking into account individuals' interest in politics, perception of the national and personal economic situation, years of schooling, and demographic characteristics. The exact wording of all the variables included in the regression models of this chapter can be found in the appendix.

#### The Data and Descriptive Statistics

For testing the hypotheses of this chapter, I make use of the 2008 round of the AmericasBarometer's surveys carried out by LAPOP at Vanderbilt University. In the 2008 round of surveys, for the first time, a series of items about the role of the state was included in the core questionnaire, including an item that asks respondents about the extent of their support for

income redistribution by the state. The sample consists of twenty Latin American countries plus Canada and the United States. The dataset includes over 36,000 individual interviews. The data for Canada and the United States are used to assess the level of citizens' support for redistribution in these two countries in comparison to the Latin American region. The hypotheses of this chapter are tested at the individual level taking into account the Latin American countries included in the sample.

#### The Level of Support for Income Redistribution in the Americas

Citizens' support for redistributive policies was measured using the following item in the 2008 round of the AmericasBarometer surveys by LAPOP:



Figure IV.1 shows the average level of support for income redistribution. The original variable was recoded into a 0-100 scale in order to ease the interpretation of the results. The data indicate that citizens' support for the implementation of public policies to reduce the gap between rich and poor is high in most Latin American countries. A clear exception is Venezuela where support for income redistribution by the government is relatively low, 54.1 points, perhaps reflecting the political polarization between those who support Hugo Chavez's policies and those who oppose them.

In the remaining of Latin American countries, although support for redistribution is relatively high, an important variation in the average level of support is also observed. The average level of support for the implementation of income redistribution ranges from 65 points, in Haiti, to 90.7 points, in Paraguay. Interestingly, compared to most Latin American countries, in Canada and the United States support for government redistribution is low, at 68.7 and 47 points, respectively. In fact, support for redistribution in the United States is by far the lowest in the Americas.



Figure IV-1. Average Support for Government Redistribution by Country

Figure IV.2 shows the percentage of the population in the pooled dataset, excluding Canada and the United States, that falls in each category of the original scale of the support for redistribution variable. As can be observed, in Latin America there is a clear divide between those who "strongly agree" with the implementation of redistributive policies and those who

show lower support. Figure IV.2 indicates that 48 per cent of the population in Latin America "strongly agree" with government intervention for the purpose of improving the distribution of income, while 9.7, 13.0, and 17.6 per cent of the population gave a score of 4, 5, and 6, respectively; only a small portion of the population at the lower end of the scale, 3.8 per cent, strongly disagree with the implementation of redistributive policies.



Figure IV-2. Percentage of the Population in Latin America Showing low or high support for Income Redistribution

This chapter examines the factors that explain this divide in opinions in Latin America about the proper role of the state in income redistribution; that is, why a sizable percentage of the population "strongly agrees" with the implementation of redistributive policies while others show lower support or even opposition. A simple cross tabulation suggests that an important determinant of individuals' level of support in Latin America is individual wealth (see Figure IV.3).<sup>53</sup> As expected, the poor show a higher level of support in comparison to the relatively rich. It is worth mentioning that the level of support for those in the fifth quintile is likely to be much higher than what we would observe if data for the entire population were available, since non-response rates among the very rich are much higher than among the poor in household surveys. Nevertheless, as it will be shown, the analysis presented in this chapter makes clear that when it comes to support for redistribution, citizens' opinions are divided along class lines.



Figure IV-3. Average Support for Redistribution by Quintiles of Wealth

It has been posited here that interpersonal trust encourages solidarity and therefore support for public policies that benefit the poor, regardless of individuals' economic situation.

<sup>&</sup>lt;sup>53</sup> Individual wealth is here estimated taking into account the distribution of household assets and access to basic services in each country using the Principal Component Analysis' methodology, as explained in Chapter II. Each quintile of wealth groups individuals that fall in the same level of wealth given their country's wealth distribution. This implies, for instance, that although the standard of living across countries among individuals who fall in the first quintile may vary, in relative terms they represent the poorest population in their respective country.

Thus, the normative question that this study asks is how the linear relationship shown in Figure IV.3 can be made to look more like a flat line at a high value of support for redistribution. I hypothesize that interpersonal trust is an essential ingredient for achieving that goal.

#### **Multivariate Analysis**

#### Gridlock Politics between the Rich and Poor

In order to test the first hypothesis of this chapter and explore the extent of class conflict over government redistributive policies, an ordered logit model was estimated. The model compares the likelihood of having a high support for redistribution across quintiles, holding constant individuals' age, size of place of residence, years of schooling, sex, and country fixed effects.<sup>54</sup> The results are presented in Table IV.1.<sup>55</sup>

As can be observed in equation 1, where the baseline category is the fifth quintile, the odds of having a strong support for government redistribution is significantly higher for the first four quintiles relative to the fifth. This suggests that individuals at the very top of the wealth distribution are unambiguously the ones with the lowest levels of support for redistributive policies in Latin America. In addition, the results indicate that, as individual wealth increases, the odds ratio of showing high support for redistributive policies decreases, giving support to the first hypothesis of this chapter. Specifically, equation 1 shows that for individuals in the first

<sup>&</sup>lt;sup>54</sup> Haiti was excluded from the multivariate analysis because, given its extreme levels of poverty, it was not possible to split the distribution of wealth in quintiles. Forty per cent of the population falls in the first quintile. Therefore, no observations for the second quintile were available. Including Haiti, however, the results obtained are similar to the one reported in the regression models in this section.

<sup>&</sup>lt;sup>55</sup> In all regression models in this section, standard errors were estimated taking into account the complex sample design of the LAPOP surveys; that is, the multivariate statistical analysis take into account the design effect on the precision of the regression results due to clustering and stratification. Standard errors were computed employing the command "svy" in STATA v.10 using the Taylor series' linearization procedure.

quintile, the odds of showing the highest level of support for government redistribution (a score of 7) versus a lower score is about 1.34 times greater than for individuals in the fifth quintile.

Table IV-1. Ordered Logit Model: Impact of Individual Wealth on Support for Redistributive Policies									
	Equation 1	Equation 2	Equation 3						
	Odds Ratio	Odds Ratio	Odds Ratio						
Quintile 1	1.336***		1.089*						
Quintile 2	1.226***	.918*							
Quintile 3	1.206***	.903*	.983						
Quintile 4	1.161***	.869**	.947						
Quintile 5		.749***	.815***						
Age	1.001	1.001	1.001						
Large City (Capital city;	1.015	1.015	1.015						
large cities =1; otherwise=									
0)									
Years of Schooling	1.006	1.006	1.006						
Gender (1=Male ;	1.041 +	1.041 +	1.041+						
0=Female)									
+ p<0.10, * p<0.05, ** p<0.0	l, *** p<0.001; Standard Er	ors take into account design e	ffect						
N. of cases= 29,804	· · · ·	-							
N of countries=21									
F(26,1605)=32.26									
Country fixed effects included but not shown									

Equations 2 and 3 compare the probabilities of high support, leaving as reference categories the first and second quintile groups, accordingly. Taken together, equations 2 and 3 suggest that, all other things being equal, the opinions of individuals in quintiles 2, 3, and 4 are closer to that of the poor; this is suggested by the smaller difference in the size of the odd ratios between the first four quintiles. The results also suggest that across quintiles 2, 3, and 4 individuals show similar levels of opinions on what the role of the state in improving the distribution of income should be. Consequently, the highest levels of polarization about whether the government should implement firm policies to reduce income inequality is found between the very poor and rich. As the bulk of the literature predicts, the middle class seems to have more moderate views on political issues, balancing out political conflict between haves and have nots (Lipset 1961; Moore 1966).

#### Testing the Impact of Social Capital on Support for Redistributive Policies

Table IV.2 shows the results of the ordered logit model for testing the second hypothesis of this chapter. The regression results provide support to the hypothesis that trusting individuals are more likely to show higher support for redistributive policies, independently of individuals' economic status and other confounding factors. In fact, as the standardized coefficient related to this variable indicates, interpersonal trust exerts one of the strongest effects on support for redistribution among the independent variables included in the models.

Table IV-2. Ordered Logit Model: Impact of Interpersonal Trust on Support for Redistributive Policies								
(Standardized Coefficients)								
	Equation 1	Equation 2	Equation 3					
Interpersonal Trust	0.124***	0.120***	0.126***					
Quintiles of Wealth	-0.071***	-0.065***	-0.058**					
Political Trust		0.110***	0.123***					
Ideology			-0.102***					
Participation in Religious Organizations	-0.017	-0.014	-0.015					
Participation in Parents' Organizations	0.053***	0.051***	0.059***					
Participation in Community Organizations	0.055***	0.050***	0.059***					
Participation in Work Related Organizations	-0.028*	-0.025+	-0.029+					
Participation in Political Parties	-0.011	-0.014	-0.009					
Interest in Politics	0.051***	0.043**	0.051**					
Perception of Personal Economic	-0.067***	-0.076***	-0.076***					
Wellbeing								
Perception of National Economy	-0.063***	-0.085***	-0.085***					
Number of Children	0.073***	0.071***	0.076***					
Age	-0.044**	-0.046**	-0.036*					
Large City (Capital city ; large cities=1;	0.018	0.020	0.015					
otherwise= 0)								
Years of Schooling	0.038*	0.046*	0.069***					
Gender (1=Male ; Female=0)	0.036**	0.038**	0.047***					
F	30.61	30.34	32.94					
Number of Obs.	27814	27374	22446					
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001;	Standard Errors take into	account design effect						
Country fixed effects included but not shown								

Additionally, Table IV.2 indicates that this result holds even after taking into account individuals' level of trust in the government and ideological inclinations. Individuals who trust others are more likely to sympathize with the causes of economically disadvantaged groups,

regardless of their personal economic situation, degree of political trust, and ideology. Moreover, as the literature suggests, individuals who show a higher level of trust in the government are also more willing to support the implementation of public policies that benefit the poor. On the other hand, as expected, individuals who place themselves on the right of the ideological continuum show lower levels of support for direct government involvement in the distribution of income.

The results in Table IV.2 also make clear that interpersonal trust rather than civic participation is unambiguously the most important source of solidarity in Latin American countries, a finding similar to Uslaner's conclusion for the United States. Interestingly, participation in religious organizations, the most common type of civic participation in Latin America, does not have any impact on citizens' support for policies that benefit the poor. The only two types of civic participation that seem to foster support for redistributive policies are participation in community groups and parents associations. This result confirms the finding of previous studies that suggest that in the Latin American context, contrary to Putnam's contention, the type of civic participation matters for the formation of democratic attitudes (Seligson 1999).

The three attitudinal items included in the model as control variables are statistically significant and have the expected signs. Citizens expressing more interest in politics show higher levels of support for redistributive policies. In addition, individuals who have more positive perceptions of their personal economic situation and of the state of the national economy are less likely to support redistributive policies. However, as the size of the standardized coefficients for these variables suggests, the effect of subjective measures on support for redistribution is smaller than the impact of objective individual wealth.
In terms of the demographic variables, the results indicate that despite the usual positive correlation between individual wealth and education, the latter is statistically significant but shows a positive sign. Therefore, while higher levels of individual wealth work to decrease the likelihood of strong support, education has the opposite impact, suggesting that education is not a good proxy of individual wealth. In addition, individuals with children also show a higher probability to strongly support policies to shrink the gap between the rich and poor, a finding congruent with the result that participation in parents' organizations fosters support for redistributive policies. As Rehm (2007) suggests, it is likely that individuals, in this case those with children, support the implementation of redistributive policies regardless of their current wealth as a means to guarantee the economic safety of their family in the future. Finally, males show a higher likelihood of strongly agreeing to the implementation of redistributive policies, while older individuals are more likely to show lower support.

#### Interpersonal Trust as a Source of Support for Redistribution among the Well-Off

The empirical evidence gives strong support to the third hypothesis of this chapter as well. Better off individuals who show high levels of trust in the people in their community were found to be more likely to support policies to that benefit the poor. Table IV.3 presents the results. In order to test this hypothesis, an interaction term between interpersonal trust and quintiles of wealth was included in the ordered logit model. The positive and statistically significant coefficient of the interaction term indicates that the higher the level of interpersonal trust, the higher the likelihood that economically better off individuals strongly support government policies to reduce income inequality. As shown in Table IV.3, the coefficient of the

interaction term is statistically significant even after controlling for political trust and ideology,

the other two most important determinants of support for redistribution in the model.

Table IV-3. Ordered Logit Model: Interpersonal Trust as a Mediating Factor between Individual Wealth			
and Support for Redistributive Policies			
(Standardized Coefficients)			
	Equation 1	Equation 2	Equation 3
Interpersonal Trust	0.046	0.035	0.050
Quintiles of Wealth	-0.186***	-0.189***	-0.166**
Interpersonal Trust * Quintiles of Wealth	0.145**	0.156**	0.137*
Political Trust		0.110***	0.123***
Ideology			-0.101***
Participation in Religious Organizations	-0.016	-0.014	-0.014
Participation in Parents' Organizations	0.052***	0.051***	0.058***
Participation in Community Organizations	0.055***	0.050***	0.059***
Participation in Work Related Organizations	-0.029*	-0.025+	-0.029*
Participation in Political Parties	-0.011	-0.014	-0.009
Interest in Politics	0.051***	0.043**	0.051**
Perception of Personal Economic Wellbeing	-0.068***	-0.077***	-0.077***
Perception of National Economy	-0.062***	-0.084***	-0.085***
Number of Children	0.074***	0.072***	0.077***
Age	-0.045**	-0.047**	-0.037*
Large City (Capital city; large cities=1;	0.017	0.019	0.014
otherwise = 0)			
Years of Schooling	0.036*	0.044*	0.067***
Gender (1=Male ; Female=0)	0.037**	0.039**	0.048***
F	30.18	29.92	32.53
Number of Obs.	27814	27374	22446
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001; Standard Errors take into account design effect			
Country fixed effects included but not shown			

Figure IV.4 illustrates the effect of interpersonal trust on the probability to "strongly agree" (i.e. to give a score of 7) with government intervention with the objective to reduce economic inequality. The predicted probabilities of giving a score of 7 to the redistribution question were estimated based on the results of equation 1 in Table IV.3. As shown in Figure IV.4, the average predicted probability of a "strongly agree" response to the implementation of redistributive policies is above fifty per cent for poor individuals (i.e. those in the first quintile), regardless of their level of interpersonal trust. In sharp contrast, the probability of a "strongly

agree" response among well-off individuals (i.e. those in the fifth quintile) is conditioned on their level of interpersonal trust.



Figure IV-4. Predicted Probability to Strongly Support Redistributive Policies by Quintiles and Levels of Interpersonal Trust

While the difference of falling in the category of maximum support for government redistribution between individuals in the first and fifth quintiles is greater than twelve points among those with the lowest level of interpersonal trust, this gap between rich and poor shrinks considerably among those who find people in their community "very trustworthy." Specifically, when individuals believe people in their community to be "very trustworthy," the likelihood that they will "strongly agree" with the implementation of firm policies to reduce inequality is above fifty per cent for all economic groups. Thus, as interpersonal trust increases, agreement on fundamental political issues between the rich and poor is more likely, as depicted by the almost flat curve at the highest level of interpersonal trust.

### Conclusion

Latin American countries have high rates of political instability, which have been associated with the region's high economic inequality and polarization (Gasparini and Molina 2006). This chapter demonstrates that an important source of political conflict in Latin America is the disagreement among the citizenry on the role of the government in income redistribution, particularly between the very rich and poor. While the poor cry for vigorous redistributive public policies, the rich show low support or utterly reject them.

The findings support Acemoglu and Robinson's (2008) suggestion that the "political nature" of the process of reforming economic institutions makes such reform difficult. In economically divided societies, profound divergence of interests seems to impede achieving a "political equilibrium" that would translate into sound public policies. Thus, an important issue to resolve is how political compromise can be encouraged across economic groups with the aim to promote economic progress and political stability.

The findings of this chapter suggest that interpersonal trust does work as a conciliatory force between haves and have nots. Contrary to what rational choice models predict, support for redistributive public policies is higher among well-off individuals who show high levels of interpersonal trust. Moreover, this chapter demonstrates that interpersonal trust trumps civic participation, since the former consistently predicts higher levels of support for redistribution, giving firm support to the contention that generalized interpersonal trust is strongly linked to equality and solidarity values. In turn, interpersonal trust seems to be a critical part of the solution to the political disequilibrium that characterizes the region.

The downside of this hopeful finding is that, as previously noted, the formation of interpersonal trust in the Americas is conditioned by poverty and economic inequality levels.

176

High poverty and inequality disincentivize the emergence of interpersonal trust, particularly among those who are most likely to oppose redistribution, especially the well-off. Thus, Latin American countries seem to be trapped in a vicious circle between high poverty and economic inequality, low interpersonal trust, and low support among the rich for the implementation of public policies that are likely to counterbalance the state of poverty and deep economic disparity that characterizes the region.

A policy implication of this study is that Latin American governments need to weight the preferences of the relatively poor more heavily in their political agendas and implement serious and effective policies to alleviate poverty and economic inequality while increasing the levels of interpersonal trust. Of course, if those elected to office are themselves wealthy, it is unlikely that they will follow this advice. Nonethless, to escape from the poverty/inequality/instability trap, Latin American leaders need to heed the cross-country empirical evidence that reducing economic inequality through redistributive public policies has a positive effect on the generation of interpersonal trust (Knack and Zak 2002), suggesting that in Latin America, the implementation of progressive fiscal policies are key for turning the vicious circle here described into a virtuous circle that might ultimately promote a more just and democratic region.

# Appendix

Appendix IV-1. Exact Wording of the Items from the LAPOP Survey Included in Chapter IV		
Variable	Question	
Interpersonal trust	Now, speaking of the people from here, would you say that	
	people in this community are generally very trustworthy,	
	somewhat trustworthy, not very trustworthy or untrustworthy?	
Support for Redistributive Policies	The (country) government should implement firm policies to	
	reduce inequality in income between the rich and the poor. To	
	what extent do you agree or disagree with this statement? (1-/	
Participation in Meetings of Religious	Lam going to read a list of groups and organizations. Please tell	
Organizations	me if you attend their meetings at least once a week once or	
organizations	twice a month once or twice a year or never	
	Meetings of any religious organization?	
Participation in Meetings of Parents'	Meetings of a parents' association at school?	
Organizations		
Participation in Meetings of Community	Meetings of a committee or association for community	
Organizations	improvement?	
Participation in Meetings of Work related	Meetings of an association of professionals, traders or farmers?	
Organizations		
Participation in Meetings of Political Parties	Meetings of a political party or political movement?	
Interest in Politics	How much interest do you have in politics: a lot, some, little or none?	
Political Trust	To what extent do you trust the national government? (1-7 scale)	
Ideology	On this card there is a 1-10 scale that goes from left to right	
	According to the meaning that the terms "left" and "right" have	
	for you, and thinking of your own political leanings, where	
Dercention of Dercenal Economic Situation	Would you place yoursell on this scale?	
reception of reisonal Economic Situation	Would you say that it is very good good neither good nor had	
	bad or very had?	
Perception of National Economy	How would you describe the country's economic situation?	
	Would you say that it is very good, good, neither good nor bad,	
	bad or very bad?	
Education	What was the last year of education you completed?	
Quintiles of Wealth	Own estimations based on LAPOP's household assets and access	
	to basic services series and the Principal Component Analysis's	
	methodology	
Number of Children	How many children do you have?	
Large Cities (Capital city and large cities=1;	Based on LAPOP's size of place variable.	
otherwise = 0		

# References

- Acemoglu, Daron, and James A. Robinson. *Economic Origins of Dictatorship and Democracy*. Cambridge ; New York: Cambridge University Press, 2006.
- ———. "The Role of Institutions in Growth and Development, Working Paper N. 10." Commission on Growth and Development, 2008.
- Almond, Gabriel A., and Sidney Verba. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton: Princeton University Press, 1963.
- Bartels, Larry M. Unequal democracy: The Political Economy of the New Gilded Age. Princeton, N.J.: Princeton University Press, 2008.
- Birdsall, Nancy. Attacking Poverty and Inequality in Latin America: The U.S. can Help. Testimony before the Committee on Foreign Affairs U.S. House of Representatives Subcommittee on the Western Hemisphere. March 28, 2007.
- Boix, Carles. *Democracy and Redistribution, Cambridge Studies in Comparative Politics*. Cambridge, UK ; New York: Cambridge University Press, 2003.
- Boix, Carles, and Susan C. Stokes. "Endogenous Democratization " *World Politics* 55, no. 4 (2003): 517-49.
- Carlin, Ryan E. "The Socioeconomic Roots of Support for Democracy and the Quality in Latin America." *Rev. cienc. polit. (Santiago)* 26, no. 1 (2006): 48-66.
- Coleman, James Samuel. *Foundations of Social Theory*. Cambridge, Mass.: Belknap Press of Harvard University Press, 1990.
- De Ferranti, David M. Inequality in Latin America : Breaking with History?, World Bank Latin American and Caribbean studies. Viewpoints. Washington, DC: The World Bank, 2004.
- Edlund, Jonas. "Class Conflicts and Institutional Feedback Effects in Liberal and Social Democratic Welfare Regimes: Attitudes toward State Redistribution and Welfare Policy in Six Western Countries." In *The Political Sociology of the Welfare State: Institutions, Social Cleavages, and Orientations*, edited by Stefan Svallfors, xiv, 291 p. Stanford, Calif.: Stanford University Press, 2007.
- Fukuyama, Francis. *Trust: The Social Virtues and the Creation of Prosperity*. New York: The Free Press, 1995.
- Gasparini, Leonardo, and Ezequiel Molina. "Income Distribution, Institutions and Conflicts: An Exploratory Analysis for Latin America and the Caribbean." In *Documentos de Trabajo*: Center for Distributional, Labor, and Social Studies at Universidad Nacional de la Plata, 2006.
- Gilens, Martin. "Inequality and Democratic Responsiveness." *Public Opinion Quarterly* 69, no. 5 (2005): 778-96.
- Hero, Rodney. "Multiple Theoretical Traditions in American Politics and Racial Policy Inequality." *Political Research Quarterly* 56, no. 4 (2003): 401-08.
- Hetherington, Marc J. "The Political Relevance of Political Trust." *American Political Science Review* 92, no. 4 (1998): 791-808.
- *———. Why Trust Matters : Declining Political Trust and the Demise of American Liberalism.* Princeton, NJ ; Oxford: Princeton University Press, 2005.
- ———. "Trust, Well-being and Democracy." In *Democracy and Trust*, edited by Mark E. Warren, 88-120. Cambridge: Cambridge University Press, 1999.
- Iversen, Torben. Capitalism, Democracy, and Welfare, Cambridge Studies in Comparative Politics. Cambridge, UK; New York: Cambridge University Press, 2005.

- Knack, Stephen, and Paul J. Zak. "Building Trust: Public Policy, Interpersonal Trust, and Economic Development." *Supreme Court Economic Review* 10, no. 1 (2002): 91.
- Kumlin, Staffan, and Bo Rothstein. "Making and Breaking Social Capital: The Impact of Welfare-State Institutions." *Comparative Political Studies* 38, no. 4 (2005): 339-65.
- Lipset, Seymour Martin. Political Man: The Social Basis of Politics. 1981 (expanded edition) ed.

Baltimore, MD.: Johns Hopkins University Press, 1961.

- Luttmer, Erzo F. P. "Group Loyalty and the Taste for Redistribution." *Journal of Political Economy* 109, no. 3 (2001): 500-28.
- Mau, Steffen, and Benjamin Veghte. *Social Justice, Legitimacy and the Welfare State.* Aldershot, England ; Burlington, VT: Ashgate, 2007.
- Meltzer, Allan H., and Scott F. Richard. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89, no. 5 (1981): 914-27.
- Moore, Barrington. Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World. Boston,: Beacon Press, 1966.
- Persson, Torsten, and Guido Enrico Tabellini. *Political Economics: Explaining Economic Policy*, *Zeuthen lecture book series*. Cambridge, Mass.: MIT Press, 2000.
- Putnam, Robert. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press, 1993.
- Rehm, Philipp. "Who Supports the Welfare State? Determinants of Preferences Concerning Redistribution." In *Social Justice, Legitimacy and the Welfare state* edited by Steffen Mau and Benjamin Veghte, xviii, 264 p. Aldershot, England ; Burlington, VT: Ashgate, 2007.
- Rothstein, Bo, and Dietlind Stolle. "Introduction: Social Capital in Scandinavia." *Scandinavian Political Studies* 26 (2003): 1-26.
- Seligman, Adam B. The Problem of Trust. New Jersey: Princenton University Press, 1997.
- Seligson, Amber L. "Civic Association and Democratic Participation in Central America: A Cross National Test of the Putnam Thesis." *Comparative Political Studies* 32 (1999): 342-52.
- Smith, Peter H. *Democracy in Latin America: Political Change in Comparative Perspective.* New York, N.Y.: Oxford University Press, 2005.
- Uslaner, Eric M. "Producing and Consuming Trust." *Political Science Quarterly* 115, no. 4 (2000): 569-90.
  - . The Moral Foundations of Trust. New York: Cambridge University Press, 2002.

. "Trust and Social Bonds: Faith in Others and Policy Outcomes. Revisited" *Political Science Quarterly* 57, no. 3 (2004): 501-07.

## FINAL REMARKS

Intense conflict over public policy choices has historically turned Latin American countries into battle fields. During the democratization period in Latin America, social conflict over policies has continued to occur on daily basis, particularly in unconventional types of political participation, putting democratic stability at risk. Disputes in Bolivia over the fate of gas industry revenues, social polarization in Costa Rica between supporters and opponents of the implementation of a free trade agreement with the United States, and the opposition of farmers in Argentina to the taxation of exports are just some of the most recent and salient examples of political conflict in the region that have resulted in heated street protests. The results of this study suggest that at the core of Latin America's political turmoil are the high levels of economic inequality that characterize the region. Heightened economic inequality engenders adverse social attitudes among the citizenry that ultimately erodes solidarity and results in polarized public policy preferences along economic class lines, especially when such policies are likely to produce redistributive effects.

Specifically, this study finds that Latin America's high economic inequality is preventing the widespread emergence of a core social attitude for the achievement of political stability, namely interpersonal trust. Extreme economic heterogeneity creates the perfect setting for the growth of discriminatory attitudes against those who have less and also infuses fear of crime among well-off individuals, resulting in overall lower levels of interpersonal trust. These pervasive social dynamics make the rich and poor uneasy about each other to the point that the rich who live in contexts of high economic inequality and underdevelopment might even show lower levels of interpersonal trust than the poor. This finding clearly contradicts the conventional wisdom in the democratization and social capital literature that suggests that the poor are the ones primarily responsible for low levels of interpersonal trust in developing countries.

By examining the political culture and preferences of ordinarily citizens in economically unequal societies, this study has contributed to our understanding of why economic inequality produces fragile democracies. The political implications of the social dynamics that this study finds in contexts of high economic inequality are profound. In particular, low levels of generalized interpersonal trust among the rich make it more difficult for them to identify with the cause of the poor and therefore to compromise and support policies aimed at the redistribution of income or wealth. While the majority of the population demands policies to improve their standards of living, a minority bitterly opposes them. Thus, individualism trumps solidarity under conditions of inequality, perpetuating a state of poverty and political instability. As the empirical evidence from Latin America presented in this dissertation suggests, political deadlocks over policy preferences among the citizenry is a primary characteristic of economically unequal democracies, which are at the same time characterized by feelings of mistrust, discriminatory attitudes, and fear.

Pundits and academics alike face the challenge of determining feasible courses of action that will eventually break Latin America's vicious circle that links economic inequality, mistrust, and low support among the rich replacing these with the implementation of policies to tackle poverty. An obvious part of the solution is to weight more heavily the voices of the poor in the design and implementation of public policies. Although in the last few years many Latin American countries have elected, self-denominated, pro-poor governments, proclaiming and implementing populist measures and acting at the margin of the law, however, has been typical for many of these new administrations. How to fight poverty and achieve political stability

182

within the confines of the democratic game is the real challenge that Latin American countries face.